EFFECTS OF SPINAL ELECTRO-MAGNETIC STIMULATION ON NEUROPHYSICIOLOGICAL RESPONSES IN PEOPLE WITH SCI COMPARED TO HEALTHY CONTROLS

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Sue Ann Sisto, PT, MA, Ph.D., FACRM
Stony Brook University and University at Buffalo

CV:
BIOGRAPHICAL SKETCH

NAME: SUE ANN SISTO, P.T., M.A., Ph.D, FACRM
POSITION TITLE: Professor and Research Director

EDUCATION/TRAINING

St Louis University, St. Louis, Missouri
BS 05/1979 Physical Therapy
New York University, NY, NY
MA 05/1985 Physical Therapy & Pathokinesiology
New York University, NY, NY
PhD 05/1996 Pathokinesiology
NIH, NJ Cooperative Chronic Fatigue Syndrome (CFS), Newark, NJ Post Doc 05/1996-05/2007 Activity in CFS

Personal Statement - I have been a physical therapist working in rehabilitation for 37 years. I have spent the last 15 years conducting rehabilitation research. I have served on several advisory boards for grants such as RERCs, NIDRR model systems, NIH multi-center trials, NIH DSMB and NSF. I am a grant reviewer for Shriners Hospital for Children, PVA, DOD, and NIH (MRS study section). My research has spanned 2 decades with the primary focus on physical functioning in SCI with grants in obesity, body composition, wheelchair propoulsion, locomotor traning and neurommodulation.

January 2018- Present Chair of Rehabilitation Science Buffalo University at Buffalo (PT, OT, Ph.D. programs)

October 2014-Chair, Ph.D. in Health and Rehabilitation Sciences Stony Brook Stony Brook Univ. 2018

March 2013- 2018 Health and Rehab SciencesProgram Director, Ph.D. Program Stony Brook Stony Brook Univ.

September 2012- Present Scientist, NeuroRecovery Network University at Buffalo

September 2007- Professor and Research Director, Division of Rehabilitation Stony Brook Univ. 2018 Sciences, School of Health Technology and Management Stony Brook, NY

September 2007-12 Co- Director, NeuroRecovery Network Stony Brook Univ. Program Co-Director, Health and Rehabilitation Stony Brook, NY Science Ph.D. Program

February 1997 – Director of the Human Performance Laboratory Kessler Medical and August 2007 Research Department (HPMAL) Rehabilitation Research and Education Center, (KMRREC), now referred to as Kessler Foundation

September 1991-February 1997 Associate Director of Physical Therapy Research Kessler Institute for Clinical Team Leader of New Jersey Chronic Rehabilitation Research Fatigue Syndrome for Treadmill Exercise Test and West Orange, NJ Fatigue study, Research Assistant for Long-Term Orthotic Device Utilization Grant

(NIDRR) and Oxygen Consumption (KIR) and Functional Capacity for the Traumatic Amputee (East Orange Veterans Administration, East Orange, NJ).

August 1988- Associate Director of Physical Therapy Kessler Institute for September 1991 Re, habilitation, West Orange, NJ

February 1986-Assistant Director of Out-Patient Physical Therapy Kessler Institute for August 1988 Rehabilitation, West Orange, NJ

March 1983-February 1986 Assistant Director of In-Patient Physical Therapy Kessler Institute for Rehabilitation, West Orange, NJ

May 1981-March 1983 Supervisor of Prosthetics and Orthotics Kessler Institute for Rehabilitation, West Orange, NJ

July 1979-Staff Physical Therapist Kessler Institute for
January 1980 Rehabilitation, West Orange, NJ

Selected Honors and Awards
Recipient of the Mary E. Switzer Fellowship, NIDRR
NIDRR Research
Full-time Doctoral Clinical Traineeship awarded to NYU PT Department
American Physical Therapy Association Foundation Doctoral Research Award
Best Mentor Award, UMDNJ/NJMS Department of PM&R
Empire Innovation Program Distinguished Faculty Award, Stony Brook University
Fellow of the American Congress of Rehabilitation Medicine (FACRM)

Selected Appointments/Elected Positions
Member, ASIA Research and Awards Committee (now Research Committee only)
Chair, Gait and Clinical Movement Analysis Society Awards Committee
Invited Speaker, Research Summit On Wheeled Mobility and Accessible Transportation
National Institutes of Health Review Panel, Musculoskeletal Rehabilitation Sciences
Elected to the Board of Governors of American Congress of Rehabilitation Medicine
NIH/National Center for Medical Rehabilitation Research Musculoskeletal Rehabilitation Advisory Panel
State of the Science on Wheelchair Propulsion, Rancho Los Amigos, Downey, CA
Co-Chair of the ACRM Communications Committee
Member of the International Core Data Set in Spinal Cord Injury Committee, ACRM liaison Member of Nomination Committee of APTA Section on Research
Membership and Program Committees of ACRM
Scientific Review Committee of the Foundation for Physical Therapy
Invited Member of the Mobility Rehab. Engineering Rehab Ctr, State of Science Conf.
Member of Steering Committee of the Northern New Jersey Model System Spinal Cord Injury System (NNJMSCIS)
Elected Vice President of American Physical Therapy Association, Neurology Section, Spinal Cord Injury Special Interest Group
Brain Canada Review Panel, Montreal Canada
MSK NIH Review Panel, Seattle, WA
Extramural RADAR Concept Development Committee for NIH/NCI Repository for Algorithm Development for Ambulatory Research (RADAR)
SNRP Grant Reviews, NIH Bethesda, MD
Scientific Advisory Committee, NIH Grant entitled “Clinical Trial to Evaluate the Effects of an Activity-Based Therapeutic Exercise Program for Individuals with Spinal Cord Injury (PI-Mike Jones, Ph.D.)
Data Safety and Monitoring Board for NIH Multi-Site Clinical Trial

Selected publications (in addition to 5 listed above):
1. Forrest GF, Hutchinson K, Lorenz DJ, Buehner JJ, Vanhiel LR, Sisto, SA, Basso DM. (2014). Are the 10 meter and 6 minute walk tests redundant in patients with spinal cord injury? PLoS One, 1;9 (5):e94108.

2. Jones, M, Cifu, D, Backus, D, Sisto, SA. (2013).Instilling a research culture in an applied clinical setting, Archives of Physical Medicine and Rehabilitation, 94:S49-54.
3. Biering-Sørensen F, Burns AS, Curt A, Harvey LA, Jane Mulcahey M, Nance PW, Sherwood AM, Sisto, SA. (2012). International spinal cord injury musculoskeletal basic data set, Spinal Cord.50(11):797-802.
4. Sisto, SA, Lorenz, L., Hutchinson, K, Wenzel, L, Hillyer, J, Harkema, SJ, Krassioukov, A. (2012). Cardiovascular parameters from 213 patients with incomplete spinal cord injury from seven NeuroRecovery Network centers in the USA, Archives of Physical Medicine and Rehabilitation, 93(9): 1578-87.
5. Harkema, SJ, Behrman, A, Schmidt, M, Ardolino, E, Sisto, SA. (2012). Locomotor training: As a treatment and in the progression of neurological rehabilitation, Archives of Physical Medicine and Rehabilitation 93(9):1588-97.
6. Morrison, S, Pomeranz, JL, Yu, N, Schmidt Read, M, Wescott, C, Sisto, SA, Behrman, AL (2012). Life care planning outcomes for two individuals with motor incomplete spinal cord injury pre and post locomotor training: A Case Series. Journal of Neurological Physical Therapy, 36(3):144-53.
7. Forrest, GF, Lorenz, DJ, Karen Hutchinson, K, VanHiel, L, Basso, DM, Datta, S, Sisto, SA, Harkema, SJ, (2012). Ambulation and balance outcomes measure different aspects of recovery in individuals with chronic incomplete spinal cord injury. Archives of Physical Medicine and Rehabilitation, 93(9): 1553-64.
8. Harkema SJ, Schmidt-Read M, Behrman AL, Bratta A, Sisto SA, Edgerton VR. (2012). Establishing the NeuroRecovery Network: Multisite rehabilitation centers that provide activity-based therapies and assessments for neurologic disorders. Archives of Physical Medicine and Rehabilitation, 93(9):1498-507.
9. Kwarciak AM, Yarossi M, Ramanujam A, Dyson-Hudson T, Sisto SA. (2009) Evaluation of wheelchair tire rolling resistance using dynamometer-based coast-down tests. Journal of Rehabilitation Research and Development, 46(7):931-8.
10. Sullivan S, Sisto SA, Langrana N. (2009) Comparison of kinematics, kinetics, and EMG throughout wheelchair propulsion in able-bodied and persons with paraplegia: An integrative approach, Journal of Biomechanical Engineering.
11. Forrest GF, Sisto SA, Asselin P, Mores J, Bond Q, LaFountain MF, Harkema S. (2008) Locomotor training with incremental changes in velocity: Muscle and metabolic responses. Topics in Spinal Cord Injury Rehabilitation, 14:1, 16-22, Summer.
12. Sisto SA, Forrest GF, Faghri P. (2008) Technology for mobility and quality of life in spinal cord injury: Analyzing a series of options available, IEEE Engineering in Medicine and Biology Magazine, March/April, pp.56-68.
13. Dyson-Hudson TA, Sisto SA, Bond EQ, Emmons R, Kirshblum S. (2007) Comparison of self-report pain changes as a result of arm-crank ergometry in chronic complete SCI, Archives of Physical Medicine and Rehab, Brief Report, December 88 (12).
14. Koontz AM, Yang Y, Price R, Tolerico ML, DiGiovine CP, Sisto SA, Cooper RA, Boninger ML. (2007) Multi-site comparison of wheelchair propulsion in persons with paraplegia, Journal of Rehabilitation Research and Development, 44(3): 449:458.
15. Sisto SA, Dyson-Hudson T. (2007) Use of Dynamometry for the Measurement of Strength in SCI, Journal of Rehabilitation Research and Development, 44(1):123:136.

Other selected publications
1. Editorial Commentary of Epidural Stimulation form Harkema et al., Lancet, 2011; http://news.todayinot.com/article/20110718/TODAYINPT0105/110718005&SearchID=73448537530396.
2. Encyclopedia of Clinical Neuropsychology, (2011) contributed to sensory motor scales entries, released as online publication, Springer Link. http://www.springer.com/psychology/neuropsychology/book/978-0-387-79947-6.
3. Engsberg, J. R., Tucker, C., Ounpuu, S., Wren, T. A., Sisto, S. A., & Kaufman, K. R. (2009). Gait and clinical movement analysis research priorities: 2007 update from the research committee of the Gait and Clinical Movement Analysis Society. Gait & Posture, 29(2), 169-171. doi: S0966-6362(08)00390-[pii]10.1016/j.gaitpost.2008.11.015.
4. Clinical Research Agenda Review Panel (multiple authors, including Sisto, SA). (2000). Clinical research agenda for physical therapy, 80(5):499-513.
5. Sisto, S.A., (2000). Use of Virtual Reality in therapy for Upper Extremity Hemiparesis in Stroke. Focus on Physiatry, Vol. 5(1).
Monographs: Lacker, H. M., Chaudhry, H., Choi, T. H., Kriegsmann, J. J., Boda, W., Tapp, W. N., & Sisto, S. A. (1993). A simple mathematical model of the complete walking cycle with applications to the physically disabled: Symmetric and asymmetric steady periodic solutions. NJIT, Center for Applied Mathematics and

Statistics.

Public Speaking or Presentations
1. Sisto, S.A., Petrosyan, H.A., Zou, C., Leone, Tesfa, A., Fahmy, M., Zaidi, M., Arvanian, V.L., Spinal electromagnetic stimulation results in frequency dependent depression in healthy adults. (November, 2018), Society for Neuroscience, San Diego, CA.
2. Arvanian, V.L., Petrosyan, H.A., Tesfa, A., Fahmy, M., Zou, C., Sisto, S.A., Combined administration of electro-magnetic stimulation (EMS) at spinal level and leg muscles to modulate neurophysiological properties at spino-muscular circuitry in healthy and SCI humans, (November, 2018), Society for Neuroscience, San Diego, CA.
3. Arvanian, V.L., Petrosyan, H.A., Harb, M., Zaidi, M., Zou, C., Liang, L., Kaufman, M.A., Sisto, S. A., Non-invasive electromagnetic stimulation of neuromuscular circuitry: Translating from animal models to human. (November, 2017) Society for Neuroscience, Washington DC.
4. Sisto, S.A., Qureshi, F., Hegemiller, K., Concepcion, L. Zou, C. Respiratory and Functional Outcomes after Locomotor Training (LT) in SCI (October, 2016).American Congress of Rehabilitation Medicine, Atlanta, GA
5. Qureshi, F., Kung, P., Jin Cho, H., Phagu, N., Sisto, S.A., Collins, W.F. Using serial cystometry to evaluate effectiveness of treadmill training on recovery of lower urinary tract function in a rat contusion model of SCI. (November, 2016) Society for Neuroscience, San Diego, CA
6. Alessi, V. Petrosyan, H. Sniffen, J, Sisto:. M., S.A. Kaufman. A., Arvanian, V.L. Transcranial magnetic stimulation (TMS) evoked responses from hind limb muscles are diminished in spinal cord injured animals and partially recovered following improved plasticity induced by repetitive electromagnetic stimulation at spinal levels, (November, 2016), Society for Neuroscience, San Diego, CA
7. Wang, C., Shah, P, Sisto, SA, Vasudevan, E. How Does Movement of the Arms Influence the Legs During Walking in Young, Neurologically-Intact Adults? (November, 2016)Society for Neuroscience, San Diego, CA
8. Zangle, A., Ovechkin, A., Brooks, M., Sisto, S.A., Respiratory Changes after Locomotor Training in SCI, (November 2016) ACRM Symposium, Chicago, IL
9. Sisto, S.A., Ovechkin, A., FES as a Rehab Tool for NDD, Stroke and SCI, Functional electrical stimulation, (November 2016) Instructional Course, CRM, Chicago IL
10. Neuroplasticity: Leveraging Principles of plasticity to optimize neurorehabiitation, (Nov. 2016) TMS for SCI, Instructional Course, ACRM, Chicago IL
11. Fitzgibbon, S., Sexton, T., Sisto, S.A. (October 2015). Changes in Lower Extremity Kinematics with Forefoot Wedges at the Shoe Pedal Interface in Competitive Cyclists: A Pilot Study. Combined Sections Meeting of the American Physical Therapy Association, Anaheim, CA.
12. Sisto, S.A. (October, 2015). Reliability of the International Musculoskeletal Basic Data Set. American Congress of Rehabilitation Medicine, Dallas, TX.
13. Qureshi, F., Kung, P., Sisto, SA, Collins, WF, III (October, 2015). Serial Cystometry Measurements: A Novel Method for Evaluation of Lower Urinary Tract Function in Adult Female Sprague-Dawley Rats. Society for Neuroscience, Chicago, IL.
14. Safety of Titanium Rods used for Spinal Stabilization during Repetitive Magnetic Stimulation. Society for Neuroscience, Chicago, IL.
15. Kung, P., Qureshi, F., Sisto, S.A. (April 2015) Effect of Locomotor Training on Health Outcome Measures after Spinal Cord Injury. Undergraduate Research and Creativity (URECA), Stony Brook University, Stony Brook, NY
16. Block, P., Squllace, M., Hochman, L., Santasier, A., Sisto, S.A., Milazzo, M., Burke, C., Cesiro, J. (April 2015) EmpowerSCI: Progress and Impact, Converging Science Conference Proceedings, Stony Brook University, Stony Brook, NY.
17. Baunsgaard, C.B., Chhabra, H.S., Harvey, L., Savic, G., Sisto, S.A., Biering-Sørensen, F. SCI MS Data Set Reliability Group: Qureshi, F., Sachdev, G., Saif, M., Sharawat, R., Yeomans, J. (May, 2015). Reliability of the International Spinal Cord Injury Musculoskeletal Basic Data Set. ISCOS/ASIA Montreal CA.
18. Qureshi, F., Boyce, V., Collins, W.F., Mendell, L, Sisto, S.A. (2013) Recovery Of Micturition and Locomotion Function after SCI-Translational Animal and Human Models. Translational Science Abstracts. Clinical and Translational Science, 6:2, 103–164. doi: 10.1111/cts.12047.
19. Qureshi, F., Sisto, S.A., Collins, W.F. (April, 2013). Recovery of locomotion and micturition function following SCI: Translational Animal and Human Models. Converging Science Conference, Stony Brook University, Stony Brook, NY.

20. Backus, D, Chae, J, Lehmann, C, Rimmer, JH, Sullivan, KJ, Sisto, SA, Affordable Care Act: A Road Map to Transformation in Rehabilitation Policy, Research and Practice (November, 2013). American Congress of Rehabilitation Medicine, Orlando, FL
21. Sisto, SA, Lorenz, D, Harkema, SJ. Respiratory changes after Locomotor Training in incomplete Spinal Cord Injury. Proceedings from American Congress of Rehabilitation Medicine, Orlando, FL, November, 2013.
22. Martino, S.A., Sisto, S.A., Britelli, J., Gouzman M. Development and validation of a wireless activity and heart -rate sensor for children who are overweight. International Conference on Ambulatory Monitoring of Physical Activity and Movement, Amherst, MA, June, 2013.
23. Martino, S.A., Morelli, P.J., Sisto, S.A., Britelli, J., Das, S. Gouzman, M.,Gavrilov, D.N.,Kuzminsky, V. Development and validation of a wireless activity and heart -rate sensor in over and normal weight children. Converging Science Conference, Stony Brook University, Stony Brook, NY, April, 2013.
24. Sisto, S.A., Lorenz, D., Hutchinson, K,. Wenzel, L., Forrest, G.F., Harkema, S.J., Krassioukov, A., Cardiovascular Parameters after Locomotor Training in Incomplete Spinal Cord Injury. Proceedings from the American Congress of Rehabilitation Medicine, Vancouver, BC, Canada, October, 2012.
25. Faghri, P., Sisto, SA, Forrest, GF. Health promotion and disease prevention across the lifespan in spinal cord injury: from pediatrics to geriatrics. Proceedings from American Congress of Rehabilitation Medicine, Vancouver BC, CA, October, 2012.
26. Morrison, S., Pomeranz, J.L., Yu, N., Schmidt-Read, M, Wescott, C., Sisto, S.A., Behrman, A.L. Life Care Planning Outcomes Pre and Post Locomotor Training Intervention. Proceedings from the Academy of Spinal Cord Injury Professionals, September 3, 2012.
27. Sisto, S.A., Lorenz, D., Hutchinson, K,. Wenzel, L., Forrest, G.F., Harkema, S.J., Krassioukov, A., Cardiovascular Parameters in Incomplete Spinal Cord Injury. Proceedings from the Academy of Spinal Cord Injury Professionals, September 3, 2012.
28. Fitzgibbons, S. and Sisto, S.A. The Effect of Forefoot Wedges on Kinematics of the Lower Extremity in Competitive Cyclists, American Physical Therapy Association National Conference, Tampa, FL, June, 2012.
29. Sisto, S.A.,(facilitator, McConlogue-Ferro, A., Agnes DeTurk, W., Johnson, L.M., Montgomery, C.A., McGlynn-DeLuca, B., Cappelletti, Corinne. Cartwheels and the Art of Moving: Physical Therapy, Feldenkrais, Somatic and Dance Perspectives. Wang Center, Stony Brook University, April 17, 2012.
30. Sullivan, K., Sisto, S.A., Schmidt, M., Hershberg, J., Knowledge to Action: Evidence, Collaboration, Improved Patient Outcomes in Neurorehabilitation. APTA, Combined Sections Meeting, Chicago, IL, February, 2012.

Current and Past Research Support
1. 65343 Sisto (PI) Harkema, SJ and Lorenz, DL (CoIs). Craig H. Neilsen Foundation. Health Outcomes after Locomotor Training across the NeuroRecovery Network. The goals of this grant is to determine autonomic, respiratory and cardiometabolic changes after Locomotor Training.
2. Effects of Spinal Electromagnetic Stimulation and Locomotor Training on Motor Recovery and Walking in Incomplete SCI Projects to Accelerate Research Translation (PART) and Innovative, Developmental or Exploratory Activities (IDEA) in Spinal Cord Injury, Sisto PI. The New York State Spinal Cord Injury Research Program, Award #: C32097GG, $989,199, Award period: January 1, 2017, December 31, 2019.
3. Institutional Support for Spinal Cord Injury Research, Sisto PI, Collins Co-PI, Department of Health, Spinal Cord Injury Research Board, Award #: C030175, $211,920, Award period: 1/28/2015 – 8/31/2015.
4. Core Facilities to Support Collaborative Spinal Cord Injury Research, Sisto PI, Collins Co-PI, Department of Health, Spinal Cord Injury Research Board, Award #: C030082, Grant total: $339,111, Award period: 10/1/2014 – 2/28/2015.
5. Health Outcomes after Locomotor Training across 6 NeuroRecovery Network, Sisto PI, Craig H. Neilsen Foundation, Award #: 284755, Grant Total: $298,465, Award period: 2014-2018.
6. Advanced Rehabilitation Research and Training Center (ARRTC) on Neuromusculoskeletal Rehabilitation Post-Doctoral Training Grant, NIDRR, $748,975, 2007-2012.
7. NeuroRecovery Network, Co-PI, Christopher Reeve Foundation, $450,000, 2007-2010, U10/CCU220379.
9. Biomechanical Predictors of Pain and Injury during Manual Wheelchair Propulsion in Tetraplegia, New Jersey Commission on Spinal Cord Research, 2005-07, $398,924
10. Body Weight Support for Recovery of Walking after Stroke, Rippel Foundation, $103,050, 2004.

Chuancai Zou, MS, ME
Stony Brook University

(no CV uploaded)

Wei Hou, Ph.D.
Stony Brook University

(no CV uploaded)

Yong Zhang, MS, Applied Math and Statistics
Stony Brook University

(no CV uploaded)

Hayk Petrosyan, Ph.D.
Northport Veterans Affairs Medical Center

(no CV uploaded)

Cynthia Leone, DPT, NCS
Stony Brook University

(no CV uploaded)

Victor Arvanian, Ph.D.
Northport Veterans Affairs Medical Center

(no CV uploaded)

Suicidal Ideation Identified Using PHQ-9 : Model Systems Follow-up Study

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Kazuko Shem, MD
Santa Clara Valley Medical Center

CV:
PROFESSIONAL POSITION

Santa Clara Valley Medical Center, Department of Physical Medicine & Rehabilitation
Chief of PM&R Outpatient Clinics 9/11 - present
Acting Medical Director of Spinal Cord Injury Program 12/06 -11/09
Director of Electromyography Clinic, 7/98 – present.
Women with Disabilities Health Care Clinic Medical Director, 10/00 – present
Northern California Spinal Cord Injury Model System of Care Grant Principal Investigator, 10/00 – 9/06
"Back on Track" A Community-Based Mentoring Program Co-Principal Investigator, 11/06 – 7/10

Stanford University School of Medicine, Department of Orthopedic Surgery
Physical Medicine & Rehabilitation Assistant Residency Program Director, 5/99 – 5/10
Clinical Assistant Professor (Affiliated) July 1, 2006 – present

Fremont-Rideout Health Group Services, Active Ancillary Staff Member, 6/1/15-5/31/17

Doctors Medical Center, Affiliate Medical Staff Member, 10/31/08 – 5/31/13

Easter Seals Bay Area Timpany Center, Medical Director, 12/00 – 9-01

BOARD CERTIFICATION

American Board of Physical Medicine and Rehabilitation, 1999 – 2019
American Board of Electrodiagnostic Medicine, 2000 – 2020
American Board of Physical Medicine and Rehabilitation, Spinal Cord Injury Subspecialty, 2001 – 2021
American Board of Physical Medicine and Rehabilitation, Pain Subspecialty, 9/03 – 9/23

LICENSES

Medical Board of California, expires 5/31/2019

AWARDS

San Andreas Regional Center 18th Annual Service Above Self Award – Recognition of Merit (2016)
Craig Neilsen Foundation Quality of Life Grant (2015)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2015)
Dr. Robert Violante VMC Foundation Physicians and Philanthropy Award (2014)
Stanford University Physical Medicine and Rehabilitation James Thompson Humanitarian Award (2014)
Craig Neilsen Foundation Quality of Life Development Grant (2014)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2010)
Christopher and Dana Reeve Foundation Quality of Life grant (2009)
Jose C. Montero Excellence in Teaching Physical Medicine and Rehabilitation award (2004)
Sell Research Grant, American Spinal Injury Association (2004)
Sally Rynne National Association of Women's Health Quality Award (2002)
AAP Elan Pharmaceutical Award for Outstanding Paper Presentation (2002)
San Jose Mercury News "10 People to Watch" (4/1/01)
Robert Taylor California Society of PM&R Research Award (1998)

UCSF Student Summer Research Scholarship (1991)
Tau Beta Pi National Engineering Honor Society
UCLA Medical Auxiliary Scholarship (1990, 1986)
UC Regents Scholarship (1985-1989)
Rehabilitation Service Guild Scholarship (1988)

MEMBERSHIPS
American Academy of Physical Medicine and Rehabilitation
American Spinal Cord Injury Association
American Association of Electrodiagnostic Medicine

PUBLICATIONS

Elliott CS, Dallas KB, Zlatev D, Comiter CV, Crew J, Shem K. Volitional Voiding of the Bladder following Spinal Cord Injury: Validation of Bilateral Lower Extremity Motor Function as a Key Predictor. J Urol. 2018 Feb 17. pii: S0022-5347(18)32264-X. doi: 10.1016/j.juro.2018.02.064.

Shem K, Barncord S, Flavin K, Mohan M. Adverse cognitive effect of gabapentin in individuals with spinal cord injury: preliminary findings. Spinal Cord Series Cases 2018. 4:9. doi:10.1038/s41394-018-0038-y.

Elliot C, Shem K. Volitional Voiding After Spinal Cord Injury—Who Will and Who Will Not. Current Bladder Dysfunction Reports 2017. 12 (4): 337–342.

Shem K, Sechrist SJ, Loomis E. Isaac L. SCiPad: Effective Implementation of Telemedicine Using iPads with Individuals with Spinal Cord Injuries, a Case Series. Front. Med. 29 May 2017 |https://doi.org/10.3389/fmed.2017.00058

Zlatev DV, Shem K, Elliott C. Predictors of Long-Term Bladder Management in Spinal Cord Injury Patients - Upper Extremity Function May Matter Most. Neurourology and Urodynamics. Article DOI: 10.1002/nau.23430.

Shem K, Sechrist S. Solis L. SCiPAD: Telemedicine Program Using iPad's for Individuals with Spina Cord Injury. Topics in Spinal Cord Inj Rehab. 2017:23(Supplement 1):82.

Shem K, Karasik D, Carufel P, Kao M, Zheng P. Seated Tai Chi to Alleviate Pain and Improve Quality of Life in Individuals with Spinal Cord Disorder. J Spinal Cord Med. Feb 2016.
Williams TG, Ehsanian R, Shem KL, Wright J, Isaac L, Crew J. The effect of vitamin D supplementation on pain, mood, depression and strength in patients with spinal cord injury. PMR 2016:Suppl 98;S153.

Zlatev DV, Shem K, Elliott CS. How Many Spinal Cord Injury Patients Can Catheterize Their Own Bladder? The Epidemiology of Upper Extremity Function as it Affects Bladder Management. Spinal Cord advance online publication, January 19 2016. doi:10.1038/sc.2015.169

Timmerman MA, Crew J, Shem K, Kim M, Kolakowsky-Hayner SA, Wright JA. Low Vitamin D Levels in Persons with Spinal Cord Injury and Increased Incidence of Venous Thromboembolic Events During Acute Inpatient and Rehabilitation Stay. PM&R 2013; 5(9):S140.

Williams L, Ajay P, Shem K. Persistent Autonomic Dysreflexia Due to Bowel Care in Spinal Cord Injured Men: A Case Series . Am J Phys Med Rehabil: 2014;93 Suppl 2: a36

Ben Dirlikov, MA
Santa Clara Valley Medical Center

CV:

Not applicable

Cria-May Khong, BS
Santa Clara Valley Medical Center

CV:
Not applicable

Capsaicin 8% Patch for SCI Neuropathic pain

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Michelle Trbovich, MD
Ut Health San Antonio/South Tx Veteran's Health Care System

(no CV uploaded)

Brett Helmonds, DO
Ut Health San Antonio/South Tx Veteran's Health Care System

CV:
Brett Helmonds, D.O.
UT Health San Antonio: Department of Rehabilitation Medicine BRETTHELMONDS@GMAIL.COM 408-839-5887

POST GRADUATE TRAINING

Residency, Physical Medicine and Rehabilitation, UT Health, San Antonio, TX 2015-Present
Anticipated Graduation June 30, 2019
Board Eligible 2019
Trained at the following facilities:
Audie Murphy VA:
• Spinal Cord Injury Center, inpatient/outpatient, 1 month
• Polytrauma Rehabilitation Center, 2 months inpatient, 3 months outpatient
• Pain Clinic, outpatient, 1 month
• EMG, outpatient, 2 months
• Geriatrics and Extended Care, inpatient/outpatient, 2 months
• Neurosurgery, inpatient, 2 months
• Orthopedics, inpatient/outpatient, 2 months
• Internal Medicine, inpatient, 4 months
• Rheumatology, outpatient, 1 month
UT Health System: 16 months
• Reeves Acute Rehabilitation Center, inpatient, 6 months
• PM&R Consults, inpatient, 6 months
• UHS Rehab outpatient clinics (Spine, MSK, SCI, Neurorehab, Prosthetics, Amputee), 6 months
• UHS EMG clinic, inpatient/outpatient, 1 month
• UT Health Westgate Pain Clinic, 1 month
Christus Santa Rosa Children's Hospital: 2 months
Warm Springs Inpatient Rehabilitation: 1 month
Sports Medicine Associates, outpatient, 1 month

SPECIAL COMPETENCIES
• Comprehensive inpatient rehabilitation consultation services and acute inpatient management
• Extensive training in EMG/NCS including complex inpatient/outpatient services
• Headache Management: occipital nerve blocks, migraine Botox protocol, pharmaceutical management
• Spasticity Procedures: Botox, Baclofen pump refill and maintenance

• Musculoskeletal Procedures: ultrasound guided peripheral joint injections, trigger point injections, epidural steroid injections, fluoroscopy guided spinal injections
• Wound Care Procedures: debridement, negative pressure wound therapy, pre-post plastic surgery wound flap management

PROFESSIONAL MEMBERSHIPS
•American Academy of Physical Medicine and Rehabilitation
•Association of Academic Physiatrists
•American Osteopathic Association
•National Athletic Trainers Association

RESEARCH AND PUBLICATIONS
•Capsaicin 8% Patch for Focal Neuropathic Pain in Spinal Cord Injury

PRESENTATIONS
•Pediatric Concussions
•Lower Extremity Anatomy and Injuries
•Wound Care and Osteomyelitis in Spinal Cord Injury
•Nephrolithiasis and Urolithiasis in Spinal Cord Injury
•Wound Care
•Pediatric Seizures and Epilepsy
•Insomnia in Geriatrics
•Geriatric Fall Prevention

HONORS/AWARDS
•Poster acceptance to American Academy of Pain Management Annual Scientific Meeting (April 2018)
•Poster acceptance to American Spinal Injury Annual Scientific Meeting (May 2017)
•Poster acceptance to Association of Academic Physiatrists Annual Conference (February 2017)
•Awarded Milbank Spinal Cord Injury Rehabilitation Research Grant

VOLUNTEER/EXTRACURRICULAR EXPERIENCE
•Special Olympics: Completed sports physicals for children with disabilities (2015, 2016)
•Chapman University Varsity Baseball: 2007-2009

EMPLOYMENT EXPERIENCE
•NHL: Anaheim Ducks Strength and Conditioning (2009 -2010)
•MLB: Los Angeles Angels of Anaheim Athletic Training (2009)
•High School Athletic Trainer (2006-2010)

Utilizing 3D wound imaging to optimize wound care for the SCI population

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Pricias Daysa, RN, BSN
Louis Stokes Cleveland Va

CV:
Professional Experience:

Veterans Affair Medical Center
2009-Present
Charge nurse/staff nurse:

Spinal Cord Injury/Diseases Unit (SCI)

Assess and implement patient care with SCI needs

Checking and administering controlled and scheduled medications

Patient discharge and admission

Collaboration with interdisciplinary team

Educate patients and families on SCI needs, rehabilitation after SCI

Proficient in providing care to patient with newly injured spinal cord

Responsible for maintaining stable blood pressure for SCI patient

Ensuring adequate ventilation and lung function

Knowledgeable of ventilator equipment

Responsible for updating reports to the supervisor/nurse manager to communicate floor status

Manage daily staff assignment

Precept new nursing employee on the unit

Staff Resource for the unit

Manage complicated wound care and dressing

Rounds weekly with wound care nurse

Wayside Farm Nursing and rehabilitation September 2008- February 2009
Staff nurse:

Provided direct quality care to patient with mental health issues

Assess, plan, implement and evaluate individual patients based on their needs

Offered bedside care and treatment plan for patients with broad range of mental health issues Manage care of adult residence with special care /behavior.

Provided care for existing and emergency health condition both medical and psychiatric

Provided therapeutic interaction with patient when needed

Presentations:

“The Spinal Cord Injury /Diseases Pressure Ulcer Monitoring Tool”, Cleveland Spinal Cord Injury/Diseases Conference in Cleveland Ohio

Pudendal Nerve Block Poster presented at Spinal Cord Spotlight 2017

Broderick Flynn, RN, BSN
Louis Stokes Cleveland Va

CV:
Work History:

Patient companion, 05/2009 to 07/2010
Cleveland Clinic – Cleveland
-Provided one on one care for patients who were: combative, suicidal, threat to self or others, special needs
-Provided basic physical assessment
-Interacted with medical staff in a professional manner

Registered Nurse, 08/2010 to 10/2013
Veterans Affairs – Cleveland
-Entrusted with charge nurse responsibility regularly on the floor.
-Given the responsibility to precept new hires on the floor.
-C-diff champion on floor, has taught educational classes to co-workers regarding C-diff and medical center policies.
-Speaking at the annual spinal cord injury conference to hub and spoke sites regarding new developments in spinal cord injury nursing.
- Responsible for accurate clinical assessments, interventions, evaluations and documentation of patients with spinal cord, Multiple sclerosis, and ALS related medical conditions
- Co-presented nationally teleconferenced class regarding diabetes in the SCI patient.
- Collaborates with the Inter-disciplinary teams, such as physical therapists and social workers to manage, develop, and implement each patient's plan of care to provide continuity of care to the patient
- Actively teaching Patient Education classes, once a quarter, to help facilitate understanding of relevant care to patients, their families, and health care team
- Exceptional charting and communication skills relating to nursing care
- Outstanding ability to organize, collaborate, and prioritize to effectively meet patient needs
- Often assigned as Charge Nurse and responsible for overseeing activities during shift
- Participates in Quality Assessment and Improvement program activities
- Works with veterans suffering from post-traumatic stress disorder also veterans who are suffering from depression, anxiety, and suicidal ideation
- Maintains patients' Foley catheters and suprapubic catheters
- PICC line maintenance
- Performing various types of dressing changes including vacuum assisted closure, wet to dry dressing changes, and performing all relevant documentation related to wound care
- Hospice Resource for the floor
- Member of annual spinal cord injury hub and spokes conference planning committee
- Flu shot champion
- Member of policy review committee
- Part of the Glucose Monitoring Quality Assurance Committee
- Monitoring patient's vital signs, and laboratory trends

Telehealth Nurse Care Coordinator, 10/2013 to Current
Veterans Affairs – Cleveland
-Help develop new programs that assist with patient provider interaction via technology.
-Coordinate with providers and patients to aid patients in clinical visits and access.
-Provide clinical nursing assessments of patients via video.
-Provide patient education regarding spinal cord injury issues

Publications:

Delivering tertiary centre specialty care to ALS patients via telemedicine: a retrospective cohort analysis.

Stephen M. Selkirk, Monique O Washington, Frances McClellan, Broderick Flynn, Jacinta M Seton, Richard J Strozewski

---

Jaimie Jurkowski, RN, BSN
Louis Stokes Cleveland Va

CV:
Work Experience:

Professional Experience
September 2012 – Present Staff Nurse, Acute Spinal Cord 6B LOUIS STOKES CLEVELAND VAMC CLEVELAND, OH
• Provide comprehensive patient care for spinal cord injuries including paraplegics, tetraplegics, TBI, stroke,MS and ALS on a 32 bed inpatient unit.
• Work directly with the interdisciplinary team and participate in rehabilitation by creating goals customized to each specific patient. Meet weekly to discuss the patient's current status as well as creating new goals with a strong emphasis on bowel, bladder, and skin.
• Serve as wound champion, participating in weekly wound rounds measuring and assessing wounds. Recognizes changes in wound appearance and drainage and initiates evidenced based clinical change. Serve as
reference to staff members for correct staging of
pressure ulcers.
• Provide education experiences to staff throughout the hospital, patients and students regarding wound care and SCI specific tasks such as AD, suprapubic changes, cough assist, and bowel care.
• Accurately use the Braden Scale to implement
preventative measures to protect skin integrity.
• Knowledgeable on several wound treatments and tools including lavage, Pressure Ulcer Monitoring Tool (PUMT) scoring, Silhouette imaging, and available products.

Leadership Activities:

• Nurse Preceptor
• Charge Nurse
• Vice President of Unit Peer
Counsel
• Wound Care Champion
• Nursing Peer Review committee
• Prevalence Study team leader

Recognitions/awards:

• Nominated for the 2014

Secretary's Hands and Heart
award.
• Scholarship recipient for 2017
PVA Summit.
• Experience with medication administration, blood administration, feeding tubes, chest tubes, colostomies, intravenous treatment, trauma/wound care, code procedure protocol, and monitoring laboratory values.
• Delegate assignments and supervise while advocating for nursing staff and patients as charge nurse.
• Initiated and implemented Primary Nursing on 6B.

Jessica Treska, RN, BSN
Louis Stokes Cleveland Va

CV:
Work History:

• Provide direct patient care for a patient population with new spinal cord injuries including paraplegics, tetraplegics, TBI, stroke, MS and ALS on a 32 bed inpatient unit.
• Work directly with the interdisciplinary team and participate in rehabilitation by creating goals customized to each specific patient. Meet weekly to discuss the patients current status as well as creating new goals with a strong emphasis on bowel, bladder and skin.
• Manage and monitor patients on LTV ventilation as well as Trilogy.
• Participate in weekly wound rounds participating in measuring, documentation, and making recommendations for wound healing.
• Use Silhouette to document measurements and visual appearance of wounds to track progress and decline in wound healing.
• Educate patients and staff on pressure ulcer prevention, staging, and wound products.
• Monitor and manage lab values including SCI specific problems such as Autonomic Dysrelexia.
• Administer IV fluids, medications, antibiotics and blood products while monitoring for adverse reactions and side effects.
• Delegate assignments and supervise while advocating for nursing staff and patients as Charge Nurse 2-3X a week.
• Iniated and implemented Primary Nursing on our unit.

Leadership Roles:

• Nurse Preceptor
• Charge Nurse
• President of Unit Peer Counsil
• Scheduling Committee
• Wound Care Champion
• Nursing Peer Review committee
• Retention committee

Achievements:

Florence Nightingale of Nursing

The Effect of Gait Training Using End-Effector Type Robotic Device in Patients with Incomplete SCI

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Hara Jeon, MD
Nhis Ilsan Hospital

CV:
1. Medical Certification
-Feb. 2007 : License in Medicine
-Mar. 2012 : Diplomat, Korean Board of Rehabilitation Medicine

2. Appointments
-Mar. 2007 - Feb. 2008 : Intern, Severance Hospital, Yonsei University, Seoul
-Mar. 2008 - Feb. 2012 : Resident in Rehab. Medicine, Yonsei University, Seoul
-Mar. 2012 - Feb. 2013 : Fellow in Dept. of Physical Medicine & Rehabilitation, NHIS Ilsan Hospital
-Mar. 2013 - present : Dept. of Physical Medicine & Rehabilitation Medicine, NHIS Ilsan Hospital
-Mar.2016-present : Clinical Professor in Dept. of Rehabilitation Medicine, Yonsei University

3. Society Memberships
-Member of Korean Academy of Rehabilitation Medicine
-Member of Korean Spinal Cord Society

Seung Yeon Rhee, MD
Nhis Ilsan Hospital

(no CV uploaded)

Autologous bone marrow derived mononuclear cell (BM-MNC) therapy of pressure injury in Spinal cord injury cases- A pilot study

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Rajeshwar Srivastava, MS (Ortho)
King George's Medical University

CV:
Postings Held
• Appointed as Medical Officer in Provincial Medical Services (PMHS) in Jan, 1989.
• Appointed as Lecturer in Ortho Surgery, K.G.'s Medical College on May 16th, 1995
• Promoted as Assistant Professor in Ortho Surgery, K.G.'s Medical College on July 5th, 1997.
• Promoted as Associate Professor in Ortho Surgery, K.G.'s Medical College on July 5th, 2001
• Promoted as Professor in Ortho Surgery, K.G.'s Medical College on July 5th, 2003
• Prof & Head, Dept. of Physical Medicine & Rehabilitation, KGMC since 30th May, 2012
Academics
• Publications in peer reviewed indexed Journals: 130 (Abstracts: 61, Review: 10, Research articles: 58, Acknowledgements: 1)
• Free papers presented in Annual Conferences: 71
• (Abroad: 46 & in own country: 25)
• Guest Lectures abroad: 10
• Visiting Professor/ Observer abroad: 3
• R3G Score: 35.60
• Publication in last 5 years: 48 (Review: 6, Research articles: 42)
• Number of citation received on my publications in last 6 years: 452
• H index: 12
• I-10 index: 15
Awards/Fellowships/Distinctions: -
• In MBBS examinations, first Class with Distinctions in Anatomy, Physiology, Biochemistry, Microbiology, Community medicine, Forensic medicine & Ophthalmology. Secured highest marks (1st Position) in Microbiology & Community Medicine.

• "TRAVELLING FELLOWSHIP" of UP Chapter, Indian Orthopaedic Association in 1993.

• "JOHNSON & JOHNSON FELLOWSHIP" of Indian Orthopaedic Association in 1994.

• "BEST POSTER AWARD" in Annual Conference of UP, IOA in 1995.

• "ADVANCED SPINAL FELLOWSHIP" at SION HOSPITAL, Bombay in 1996.

• "2nd BEST POSTER AWARD" in Annual Conference of IOA in 1998 and in UP, IOA in Feb.'2000.

• "PROF. A.N. SRIVASTAVA VISITING FELLOWSHIP" of UP, IOA in 2002.

• "EXPERT" in Selection Committee of Public Service Commission of Uttaranchal for appointment of medical officers in PMHS cadre of the state in May, 2003

• "AWARD FOR EXCELLENCE IN INNOVATIVE RESEARCH" to Paper presented at Annual Conference of American Spinal Injuries Association (ASIA) held at Denver, USA in May, 2004.

• "PRESIDENT MEDAL" for best oral presentation in senior faculty at Annual Conference of UP- IOA held at Jhansi in Feb' 2005.

• "CHIEF GUIDE" for the FIRST MD-PhD scholar enrolled in India by ICMR" in Mar, 2007.

• “EXPERT” in selection committee for appointment of Lecturers in Institute of paramedical sciences, CSJM University, Kanpur in July, 2007.

• “MCI INSPECTOR” for recognition of PG course at MGM Medical College, Kamothe, Navi Mumbai (2008); for starting PG courses at PGIMS ESI Hospital Manicktala, Kolkata (2009); and at Yenepoya Medical College Mangalore, Karnataka (2013); at Sri Lakshmi Narayan Instt. Of Medical Sciences, Puducherry under Bharath University, Chennai (2013); Gian Sagar Medical College and Hospital, Patiala chandigarh (2014).

• “TRAVELLING FELLOWSHIP of US $2000/-” to present a free paper at Annual Conference of OARSI, held at Brussels Belgium in Sept. 2010.

• “TRANS USA AND PARADIGM SPINE FELLOWSHIP” as Visitor to Lingen Germany and Luxenbourg for live demonstrations of AXIA-LIF and DCI in spinal surgeries in April 2011.

• “TRAVELLING FELLOWSHIP” to present a free paper at Annual conference of EULAR 2011 held at London in June 2011.

• AO SPINE-INDIA RESEARCH AWARD 2011 and 2012 for clinical trials on treatment modalities in Spinal cord injury

• “EXPERT” in selection committee for appointment of Professor and Assistant Professors in Institute of Medical Science and Research, SAIFAI, Etawah, U.P in Dec 2011

• Faculty incharge MCI and UGC cell KGMU, since 2012

• Member Stem Cell Ethics Committee, KGMU, since 2013 and Member Stem Cell Ethics Committee, ERA's Lucknow Medical College, since 2015

• “MEMBER EXPERT” in PRC (Project review committee) meetings of Indian Council of Medical Research, New Delhi Since 18 Jan 2013.

• “EXPERT” in selection committee for appointment of Professor and Assistant Professors in 6 new AIIMS conducted at Delhi in April 2012

Mukesh Dwivedi, PhD
King George's Medical University

(no CV uploaded)

Amit Bhagat, MSc
King George's Medical University

(no CV uploaded)

Saloni Raj, MBBS
King George's Medical University

(no CV uploaded)

Postpartum depression and spinal cord injury: Results from a multi-centre retrospective study

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Amanda Lee, MSc
International Collaboration on Repair Discoveries (Icord)

CV:
PERSONAL STATEMENT
Amanda Lee recently completed her MSc in Experimental Medicine at the University of British Columbia, supervised by Dr. Krassioukov at the International Collaboration on Repair Discoveries (ICORD). She obtained a CIHR CGS-M scholarship to work on the present study, which served as one component of her thesis project. Amanda currently works with an interdisciplinary panel of health care practitioners, including sexual medicine clinicians, lactation consultants, nurses and occupational therapists to form evidence-based recommendations and clinician guidelines for postpartum care of mothers with SCI, specifically in the areas of facilitating successful breastfeeding.

Amanda's research experience in the field of SCI includes both pre-clinical and clinical research. She has been involved in studies using rodent models to evaluate the impact of SCI on cardiovascular function and cognition: previously humans with SCI exhibit mild cognitive impairment as well as elevated risk of cardiovascular disease associated with impaired cardiac function and vascular reactivity. Amanda's involvement in this area includes assessing whether novel interventions such as passive exercise mitigate the cardiovascular aberrations and cognitive deficits that follow chronic SCI, as well as the effects of SCI on vascular structure and cytoarchitecture (particularly the hippocampus).

With respect to clinical research, Amanda conducted numerous projects in addition to her work on maternal health after SCI. Several of these projects have been published and a few studies are ongoing. Currently Amanda is interested in the phenomenon of neurovascular coupling (NVC) as a marker for cerebrovascular health in persons with SCI, and she is currently studying the implications of different durations of SCI and autonomic dysreflexia on global cerebral blood flow and cognition. This upcoming study, funded by the Heart & Stroke Foundation, will utilize ambulated blood pressure monitoring, hemodynamic assessments, neuroimaging (fMRI) and cognitive tasks. Additionally, Amanda is currently involved in clinical trials using intradetrusor onabotulinumtoxinA (Botox) administration to treat neurogenic detrusor overactivity and its subsequent impact on a) autonomic dysreflexia incidence/severity and b) cerebral autoregulation.

AWARDS:
2018 – Neurotrauma Travel Award to the 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care
2018 - 2nd Best Poster Presentation, ICORD Trainee Symposium
2018 - Runner-up for Best Poster Presentation, ICORD Annual Research Meeting
2018 - Publication Award, UBC Department of Experimental Medicine
2018 - Academic Award, UBC Department of Experimental Medicine
2017 - Trainee Travel Award, International Collaboration on Repair Discoveries (ICORD)
2017 - Go Global Self-Directed Research Award, University of British Columbia
2017 - Canada Graduate Scholarships - Master's Program (Experimental Medicine), Canadian Institutes of Health Research (CIHR)
2017 – 3rd Best Poster award at the 4th Annual International Autonomic Symposium, International Collaboration on Repair Discoveries (ICORD)
2016 - Canada Graduate Scholarships - Master's Program (Clinical Neuropsychology), Canadian Institutes of Health Research (CIHR) – declined offer
2015 – Highly Commended Entrant, Undergraduate Awards, Ireland

RESEARCH FUNDING
Project #: 430818
Grant Title: Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.
PI: Dr. Andrei Krassioukov

Funding Agency: Craig H. Neilsen Foundation
Dates: 10/31/2016 – 10/31/2017
Role: Project lead

Project #: 402831
Grant Title: Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia. Translating knowledge to practice.
PI: Dr. Andrei Krassioukov
Funding Agency: Canadian Institutes of Health Research (Institute of Circulatory and Respiratory Health)
Dates: 05/01/2018 – 04/30/2019
Role: Co-applicant; project lead

CONTRIBUTION TO SCIENCE
Publications:
Krassioukov A, Holmgren T, Lee A, Shea H, Hamilton L, Sandholdt N, Hellsing I, Elliott S, Claes H. Breastfeeding and motherhood after spinal cord injury: Barriers and challenges. Annals of Physical and Rehabilitation Medicine. 2018 Jul 1;61:e239. https://doi.org/10.1016/j.rehab.2018.05.555
Lee, A.H.X., Wen, B, Hocaloski, S., Sandholt, N., Hultling C., Elliott, S., Krassioukov, A.V. Breastfeeding before and after spinal cord injury: a case report of a mother with C6 tetraplegia. Minor revisions requested from the Journal of Human Lactation, July 17, 2018.

Holmgren, T., Lee, A.H.X., Hultling, C., Hocaloski, S., Elliott, S.L., & Krassioukov, A.V. (2018). The influence of spinal cord injury on breastfeeding ability and behavior. Journal of Human Lactation, 34 (3), 556-565.
Saleem, S., Vucina, D., Sarafis, Z., Lee, A.H.X., Squair, J., Barak, O.F., Coombs, G., Mijacika, T., Krassioukov, A.V., Ainslie, P., Dujic, Z., Tzeng, Y., & Phillips, A.A. Wavelet decomposition analysis is a clinically-relevant strategy to evaluate cerebrovascular buffering of blood pressure after spinal cord injury. American Journal of Physiology-Heart and Circulatory Physiology. March 26, 2018. Epub ahead of print. DOI: 10.1152/ajpheart.00152.2017
Lee, A.H.X., Phillips, A. A., Squair, J. W., Barak, O.F., Coombs, G., Ainslie, P.N., Sarafis, Z.K., Mijacika, T., Vucina, D., Dujic, Z., & Krassioukov, A.V. Alarming blood pressure changes during routine bladder emptying in a woman with cervical spinal cord injury. Spinal Cord: Series and Cases. Dec 28, 2017. eCollection 2017;3:17101. DOI: 10.1038/s41394-017-0022-y
Lee, A.H.X., Phillips, A.A., & Krassioukov, A.V. (2016) Increased central arterial stiffness after spinal cord injury: contributing factors, implications and possible interventions. Journal of Neurotrauma, 34 (6):1129-1140.
Lee, A.H.X. (2016). CB1 receptor agonist HU-210 and antagonist AM-251 exert unique effects on male rat sexual behaviour when chronically exposed in adolescence. UBC Undergraduate Journal of Psychology, 4 (1), 3-12.
Lee, A., & Rigby, R. (2014). The effect of acute low doses of the CB1 receptor agonist HU-210 on sexual behaviour in male rats. UBC Undergraduate Journal of Psychology, 3 (1), 3 - 13.
Squair, J.W., Lee, A.H.X., Sarafis, Z.K., Chan, F., Day, T., & Phillips, A. A. Network analysis identifies consensus physiological measures of neurovascular coupling in humans. In submission to Journal of Cerebral Blood Flow and Metabolism. June 25, 2018 (revision requested July 29, 2018).
Walter, M., Lee, A.H.X., Kavanagh, A., Phillips, A. A., & Krassioukov, A.V. Acute effects of epidural spinal cord stimulation on lower urinary tract and bowel function in one individual with spinal cord injury. Minor revisions requested in Frontiers of Physiology. June 24, 2018.
Coombs, G.B., Barak, O.F., Phillips, A.A., Mijacika, T., Sarafis, Z.K., Lee, A.H.X., Squair, J.W., Bammert, T.D., DeSouza, N.M., Gagnon, D., Krassioukov, A.V., Dujic, Z., DESouza, C.A., & Ainslie, P.N. Vascular function in chronic cervical spinal cord injury: acute effects of passive heat stress. In submission to Circulation Research. June 15, 2018.
Saleem, S., Sarafis, Z., Lee, A.H.X., Squair, J.W, Barak, O.F., Sober-Williams, E., Coombs, G., Mijacika, T., Krassioukov, A.V., Ainslie, P., Dujic, Z., Tzeng, Y., & Phillips, A.A Spinal cord disruption is associated with a loss of Cushing-like blood pressure interactions. In submission to Journal of Neurotrauma. May 22, 2018.

Lee, A.H.X., Wen, B, Walter, M., Hocaloski, S., Hodge, K., Sandholt, N., Hultling C., Elliott, S., Krassioukov, A.V. Increased prevalence of postpartum depression and anxiety among women with spinal cord injury. In submission to Archives of Women's Mental Health. May 10, 2018.

Walter. M., Ramirez, A.L., Lee, A.H.X., Rapoport, D., & Krassioukov, A.V. Protocol for a phase II, open-label exploratory study investigating the efficacy of Fesoterodine for treatment of adult patients with spinal cord injury with neurogenic detrusor overactivity for amelioration of autonomic dysreflexia. Under review in BMJ Open. May 10, 2018.
Frias, B., Phillips, A.A., Squair, J.W., Lee, A.H.X., Laher, I., & Krassioukov, A.V. Reduced colonic smooth muscle cholinergic responsiveness is associated with impaired bowel motility after chronic experimental high-level spinal cord injury. Autonomic Neuroscience: Basic and Clinical. (Revisions requested Jan 5, 2018).

Zheng, M. M. Z., Phillips, A. A., Golbidi, S., Lee, A. H. X., Laher, I., & Krassioukov, A.V. Impaired endothelium and remodelling in vasculature caudal to spinal cord transection that can be reversed through TRPV4 and TGFβ pathways by increasing blood flow and shear forces. The Journal of Physiology. Submitted 5 June 2017. Special Case Resubmission requested by journal July 4, 2017.
Squair, J.W., Lee, A.H.X., Sarafis, Z.K., Coombs, G., Barak, O., Cragg, J.J., Mijacika, T., Pecotic, R., Krassioukov, A.V., Dogas, Z., Ainslie, P.N., Dujic, Z., & Phillips, A. A. Sleep-disordered breathing is highly-prevalent and associated with impaired brain vascular function in individuals with spinal cord injury. (Pre-submission).
Lee, A.H.X., Romac, R., Squair, J.W., Barak, O., Coombs, G.F., West, C.R., Mijacika, T., Sarafis, Z.K., Krassioukov, A.V., Ainslie, P.N., Dujic, Z., & Phillips, A.A. Passive leg cycling in people with spinal cord injury acutely leads to integrated cardiorespiratory responses and improves femoral artery endothelial function. (In preparation)
Walter, M., Lee, A.H.X., Krassioukov, A.V. Bladder dysfunction following spinal cord injury: a cardiovascular nightmare? (In preparation).
Lee. A.H.X., Coombs, G., Phillips, A.A., Ainslie, P.N. Neurovascular coupling and global cerebral blood flow during passive heating intervention in patients with cervical spinal cord injury. (In preparation).
Lee, A.H.X., Khayambashi, S., Co, D., Frank, A., Sepehry, A.A., Krausz, M., & Schütz, C.G. Epilepsy and seizures in the mentally ill homeless: psychiatric comorbidities and substance use. (In preparation).
Chan, H., Stewart, L.C., Fayowski, C., Lee, A.H.X., & Brubacher, J. Injured elderly drivers and emergency department visits. (In preparation).
Presentations:
Lee, A.H.X., Hocaloski, S., Elliott, S., Wen, B., Hodge, K., Sandholt, N., Basso, M., Walter, M., Hultling, C., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.” Poster presented at the 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care (Neurotrauma 2018), Toronto, ON, Canada. August 11-16, 2018.
Wen, B. Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hodge, K., Walter, M., Hultling, C., & Krassioukov, A.V. “Postpartum depression after spinal cord injury: Results from a multi-centre retrospective study.” Poster presented at UBC Psychiatry Research Day. June 7, 2018.
Lee, A.H.X. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia. Oral presentation at GF Strong Research Day 2018, Vancouver, BC, Canada. May 9, 2018.
Lee, A.H.X., Hocaloski, S., Elliott, S., Wen, B., Hodge, K., Sandholt, N., Basso, M., Walter, M., Hultling, C., & Krassioukov, A.V. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia. 2nd best Poster presentation at the ICORD Trainee Symposium 2018. May 7, 2018.
Lee, A.H.X., Hocaloski, S., Hodge, K., Elliott, S., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.” Course delivered at the American Spinal Injury Association (ASIA) Annual Scientific Meeting 2018, Rochester, Minnesota, USA. May 2-5, 2018.
Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hultling, C., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.” Runner up for Best Poster presentation at the ICORD Annual Research Meeting. March 13, 2018.
Lee, A.H.X., Basso, M., Hodge, K. “Rolling into parenthood: key physical, mental health and breastfeeding considerations when working with pregnant and new parents with physical disabilities.” Oral presentation at the Perinatal Services BC’s 3rd Biennial Conference: “Healthy Mothers and Healthy Babies. Working Together to Improve Perinatal Outcomes”, Vancouver, BC, Canada. March 1-2, 2018.
Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hultling, C., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.” Poster presented at the Faculty of Medicine Research Trainee Day, Vancouver, BC, Canada. February 16, 2018.
Lee, A.H.X. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia. Oral presentation at the 2017 Medicine Research Expo for Vancouver General Hospital, Vancouver, BC, Canada.

October 31, 2017. Award for best trainee talk.
Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hultling, C., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia.” Poster presented at the Inaugural BC Support Unit Conference: “Putting Patients First: Partnerships for Better Health Research”, Vancouver, BC, Canada. November 9, 2017.
Elliott, S., Lee, A.H. X., Belich, B.N. “Pea app: a novel app for premature ejaculation.” Moderated poster session presented at the 2017 Annual Fall Scientific Meeting of the Sexual Medicine Society of North America. 27 October 2017.
Lee. A. H. X., Phillips, A.A., Squair, J.W., Sayenko, D.G., Edgerton, V.R, Gerasimenko, Y., & Krassioukov, A.V. “Non-invasive electrical spinal cord stimulation restores autonomic cardiovascular function in individuals with spinal cord injury.” Poster presented at the ICORD Trainee Symposium. 14 June 2017.
Lee, A. H. X., Zheng, M.M.Z., Wen, B., & Krassioukov, A.V. “Cardiovascular responses to ballroom dancing in wheelchair dancers.” Poster presented at GF Strong Research Day. 3 May 2017.
Lee, A. H. X., Zheng, M.M.Z., Phillips, A.A., & Krassioukov, A.V. “Chronic autonomic dysreflexia after T3 spinal cord injury results in impaired vascular function in femoral rat arteries.” Poster presented at Experimental Biology. 26 April 2017.
Lee. A. H. X., Phillips, A.A., Squair, J.W., Sayenko, D.G., Edgerton, V.R, Gerasimenko, Y., & Krassioukov, A.V. “Non-invasive electrical spinal cord stimulation restores autonomic cardiovascular function in individuals with spinal cord injury.” Poster presented at the SCI Symposium. 6 April 2017.
Lee, A. H. X., Zheng, M.M.Z., Phillips, A.A., & Krassioukov, A.V. “Chronic autonomic dysreflexia after T3 spinal cord injury results in impaired vascular function in femoral rat arteries.” Award for 3rd best poster presentation at the 4th International Autonomic Symposium. 22 February 2017.
Lee, A. H. X., Nikoo, M., Krausz, M., & Schutz, C. G. “Suicidality during opioid substitution treatment.” Poster presented at UBC Psychiatry Research Day. 26 May 2016.
Lee, A. H. X., Dang, S.S., & Gorzalka, B.B. “Enhancement of endocannabinoid 2-arachidonoyl glycerol, but not arachidonoyl ethanolamide, suppresses sexual behavior in male rats.” Poster presented at the 41st Annual Meeting of the International Academy of Sex Research. 10 August 2015.
Lee, A. H. X., Chao, T.W., & Schütz, C.G. “Stress response to cognitive assessments in patients with concurrent mental health and substance use disorders.” Poster presented at UBC Psychiatry Research Day. 18 June 2015.
Rigby, R. & Lee, A. “The effects of chronic adolescent cannabinoid exposure on the sexual behaviour of male rats.” Poster presented at the 5th Annual Multidisciplinary Undergraduate Research Conference at UBC. 21 March 2015.
Lee, A., & Rigby, R. “The inhibitory effect of CB1 receptor agonist HU-210 on sexual behaviour in male rats.” Runner-up award for Top Poster Presentation at the 4th Annual Multidisciplinary Undergraduate Research Conference at UBC. 22 March 2014.

Betty Wen, BSc
University of British Columbia

(no CV uploaded)

Matthias Walter, MD, PhD
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Shea Hocaloski, RN, BTechN
Gf Strong Rehabilitation Centre

(no CV uploaded)

Karen Hodge, MSW, RCSW

Sunny Hill Health Centre

(no CV uploaded)

Nora Sandholt, BSc
Spinalis Sci Research Unit, Karolinska Institutet

(no CV uploaded)

Claes Hultling, MD, PhD
Karolinka Institutet

(no CV uploaded)

Stacy Elliott, MD
University of British Columbia, Bc Centre for Sexual Medicine, Vancouver Sperm Retrieval Clinic, Prostate Cancer Supportive Care Clinic

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Recurrent Hydroureteronephrosis As A Complication From Suprapubic Catheter: A Case Report

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Tommy Yu, MD
James A. Haley Veterans' Hospital/University of South Florida

(no CV uploaded)

John Cunneen, MD
James A. Haley Veterans' Hospital/University of South Florida

CV:
AWARDS

Undergraduate
Dean's List (2005-2009)
Dean's Circle (2005-2009)
V.P. Travel Grant (Spring, 2008)
Math and Science Honor Society (2008-2009)
American Chemical Society Research Summary Award (April 18, 2008)
Alphi Chi (Spring, 2009) – National Honor Society
Magna Cum Laude – Marist College, 2009
Honors Curriculum Graduate - Marist College, 2009

Graduate
Summer Research Grant (Upstate) – Summer, 2010

Postgraduate
Intern of the Year – Stony Brook University Hospital, Internal Medicine, 2014
Helping Heroes Award for Excellence in Patient Care – V.A. Hospital, Northport, New York, 2014
Academic Chief Resident – April, 2016 - June, 2017
Resident Teacher of the Year – Academic year 2016-2017

UNDERGRADUATE PRESENTATIONS

American Association for Advancement of Science1,2 (Boston, Mass. February 16, 2008)

Eastern College Science Conference1 (Niagara University, NY. April 11, 2008)

American Chemical Society1 (Mt. St. Mary College, Newburgh, NY. April 18, 2008)

CURSCA (Celebration of Undergraduate Research, Scholarship & Creative Activity)1 (Marist College, Poughkeepsie NY, April 23, 2008)

UNDERGRADUATE PUBLICATIONS

1 Toxicology and Chemistry of Antimony Exposure in Chick Embryo Development (Abstract); J. Cunneen, C. Mormando, M. Siubis, Z. Gagnon; Marist College, 2008

2 Effect of Platinum Group Metal Exposure on the 5-Hydroxytryptamine Chemistry in Tomato Plants (Abstract); J. Cunneen, C. Mormando, M. Siubis, Z. Gagnon; Marist College, 2008

3 Intravascular Water Molecule Lifetime in the Japanese Macaque Brain (Secondary Author – Abstract); W. Rooney, J. Cunneen; Oregon Health and Sciences University, 2009

4 Quantitative Relaxographic Assessment of Age Related Changes in Non-Human Primate Brain (Secondary Author – Abstract); W. Rooney, J. Cunneen; Oregon Health and Sciences University, 2009

POSTGRADUATE PRESENTATIONS

Association of Academic Physiatrists (AAP – San Antonio, TX. 2015 – Presenter1)

Academy of Spinal Cord Injury Professionals (ASCIP – New Orleans, LA, 2016 – Presenter2)

Academy of Spinal Cord Injury Professionals (ASCIP – New Orleans, LA, 2016 – Presenter3)

POSTGRADUATE PUBLICATIONS

1The Utility of Monitoring Levetiracetam Levels in a Post Stroke, Hemodialysis Dependent Patient Admitted to an Acute Inpatient Rehabilitation Hospital; J. Cunneen, L. Grafton; Carolinas Rehabilitation; AAP, 2015

2 Management of the acutely injured, pregnant, spinal cord injury patient. John W. Cunneen, LaTonya Lofton, Jonathan Silverman. Presented at ASCIP Annual Conference 2015; New Orleans, LA. 09/07/2015.

3 Acute Ogilvie's Syndrome in a T5 ASIA A Spinal Cord Injury Patient. John W. Cunneen, LaTonya Lofton, Elise McClanahan. Presented at ASCIP Annual Conference 2015; New Orleans, LA. 09/07/2015.

POSTGRADUATE RESEARCH

1 DART RESTORE Study. Vu Nguyen, John W. Cunneen, Marybeth Whitney.

2 Food Security in Individuals with a Spinal Cord Injury Study. Jesse Lieberman, John Cunneen, John Schmidt, Mark Newman, Janet Niemeier, Hayden White.

3 John Cunneen, Justin Gilbert. Evaluating Board Review: A Structure Approach to Improve Resident Driven Education. (Quality Improvement Project)

COMMITTEE SERVICE

Policy Improvement Project – Medication Reconciliation; Mt. Holly Rehabilitation (April, 2015 – June, 2017)
Electronic Medical Records Committee (July, 2015 – June, 2016)
Skin and Wound Assessment Team (February, 2016 – June, 2017)
Graduate Medical Education Committee (April, 2016 – June, 2017)
Quality Assessment Improvement Committee (July 2016 – June, 2017)

MEMBERSHIPS

Association of Academic Physiatrists – Resident Physician Member (December, 2014 – Present)
AAPMR – Resident Physician Member (July, 2014 – Present)
ASCIP – Resident Physician Member (September, 2016 – Present)
ASIA – Resident Physician Member (December, 2016 – Present)

BOARD CERTIFICATIONS

American Board of Physical Medicine and Rehabilitation (July 1st – Present)

Peggy Coffey, MD
James A. Haley Veterans' Hospital

(no CV uploaded)

Innovations in Teaching Students about SCI Clinical Care, Rehabilitation and Technology: The Interplay between that have consequences on Physical, Social and Phycological Health

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Mary-Joan Roach, PhD
Case Western Reserve University/Metrohealth System

CV:
Positions and Employment
1983-1984 Research Manager, The Annual Akron Area Survey, University of Akron, Dept. of Sociology
1983-1987 University of Akron, Part-Time Instructor
1987-1988 Case Western Reserve University, Dept. of Anthropology
1988-1995 Case Western Reserve University, Dept. of Medicine
1995-2011 MetroHealth Medical System, Dept. of Physical Medicine and Rehabilitation
2000-present Case Western Reserve University, Dept. of Physical Medicine and Rehabilitation
2002-2004 Louis Stokes VA Medical Center/Center for Health Quality Research
2004-present Center for Health Research and Policy at MetroHealth Medical Center

Academic Activities
2005-2011 Reviewer. Archives of Physical Medicine and Rehabilitation
2004-2013 Reviewer. Medical Decision Making
2004 Reviewer. Louis Stokes VA Medical Center
2001 Review Committee. Annual Review of Spinal Cord Injury Model Systems. US Dept. of Education, National Institute on Disability and Rehabilitation Research.

Committee Membership

2006-2008 Research Review Committee Member. Kaiser Permanente, Cleveland, OH.
2004-2006 Member, Department of Physical Medicine and Rehabilitation Research Committee.
2000-2010 Chair, Annual Brain Injury Conference, MHMC, Dept. PM&R
1999-2003 Member, Annual Rehabilitation Conference, MHMC, Dept. PM&R
1998 Chair, ASIA Host City Committee
1995-2012 Co-Chair, Annual Spinal Cord Injury Forum, MHMC, Dept. PM&R
2006-2008 Member, Research Review Committee, Kaiser Permanente, Cleveland, OH
2009-2010 Chair for the evaluation of the psychosocial variables in the National SCI Database. NIDRR SCI Model Systems Group
2012-2013 Member, Rehabilitation sub-committee, Ohio Trauma Board, Division of EMS

Other Research Activities

1987-1988 Consultant, The Similarities and Differences in the Psychological Adjustment of Widows and Divorcees (PI: Kitson)
1989 Consultant, Variables Influencing Pressure Ulcer Development in Critically Ill Adults (PI: Kerber and Naccaroto)
1989 Survey Consultant, National Coordinating Center for the SUPPORT Study
1995 Consultant, Creating a Toolkit of Instruments to Measure End of Life Care, Responsible for evaluating Social Support Instruments (Co-PIs: Teno and Lyn)

Academic Memberships
1995-present American Sociological Association
1995-present Association of Spinal Cord Injury Professionals
2000-2013 Society for Medical Decision Making

Contribution to Science
1. Population Health. My early interest address the relationship between neighborhood structure and quality

of life. Specifically, the use of traffic zone and census track data as measures of community structure was new in 1982 and even in 2002, the use of such contextual data was not being utilized in disability research. These publications provide evidence to a growing body of literature on the importance of social structure or context as an important determinant of Quality of Life and health.

a) MJ Roach. Community Social Structure as an Indicator of Social Integration and Its Effect on Quality of Life for Persons with a Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. Winter 2002; 7(3); pp. 101-111.

b) Velligan D, Roberts DL, Sierra C, Fredreck MM, Roach MJ. What Patients with Severe Mental Illness Transitioning from Hospital to Community Have to Say About Care and Shared Decision Making. Issues in Mental Health Nursing. 2016. 37(6); 400-405.

v) Kelley M, Roach MJ, Banerjee A, Steinmetz MP, Claridge JA. Functional and long-term outcomes in severe traumatic brain injury following regionalization of a trauma system. J Trauma Acute Care Surg. 2015 Sep;79 (3):372-7.

f) G DeJong, Hoffman J, Meade MA, Bombardier C, Deutsch A, Nemunaitis G, Roach MJ, Tate DG, Boninger ML, Chen Y, Hsieh J, Jette A, Wierbicky J, Chiodo A and Forcheimer M. Postrehabilitative Health Car for Individuals with SCI: Extending health Care into the Community. Topics in SCI Rehab, 2011. Fall 17(2):46-69.

g) Roach MJ. A Review of Domains of Health Disparities and Their Impact on Health Care for Persons with Spinal Cord Injury. Topics in SCI Rehab, 2011. Fall 17(2): 17-24.

h) Roach MJ. Community Social Structure as an Indicator of Social Integration and Its Effect on Quality of Life for Persons with a Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. Winter 2002; 7(3); pp. 101-111.

2. Medical Decision Making with Persons Experiencing Life Threatening Chronic Conditions. Adjustment to a life event in the health arena involves a continual process of having to choose between various treatment options. In the 1990s, medicine began a movement to look at physician and patient preferences when determining treatment options. As an investigator on a chronic illness study and a large center study with persons with a traumatic spinal cord injury, I began to explore physician and patient preferences for treatments.

a) AF Connors, NV Dawson, HR Arkes and MJ Roach. Decision making in support: physician perceptions and preferences. Chapter 11. Journal of Clinical Epidemiology, 1990; Supplement, pp. 59S-62S. Pergamon Press, New York.

b) “U r in Control” A decision aid for persons with a spinal cord injury wanted information about the various bladder management programs available. The program is patient-centered, meaning that it is tailored for the person’s level of injury after three simple questions are answered. My colleague and I developed this decision aid in reaction to listening to patients with SCI who expressed concern that they were not being educated about the different bladder management regimes available and were left with whatever regime they were taught in acute rehabilitation after their injury. For some, the physician chosen regime did not fit the patient’s life style or preferences.

3. Patient-Centered Research with Persons with Traumatic Spinal Cord Injury/Disability. As a continuation of my interest in medical decision making, I turned my efforts to further bring the patient voice to the medical decision making process. My work with persons with traumatic spinal cord injury has concentrated on documenting the consumer perspective in terms of preferences for treatment, technologies and health behaviors for reducing the risk of developing secondary conditions related to the injury. In addition, this work had entailed describing how the disconnect between what persons with SCI need and prefer and what is available in terms of health care policy, technology and access to the community affects health disparities.

a) DL Brown-Triolo, MJ Roach, K. Nelson and RJ Triolo. Consumer perspectives on mobility: Implications for neuroprosthesis design. J. Rehabilitation Research Development, 2002; Nov/Dec; 39(6); pp. 659-670.

b) PM Sanders, Ijzerman MJ, Roach MJ, Gustafson KJ. Patient preferences for next generation neural prostheses to restore bladder function. Spinal Cord. 2010 June.

c) MJ Roach. A Review of Domains of Health Disparities and Their Impact on Health Care for Persons with Spinal Cord Injury. Topics in SCI Rehab, 2011. Fall 17(2): 17-24.

d) MJ Roach, Nagy JA, Mejia, M, Nemunaitis, G. Preventive Health Care Among Community Dwelling Persons with SCI. PM&R. 2013 Jun: 5(6): 17-24.

e) Perzynski AT, Roach MJ, Shick S, Callahan B, Gunzler D, Cebul R, Kaelber D, Huml A, Thornton JD, Einstadter D (Accepted). Patient Portals and Broadband Internet Inequality. Journal of the American Medical Informatics Association. 2017. March 23. doi: 10.1093/jamia/ocx020. [Epub ahead of print]

f) Kelly M, Roach MJ. The impact of age on functional outcome and mortality in patients admitted to traumatic brain injury rehabilitation. International Brain Injury Association, 2017 World Congress New Orleans, LA.

Complete List of Published Work in My Bibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1lM4pmKU5Ptkz/bibliograpahy/47648125/public/?sort=date&direction=ascending

Ongoing Research Support

National Institute for Disability, Independent Living and Rehabilitation Research (NIDILRR)
Spinal Cord Injury Model System Program Nemunaitis (PI) Roach (Co-PI) Oct. 2016-Sept. 2021
The goal of this grant is to collect longitudinal clinical and psychosocial data on newly injured persons with a traumatic spinal cord injury. In addition, to conduct site specific research and participate in collaborative research among the 14 designated SCI Model Systems.

Craig Nielsen Foundation Nemunaitis (PI), Roach (Co-PI) January 2017-December 2020
Spinal Cord Injury from the Time of Injury to Participation in the Community: Phase II.
The goal of this grant is to design a medical school course on spinal cord injury that translates Biopsychosocial theory into clinical practice.

Gregory Nemunaitis, MD
Case Western Resereve University/Metrohealth System

(no CV uploaded)

Early experience with edaravone: a case report of dramatic recovery of pulmonary function.

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Jungjae Lim, MD
State University of New York, Upstate Medical University

CV:
Medical Training:
State University of New York at Upstate Medical University
PM&R residency,: July 2017 - current
Currently PGY3, Anticipated Graduation Date: June 2020
Nassau University Medical Center
Internal Medicine Internship: July 2016 - June 2017

Education:
St. Georgeâ€™s School of Medicine, Doctor of Medicine (MD), June 2016
University of California, San Diego, Economics, BA. May 2005

Research Experience:
Onobotulinum A injections in a patient with recurrent shoulder dislocation due to deltoid muscle spasm: A Case Report. Jungjae Lim MD, David M Kanter MD, and Margaret A Turk MD (State University of New York at Upstate Medical University, Syracuse, New York). Poster presentation, accepted to AAPM&R 2018.
Complications of inferior vena cava filters in spinal cord injury patients. Jungjae Lim MD, Michael Ibrahim DO, Gizelda Casella MD PhD. (State University of New York at Upstate Medical University, Syracuse, New York). IRB approved, currently in progress
Sphingomyelin Undergoes Dynamic Downregulation in C2C12 Myoblasts and Intracellular Location Coincides with Proliferation and Differentiation Activities. Jung Lim, Wilfred F. Denetclaw. Poster presentation. American Society of Cell Biology 49th Annual Meeting. San Diego, CA 92101. December, 2009.

Professional/Medically-Related Experience
Charles University at Prague, Czechoslovakia, July 2012. Learned of the contrasts between the American and Czech healthcare system and medical practice

Professional Memberships/Affiliations
American Association of Neuromuscular & Electrodiagnostic Medicine, July 2017 - present
American Academy of Physical Medicine and Rehabilitation, September 2014 - present
New York Society of Physical Medicine and Rehabilitation, January 2015 - June 2016

Extracurricular/Volunteer Activities
Physical Exam Workshop for Medical Students, Instructor, 2018
Special Olympics Volunteer, 2015

Languages:
English, Korean, Spanish

Kristen Franklin, PharmD, BCPS
Va Syracuse

(no CV uploaded)

Steven Brose, DO
Syracuse Va

(no CV uploaded)

Prevalence of bladder cancer following SCI: a single center retrospective analysis

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Melody Lee, MD
Mayo Clinic

CV:
PUBLICATIONS
• Lee, M., Lennon, R., Niewczyk, P., Brown, A., “Stroke outcome at 3 months after rehabilitation hospitalization: a prediction model using a large nationally representative sample.” American Academy of Physical Medicine and Rehabilitation Annual Assembly Proceedings. Accepted 2018. Orlando, FL
• Lee, M., Sinaki, M., “Yoga-related bony spine injuries.” American Society for Bone and Mineral Research Annual Meeting Proceedings. Accepted 2018. Montreal, Canada
• Lee, M., Prideaux, C. “Massive syringomyelia in a 29 year old pregnant female: a case report.” Annual Educational Conference and Expo of the Academy of Spinal Cord Injury Professionals Proceedings. 2017. Denver, CO
• Turin, S., Rosenfield, R., Lee, M., Patel, K., Novak, R. “Feasibility of Universal HIV Testing in an Outpatient Clinic,” Clinical Infectious Diseases. 2014 Oct 15;59(8):1186-7

ORAL PRESENTATIONS
• “Stroke outcome at 3 months after rehabilitation hospitalization: a prediction model using a large nationally representative sample.” Outstanding Resident Research Podium Session, American Academy of Physical Medicine and Rehabilitation Annual Assembly, Accepted 2018, Orlando, FL
• “Impact of educational workshop for medical students on the role of occupational and physical therapy” Association of Academic Physiatrists Annual Meeting, 2018, Atlanta, GA
• “Yoga-related vertebral compression fractures: a case series” Biennial Pacific Forum on Physical Rehabilitation, 2018, Lahaina, HI

POSTER PRESENTATIONS
• “A rare case of nontraumatic tibial plateau fracture in a young man.” Minnesota Medical Association Annual Meeting, Accepted 2018, St. Paul, MN
• “Yoga-related bony spine injuries.” American Society for Bone and Mineral Research Annual Meeting, Accepted 2018, Montreal, Canada
• “Stroke outcomes at 3 months after rehabilitation hospitalization: a prediction model using a large nationally representative sample.” American Academy of Physical Medicine and Rehabilitation Annual Assembly, Accepted 2018, Orlando, FL
• “Is pharmacologic treatment of depression after TBI correlated with improved depressive symptoms, satisfaction with life, participation, or independent living?” American Academy of Physical Medicine and Rehabilitation Annual Assembly, Accepted 2018, Orlando, FL
• “A rare case of rheumatoid pachymeningitis causing profound bilateral hearing loss” American Osteopathic College of Physical Medicine and Rehabilitation Mid-year Meeting, 2018, Nashville, TN
• “Do patients who receive pharmacologic treatment of depression after traumatic brain injury show significant changes in depressive symptoms, satisfaction with life, participation or independent living?” Mayo Clinic Young Investigators Research Symposium, 2018, Rochester, MN
• “Impact of educational workshop for medical students on the role of occupational and physical therapy” Mayo Clinic Young Investigators Research Symposium, 2018, Rochester, MN
• “How to manage a patient with both hemorrhagic stroke and venous thromboses?” Association of Academic Physiatrists Annual Meeting, 2018, Atlanta, GA
• "Stiff person syndrome without axial stiffness or hyperekplexia: A case report." American Academy of Physical Medicine and Rehabilitation Annual Assembly, 2017, Denver, CO
• “Managing a case of hemorrhagic stroke followed by venous thromboses” Minnesota Medical Association Annual Conference, 2017, Rochester, MN
• "Massive syringomyelia in a 29 year old pregnant female. A case report." Academy of Spinal Cord Injury Professionals Educational Conference, 2017, Denver, CO
• “The utility of a tissue microarray (TMA) in the validation of a non-FDA approved nonpredictive antibody

(Napsin-A).” United States and Canadian Academy of Pathology (USCAP) Annual Meeting, 2014, San Diego, CA

A. Sophia Del Fabro, MD
Mayo Clinic

(no CV uploaded)

Case Report: C1 ASIA C Traumatic Spinal Cord Injury of Pregnant Female at 19 Weeks Gestation

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Abigail Ho, MD
University of Wisconsin Hospital and Clinics

CV:
NAME: Abigail Ho, MD

EDUCATION:
Doctor of Medicine. Medical College of Wisconsin, Milwaukee, WI. 2011-2015
Bachelor of Arts in Neuroscience and Biology. St. Olaf College, Northfield, MN. 2007-2011

POSITIONS:
Transitional Year Resident Physician. Mercy St. Vincent, Toledo, OH. June 2015-June 2016.
Conference Committee Representative. July 2015-June 2016.
Physical Medicine and Rehabilitation Resident. University of Wisconsin Hospitals and Clinics. July 2016-present.
University of Wisconsin House Staff Association Board Member. September 2016-present.
Resident Epic Super User. May 2017-present.
Chief Resident, UW Madison Department of Physical Medicine and Rehabilitation. April 2018-present.
Quality Improvement Committee Resident Representative. July 2018-present.

PRESENTATIONS, CONFERENCES, AND PUBLICATIONS.
American Medical Athletic Association Sports Medicine Conference at the Boston Marathon. April 19-21, 2014
American Academy of Family Physicians National Conference, Kansas City, MO. August 6-9, 2014
â€œOvertraining Syndrome in Patient Athletesâ€ Poster. Presented at MCW Pathways symposium. May 2014
Fatima Husain, Tariq Lateef, Larry Napolitano, Alex Stuckey, Briant Tran. Anticoagulation Complications in an Acute Pancreatitis Patient. Presented at: Clinical Case Conference. August 25, 2015.
Sonia Malik, Darwin McKnight, Zara Mengal, Betro Sadek, Frank Vento. Fever of Unknown Origin. Presented at: Clinical Case Conference. October 20, 2015.
Fatima Husain, Sonia Malik, Frank Vento, Alex Stuckey, Rayeesa Ahmed. Candidemia. Presented at: Case Conference. January 2016.
Zika Virus Infection in Pregnant Women in Rio de Janeiro. Presented at: Journal Club. March 16, 2016.
Ivo Besong Mangeb, Afreeda Hashmi, Darwin McKnight, Frank Vento. Infective Endocarditis. Presented at: Clinical Case Conference. March 22, 2016.
Jonathan Carrier. Osteochondritis Dissecans. Presented at: Clinical Case Conference. October 7, 2016.
Jacob Halvorsen. Curcuma Domestica. Presented at: Journal Club. November 18, 2016.
David Schanbacher. Randomized Controlled Trial of Vitamin D Supplementation in Children with Autism Spectrum Disorder. Presented at: Journal Club. February 17, 2017.
David Schanbacher. Erosive Spine Disorders, Multiple Myeloma, Gout, Pseudogout, Potts Disease. Presented at: Clinical Case Conference. March 3, 2017.
Chrissy Clemens, Lindsay Duca, Stephanie Ellingen, Sadie Whalen. Spinal Cord Injury Patient Education Group. February 2017-present.
Lower Limb Amputation and Prosthetics Conference at JFK Johnson Rehabilitation Institute, Columbia, MO April 21-22, 2017
Overtraining Syndrome. Presented at: Grand Rounds. April 28, 2017.
David Schwanebeck. Radial Ray Anomalies and Scaphoid Fractures. Presented at: Clinical Case Conference. July 7, 2017.
Jonathan Carrier. Running Exercise Strengthens the Intervertebral Discs. Presented at: Journal Club. July 21, 2017.
Jonathan Carrier. Cerebral Salt Wasting. Presented at: Clinical Case Conference. August 4, 2017.
Michael Lin. Pseudoseptic Arthritis. Presented at: Clinical Case Conference. September 1, 2017.
Tyler Klein. Randomized Controlled Trial of Avocado Soybean Unsaponifiable (Piascledine) Effect on Structure Modification in Hip Osteoarthritis: The ERADIAS Study. Presented at: Journal Club. September 15, 2017.

Low-Dose Intravenous Immunoglobulin Treatment for Long-Standing Complex Regional Pain Syndrome. Presented at: Pain Journal Club. November 11, 2017.
Spinal Cord Stimulators. Presented at: Pain Didactics. November 6, 2017.
Endocrine Imbalance in Chronic Opioid Use. Presented at: Pain Didactics. November 9, 2017.
Association of Academic Physiatrists National Meeting in Atlanta, GA. February 14-17, 2018.
Orthotics Review Course at JFK Johnson Rehabilitation Institute, Columbia, MO. April 20-21, 2018.
Spinal Cord Injury and Pregnancy. Presented at: Grand Rounds. May 25, 2018.
Hazel Mathes. Randomized Controlled Pilot Study: Pain Intensity and Pain Pressure Thresholds in Patients with Neck and Low Back Pain Before and After Traditional East Asian Gua Sha Therapy. Presented at: Journal Club. July 20, 2018.
Laura Prince. Idiopathic Avascular Necrosis with Compressive Sciatic Neuropathy. Presented at: Clinical Case Conference. August 3, 2018.

Courtney Hogendorn, MD
University of Wisconsin Hospital and Clinics

(no CV uploaded)

Benjamin Gillespie, DO
University of Wisconsin Hospital and Clinics

(no CV uploaded)

Larry Kim, MD
University of Wisconsin Hospital and Clinics

(no CV uploaded)

A Motion-Preserving Surgical Treatment for Neuromuscular Scoliosis: Proof of Concept (A Case Report)

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Randal Betz, MD
Institute for Spine & Scoliosis

CV:
Randal R. Betz, M.D.

Home Address: 507 30th Street, Ocean City, NJ 08226
Tel. (609) 398-0070

Business Address: Institute for Spine and Scoliosis
3100 Princeton Pike, Lawrenceville, NJ 08648
Tel. 609-912-1500, FAX 609-912-1600
Email: RandalRBetz@gmail.com

Birth place: Philadelphia, PA

Birth Date: January 9, 1952

Citizenship Status: USA

Military Service: None

Marital Status: Married (Betsey)
4 children (Christine, Randal Jr., Aimee, Laurie)
13 grandchildren

APPOINTMENTS

Institute for Spine and Scoliosis, Lawrenceville, NJ
Pediatric Scoliosis and Spine Surgeon 2014 - Present

Icahn School of Medicine at Mount Sinai
Clinical Professor (Voluntary), Department of Orthopaedics 2014 – Present

Mount Sinai Hospital
Active Staff, Department of Orthopaedics 2015 – Present

St. Peter's University Hospital 2015 – Present
Active Staff, Department of Surgery

Princeton HealthCare System, Plainsboro, NJ 2014 – Present
Affiliate Staff, Department of Surgery,
Section of Orthopaedic Surgery

Temple University School of Medicine, Philadelphia
Professor of Orthopaedic Surgery 1997 – Present

EDUCATION AND TRAINING

Undergraduate School
Pennsylvania State University
State College, PA
BS, Pre-Med, 1973

Graduate/Professional School
Temple University School of Medicine
Philadelphia, PA
MD, 1977

Graduate Medical Education
Internship, General Surgery
Temple University Hospital
Philadelphia, PA, 1977-1978

Residency, Orthopaedic Surgery
Temple University Hospital
Philadelphia, PA, 1978-1982

Fellowship, Pediatric Orthopaedics
Alfred I. duPont Institute
Wilmington, DE, 1982-1983

Postdoctoral Fellowship Experience
ABC Traveling Fellowship, 1989
North American Traveling Fellowship, 1984
Berg-Sloat Traveling Fellowship, 1983

Licensures
Pennsylvania MD 020978E
New Jersey 25MA07977600
South Carolina 29608
Florida ME 98616
New York 246151-1

National Board of Examiners 189055
DEA AB8263852
CDS # of New jersey D10351000
NPI # 1851369979

Board Certification
American Board of Orthopaedic Surgery, Jul. 1985 (grandfathered for life; volunteer recertified 1998)
American Board of Physical Medicine and Rehabilitation: Spinal Cord Injury Medicine, Nov. 1998; recertified 2009 - 2019

Professional Honors and Awards
Fellow of the American Spinal Injury Association, 2018
Scoliosis Research Society Lifetime Achievement Award, 2015
Scoliosis Research Society, Senior Mentor, SRS Traveling Fellowship, 2013

PROFESSIONAL ORGANIZATIONS: Local, Regional, National
• American Academy for Cerebral Palsy and Developmental Medicine 1991 – Present
Emeritus 2014 – Present
Active 1991 – 2014
• American Academy of Orthopaedic Surgeons 1987 – Present

• American Spinal Injury Association 1983 – Present
• Scoliosis Research Society 1986 – Present
Senior Mentor, SRS Traveling Fellowship, 2013
International Meeting of Advanced Spine Techniques
Emeritus Chair, 2003-Present

Research Grant Support

Betz RR: A comparison between the vertebral body wedge system and standard anterior instrumentation for correction of paralytic scoliosis in children and adolescents. Medtronic Sofamor Danek, Memphis, TN

Betz RR (as a member of the Harms Study Group): Prospective testing of the algorithm of treatment based on the Harms Scoliosis Study Group classification system of operative idiopathic scoliosis and Anterior instrumentation for correction of idiopathic scoliosis. DePuy Synthes Spine, Inc., Raynham, MA.

Betz RR (as a member of the Child Spine Study Group): Evaluation of the Synthes vertical expandable prosthetic titanium rib in children with thoracic deformity (IRB #3931). DePuy Synthes Spine, Inc., Raynham, MA

Betz RR and others: Evaluation of the effectiveness of using the PediGuard for pedicle screw insertion (IRB #4727). SpineVision, Inc., Paris, France.

PUBLICATIONS

Books, Monographs, Chapters

Bennett JT, Samdani AF, Ames RJ, Betz RR: Anterior vertebral body stapling in the treatment of idiopathic scoliosis. In Early Onset Scoliosis: A Clinical Casebook (El-Hawary R & Eberson C, eds.). Chennai, India: SpringerNature, in press (expected publication: Feb. 2018).

Betz RR: Anterior approach to scoliosis, ch. 156. IN Operative Orthopaedics, 3rd ed. (Schafer MF, Butler JP, eds.). Philadelphia: Lippincott-Raven Publishers, in press.

Samdani AF, Newton PO, Sponseller PD, Shufflebarger, HL, Betz RR (eds.). Neuromuscular Spine Deformity: A Harms Study Group Treatment Guide. New York: Thieme Medical Publishers, Dec. 13, 2017.
• Betz RR, Samdani AF: Neuromuscular scoliosis: introduction
• Miyanji F, Betz RR: Unique challenges with scoliosis and dislocated hips, ch. 6
• Pahys JM, Samdani AF, Betz RR: The patient with spinal cord injury: surgical considerations, ch. 10

Cahill PJ, Trobisch PD, Betz RR, Samdani AF: Adolescent scoliosis. In Minimally Invasive Spine Surgery: Surgical Techniques and Disease Management (Phillips FM, Lieberman I, Polly DW, eds.). New York: Springer, Sep. 17, 2016.

Betz RR, Samdani AF, Cahill PJ, Pahys JM: Intervertebral stapling for spinal deformity, ch. 61. In: Spine Surgery Tricks of the Trade, 3rd ed. (Vaccaro AR, Albert TJ, eds.). New York: Thieme Medical Publishers, Mar. 9, 2016.

Peer-Reviewed or Invited Articles

Adams AM, Refakis CA, Flynn JM, Pahys JM, Betz RR, Bastrom TP, Samdani AF, Brusalis CM, Sponseller PD, Cahill PJ: Surgeon and caregiver agreement on the goals and indications for scoliosis surgery in children with cerebral palsy. Spine Deform, in press (July 2018).

Buckland AJ, Moon J, Betz R, Lonner B, Newton P, Shufflebarger HL, Errico TJ: Ponte osteotomies increase

the risk of neuromonitoring alerts in adolescent idiopathic scoliosis correction surgery. Spine (Phila Pa 1976), in press (Jun. 2018).

Lonner BS, Ren Y, Betz RR, et al: Disc degeneration in unfused caudal motion segments ten years following surgery for adolescent idiopathic scoliosis. Spine Deform, in press (Mar. 2018).

Pahys JM, Vivas AC, Samdani AF, Cunn G, Betz RR, Newton PO, Harms Study Group, Cahill PJ: Assessment of proximal junctional kyphosis and shoulder balance with proximal screws vs. hooks in posterior spinal fusion for adolescent idiopathic scoliosis. Spine (Phila Pa 1976) 2018 Apr 23 (Epub ahead of print).

Lonner B, Diab M, Polly D, Betz R, Larson AN, Braun J, Shah S, Alanay A, Miyanji F, Cahill P, El-Hawary R, Samdani A, Newton P: Vertebral body tethering for scoliosis: past, present, future. Scoliosis Research Society newsletter, June 2018.

Lonner BS, Ren Y, Yaszay B, Cahill PJ, Shah SA, Betz RR, Samdani AF, Shufflebarger HL, Newton PO: Evolution of surgery for adolescent idiopathic scoliosis over 20 years: have outcomes improved? Spine (Phila Pa 1976) 43(6):402-410, Mar. 2018.

Lonner BS, Parent S, Shah SA, Sponseller P, Yaszay B, Samdani AF, Cahill PJ, Pahys JM, Betz R, Ren Y, Shufflebarger HL, Newton PO: Reciprocal changes in sagittal alignment with operative treatment of adolescent Scheuermann kyphosis: prospective evaluation of 96 patients. Spine Deform 6(2):177-184, Mar.-Apr. 2018.

Miyanji F, Nasto LA, Bastrom T, Samdani AF, Yaszay B, Clements D, Shah SA, Lonner B, Betz RR, Shufflebarger HL, Newton PO: A detailed comparative analysis of anterior versus posterior approach to Lenke 5C curves. Spine (Phila Pa 1976) 43(5):E285-291, Mar. 2018.

Gal J, Curatolo C, Zerillo J, Hill B, Lonner B, Cuddihy LA, Antonacci MD, Betz RR, DeMaria S Jr, Khelemsky Y: Anesthetic considerations for a novel anterior surgical approach to pediatric scoliosis correction. Pediatr Anesth 27(10):1028-1036, Oct. 2017.

Park HY, Matsumoto H, Feinberg N, Roye DP, Kanj WW, Betz RR, Cahill PJ, Glotzbecker MP, Luhmann SJ, Garg S, Sawyer JR, Smith JT, Flynn JM, Vitale MG: The classification for early-onset scoliosis (C-EOS) correlates with the speed of vertical expandable prosthetic titanium rib (VEPTR) proximal anchor failure. J Pediatr Orthop 37(6):381-386, Sep. 2017.

Cahill PJ, Auriemma M, Dakwar E, Gaughan JP, Samdani AF, Pahys JM, Betz RR: Factors predictive of outcomes in vertebral body stapling for idiopathic scoliosis. Spine Deform 6(1):28-37, Jan. 2018.

Iorio J, Orlando G, Diefenbach C, Gaughan JP, Samdani AF, Pahys JM, Betz RR, Cahill PJ: Serial casting for infantile idiopathic scoliosis: radiographic outcomes and factors associated with response to treatment. J Pediatr Orthop 37(5):311-316, Jul/Aug 2017.

Bennett JT, Samdani AF, Bastrom TP, Ames RJ, Miyanji F, Pahys JM, Marks MC, Lonner BS, Newton PO, Shufflebarger HL, Yaszay B, Flynn JM, Betz RR, Cahill PJ: Factors affecting the outcome in appearance of AIS surgery in terms of the minimal clinically important difference. Eur Spine J 26(6):1782-1788, Jun 2017.

Lonner BS, Ren Y, Newton PO, Shah SA, Samdani AF, Shufflebarger HL, Asghar J, Sponseller P, Betz RR, Yaszay B: Risk factors of proximal junctional kyphosis in adolescent idiopathic scoliosis – the pelvis and other considerations. Spine Deform 5(3):181-188, May 2017.

Lonner BS, Toombs CS, Mechlin M, Ciavarra G, Shah SA, Samdani AF, Sponseller P, Shufflebarger HL, Betz RR, Yaszay B, Newton PO: MRI screening in operative Scheuermann kyphosis: is it necessary? Spine Deform 5(2):124-133, Mar. 2017.

Ames RJ, Samdani AF, Betz RR: Anterior scoliosis correction in immature patients with idiopathic scoliosis. Oper Tech Orthop 26(4):247-257, Dec. 2016.

Mackel C, Cahill P, Roguski M, Samdani A, Sugrue P, Kawakami N, Sturm P, Pahys J, Betz R, El-Hawary R, Hwang S: Factors associated with spinal fusion after posterior fossa decompression in pediatric patients with Chiari I malformation and scoliosis. J Neurosurg Pediatr, Epub ahead of print 2016 Sept 2.

Samdani AF, Bennett JT, Ames RJ, Asghar JK, Orlando G, Pahys JM, Yaszay B, Miyanji F, Lonner BS, Lehman Jr RA, Newton PO, Cahill PJ, Betz RR: Reversible intraoperative neuromonitoring alerts in patients undergoing fusion for adolescent idiopathic scoliosis: what are the outcomes of surgery? J Bone Joint Surg Am 98(17):1478-1483, Sep. 2016.

Upasani VV, Miller PE, Emans JB, Smith JT, Betz RR, Flynn JM, Glotzbecker MP, Children's Spine Study Group: VEPTR implantation after age 3 is associated with similar radiographic outcomes with fewer complications. J Pediatr Orthop 36(3):219-225, Apr-May 2016.

Samdani AF, Belin EJ, Bennett JT, Miyanji F, Pahys JM, Shah SA, Newton PO, Betz RR, Cahill PJ, Sponseller PD: Major perioperative complications after spine surgery in patients with cerebral palsy: assessment of risk factors. Eur Spine J 25:795-800, 2016.

Betz RR: Should all AIS 1C curves be fused selectively? Spine (Phila PA 1976) 41(7S):S16-S17, Apr. 2016.

Knott P, Sturm P, Lonner B, Cahill P, Betsch M, McCarthy R, Kelly M, Lenke L, Betz R: Multicenter comparison of 3D spinal measurements using surface topography with those from conventional radiography. Spine Deform 4:98-103, Jan. 2016.

Presentations by Dr. Betz or co-authors:

Cuddihy L, Antonacci MD, Hussain AK, Vig KS, Mulcahey MJ, Betz RR: A motion-preserving surgical treatment for neuromuscular scoliosis: proof of concept. 53rd Scoliosis Research Society annual meeting (case report), Bologna, Italy, Oct. 10-13, 2018.

Samdani AF, Pahys JM, Smith JT, Samuel S, Vitale MG, El-Hawary R, Flynn JM, Sawyer JR, Betz RR, Hwang S: Magnetic growing rods in the treatment of nonambulatory neuromuscular scoliosis: how do they compare to traditional growing systems? 53rd Scoliosis Research Society annual meeting (ePoster), Bologna, Italy, Oct. 10-13, 2018.

Clements DH III, Lenke LG, Newton PO, Betz RR, Marks MC, Bastrom TP: Selective thoracic fusion of Lenke 3, 4 curves: rule breakers or new rule makers? 53rd Scoliosis Research Society annual meeting (podium), Bologna, Italy, Oct. 10-13, 2018.

Floman Y, Gavriliu S, Burnei G, Potaczek T, Zarzycki D, Desai B, Tunyogi-Csapo M, Sekouris N, Millgram MA, El-Hawary R, Lonner BS, Betz RR: A new posterior dynamic device for correction of moderate adolescent idiopathic scoliosis: 28 cases with minimum two years follow-up. 25th International Meeting on Advanced Spine Techniques (podium), Los Angeles, CA, July 11-14, 2018.

Ramirez-Lluch NF, Olivella G, Rodriguez O, Marrero P, Smith J, Garg S, Vitale M, Betz RR, Children's Spine Study Group: Spasticity is a risk factor of complications and surgical outcome in the management of early-onset neuromuscular scoliosis with a rib-based growing system. 52nd Scoliosis Research Society Annual Meeting (ePoster), Philadelphia, PA, Sept. 6-9, 2017; 15th Zorab International Symposium (podium), London, UK, June 15-16, 2017.

Lenke LG, Lehman RA, Kelly MP, Vitale M, Lonner BS, Errico TJ, Betz RR, Shah SA, Shufflebarger HL, Newton PO, Blanke KM, Harms Study Group: Thoracic-only fusions for double (type 3) and triple (type 4) major curves in AIS at a minimum 5-year follow-up: are they possible and durable? 52nd Scoliosis Research Society Annual Meeting (podium), Philadelphia, PA, Sept. 6-9, 2017.

Buckland AJ, Moon J, Betz RR, Lonner BS, Newton PO, Shufflebarger HL, Errico TJ, Harms Study Group:

Ponte osteotomies increase the risk of neuromonitoring changes in surgery for adolescent idiopathic scoliosis. 52nd Scoliosis Research Society Annual Meeting (podium), Philadelphia, PA, Sept. 6-9, 2017.

Lenke LG, Kelly MP, Lehman RA, Vitale M, Lonner BS, Errico TJ, Betz RR, Shah SA, Shufflebarger HL, Newton PO, Blanke KM, Harms Study Group: Using the lower lumbar touched vertebra to select the lowest instrumented vertebra in Lenke type 3 & 4 curves at a minimum 5-yr follow-up. 24th International Meeting on Advanced Spine Techniques (podium), Cape Town, South Africa, July 12-15, 2017.

Lonner BS, Ren Y, Marks MC, Newton PO, Betz RR, Samdani AF, Shufflebarger HL, Shah SA, Lefton D, Nasser H, Dabrowski C, Chen KS: Disc degeneration in unfused caudal motion segments ten years following surgery for adolescent idiopathic scoliosis. 24th International Meeting on Advanced Spine Techniques (podium), Cape Town, South Africa, July 12-15, 2017.

Cahill PJ, Lavelle W, Kurra S, Albanese SA, Betz RR: Retrospective review of shoulder balance comparing adolescent idiopathic scoliosis (AIS) to early onset scoliosis (EOS). 10th International Congress on Early Onset Scoliosis (ePoster), Utrecht, Holland, Nov. 11-18, 2016.

Cahill PJ, Kurra S, Lavelle W, Albanese SA, Betz RR: Surgical site infections after early onset scoliosis definitive fusion surgeries. 10th International Congress on Early Onset Scoliosis (ePoster), Utrecht, Holland, Nov. 11-18, 2016.

Bennett J, Samdani A, Cahill P, Asghar J, Betz R, Pahys J, Yaszay B, Miyanji F, Lonner B, Newton P: Significant intraoperative neuromonitoring alerts in patients undergoing fusion for adolescent idiopathic scoliosis: what are the outcomes of surgery? EuroSpine 2016, Berlin, Germany, Oct. 5-7, 2016.

Lenke LG, Lehman Jr RA, Lonner BS, Errico TJ, Betz RR, Samdani AF, Blanke K, Harms Study Group: Optimal selection of the lowest instrumented vertebra for Lenke type 5&6 thoracolumbar/lumbar major AIS curves at minimum 5-year follow-up. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Lenke LG, Newton PO, Lehman RA, Kelly MP, Clements DH, Errico TJ, Betz RR, Samdani AF, Blanke KM, Yan Y, Harms Study Group: Radiographic results of selecting the touched vertebra as the lowest instrumented vertebra in Lenke type 1 (main thoracic) and type 2 (double thoracic) curves at a minimum 5-year follow-up. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Lonner BS, Ren Y, Yaszay B, Cahill PJ, Shah SA, Betz RR, Samdani AF, Shufflebarger HL, Newton PO: Evolution of surgery for adolescent idiopathic scoliosis over 20 years: have outcomes improved? 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Newton PO, Bastrom T, Bartley CE, Yaszay B, Marks MC, Betz RR, Lenke LG, Clements DH III, Harms Study Group: A critical assessment of > 10-year follow-up of spinal fusions for adolescent idiopathic scoliosis: outcome improvement and continued follow-up required. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Yaszay B, Bastrom T, Lonner BS, Betz RR, Shah SA, Asghar JK, Miyanji F, Samdani AF, Newton PO: Progressive decline in pulmonary function 5 years post-operative in patients who underwent anterior instrumentation for surgical correction of adolescent idiopathic scoliosis. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Betz RR, Antonacci MD, Cuddihy L, Levin DM: Concurrent posterior spinal fusion and vertebral body tethering for a patient with Marfan syndrome with spondylolisthesis and severe idiopathic scoliosis. 51st Scoliosis Research Society annual meeting (case presentation), Prague, Czech Republic, Sep. 21-24, 2016.

Pahys JM, Groves ML, Wang J, Cahill PJ, Betz RR, Hayes K, Morrison M, Children's Spine Study Group, Samdani AF: Preoperative halo gravity traction in severe pediatric spinal deformity: a single center prospective study. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Pahys JM, Kelly MP, Samdani AF, Cahill PJ, Asghar JK, Sponseller PD, Betz RR, Bastrom T, Harms Study Group, Shah SA: What is the optimal pelvic obliquity for patients with cerebral palsy undergoing spinal fusion? 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Yaszay B, Bastrom T, Lonner BS, Betz RR, Shah SA, Asghar JK, Miyanji F, Samdani AF, Newton PO: Progressive decline in pulmonary function 5 years post-operative in patients who underwent anterior instrumentation for surgical correction of adolescent idiopathic scoliosis. 51st Scoliosis Research Society annual meeting (podium), Prague, Czech Republic, Sep. 21-24, 2016.

Samdani AF, Stephen J, Orlando G, Pahys JM, Betz RR, Newton PO, Miyanji F, Shah SA, Marks MC, Yaszay B, Cahill PJ, Sponseller PD: Analysis of patients with cerebral palsy requiring reoperation after spinal fusion: associated risk factors and impact on quality of life. 23rd 51st Scoliosis Research Society annual meeting (eposter), Prague, Czech Republic, Sep. 21-24, 2016; International Meeting on Advanced Spine Techniques (podium), Washington, DC, Jul. 13-16, 2016.

Betz RR, Mulcahey MJ, Cuddihy L, Samdani AF, Antonacci MD: A motion-preserving surgical treatment for neuromuscular scoliosis: proof of concept. 55th International Spinal Cord Society annual meeting (podium), Vienna, Austria, Sep. 14-16, 2016.

Betz RR, Mulcahey MJ, Cuddihy L, Antonacci MD: A motion-preserving surgical treatment for neuromuscular scoliosis: a case report. American Spinal Injury Association annual meeting (podium), Philadelphia, PA, Apr. 13-16, 2016.

Invited Lectures:

American Spinal Injury Association Annual Scientific Meeting, Rochester, MN, May 2-4, 2018
• Case presentations: surgical treatment of SCI

Chair, Deformity Correction Strategies Cadaveric Training Program, Globus Medical/MERC, Vienna, Austria, Apr. 26-27, 2018
• Review of indications and the literature
• Surgical technique: tips, potential pitfalls, and prevention

31st Annual Conference of the Association of Spine Surgeons of India, Chennai, India, Jan. 18-21, 2018
• Do all EOS patients need definitive fusion prior to adolescence / adulthood?
• Evaluation and management of the child with spinal cord injury
• Growth modulation techniques – posterior distraction methods for patients with EOS
• Unique surgical treatments for children with neuromuscular scoliosis based on diagnosis

56th International Spinal Cord Society annual meeting, Dublin, Ireland, October 24-26, 2017
• Orthopaedic considerations and complications. For Workshop: Comprehensive interprofessional management of spinal cord injury in infants and young children (with L Vogel, MJ Mulcahey, K Zebracki)

Eurasian Orthopedic Forum 2017, Moscow, Russia, Jun. 29-30, 2017
• How to write a proper medical article
• Chronic spinal cord injury: analysis of treatment options
• Early onset scoliosis: bracing vs spinal staples vs spinal fusion
• Neuromuscular spinal deformity: novel treatment options

Panel Symposium, American Spinal Injury Association annual meeting, Albuquerque, NM, Apr. 29, 2017
• Best practice for the neurological evaluation of children and youth with SCI (with Christina Calhoun Thielen, MJ Mulcahey, Mary Schmidt Read, Lawrence Vogel)

The Howard H. Steel Conference on Pediatric Spinal Cord Injury and Dysfunction, Albuquerque, NM, Apr.

26, 2017
• The Newton C. McCollough Lectureship: The past, present, and future landscape for orthopaedic management of children and adolescents with SCI

Pediatric Spinal Deformity: On the Cutting Edge VI, Coral Gables, FL, Mar. 31-Apr. 1, 2017
• Fusionless spinal surgery in idiopathic deformity
• Panelist: Panel discussion in neuromuscular deformity
• Moderator: Unique pediatric cervical challenges
• Panelist: Level selection in AIS

Grand Rounds, St. Peter's Hospital, Sep. 29, 2016
• New options for growth modulation and flexible fusions for scoliosis

Fellows/Research Day, Mount Sinai Medical Center, New York, NY, May 12, 2016
• New options for surgical treatment of idiopathic scoliosis

Harms Study Group: Contemporary Pediatric Spinal Deformity, Las Vegas, NV, Jan. 23, 2016.
• Growth modulation: who, when, and how?

Laury Cuddihy, MD
Institute for Spine & Scoliosis

(no CV uploaded)

M. Darryl Antonacci, MD
Institute for Spine and Scoliosis

(no CV uploaded)

Mary Jane Mulcahey, PhD
Thomas Jefferson University

(no CV uploaded)

Integration of supraspinal and afferent information on sub-lesional circuitry for diagnostics of discomplete spinal cord injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Igor Lavrov, MD, PhD
Mayo Clinic

CV:
Biographical Sketch
Name: Igor A. Lavrov, MD, PhD

A. Personal Statement
My research interests are focused on neuronal spinal cord circuits, their modulation, reorganization, and repair after traumatic injury. Solving the problem of traumatic neuronal injury requires multiple approaches and in my work I am trying to advance our understanding of the four key principles of neuronal repair: (1) activating neuronal circuitry with electrical stimulation, (2) retraining neural circuits to restore motor functions, (3) protecting surviving neurons from the secondary injury and further damage, and (4) stimulating regrowth of axons and their reconnections. During my research work at Mayo Clinic, UCLA, University of Louisville, Pavlov Institute of Physiology, and Kazan State University we found that electrical stimulation applied to the spinal cord can activate spinal cord circuits responsible for stepping and that this approach can help to facilitate volitional control after a complete spinal cord injury in human. Over the course of my 20-years career I participated and lead on the top research projects in the areas of neuronal circuits, spinal cord physiology, and neurorehabilitation and the results of my studies were reflected in publications in top peer review journals such as Nature Neuroscience, Journal of Neuroscience, Journal of Neurophysiology, and others and broadly cited. In this endeavor I have developed sophisticated EMG recording methods and analysis for the spinal cord motor evoked potentials, novel system for evaluation of stimulation protocols in acute and chronic animal models and evaluation of motor performance that combined treadmill and harness with open field analysis, behavioral and kinematic analysis to evaluate motor deficits and motor recovery.

B. Positions and Honors

Positions
1999 – 2002 Staff neurologist - Department of Neurological Surgery, 23rd City Hospital, St. Petersburg, Russia
2000 – 2002 Staff neurologist - Clinical-Diagnostic Center “ONIKA”, Pushkin, Russia
2005 – 2007 Research Associate. CRPF Research Consortium
2008 – 2011 Assistant Researcher. Department of Physiological Science, University of California Los Angeles, CA
2014 – 2015 Associate Professor. Institute of fundamental medicine and biology (IFMB), Kazan, Russian Federation
2015 – Present Assistant Professor, Department of Neurologic Surgery, Department of Biomedical Engineering, Mayo clinic. Rochester, MN.

Honors and Other Professional Activities
1999 “Pavlov” award for the success in scientific achievements.
1999 International Summer School Tuition Waiver Award
2000 International Summer School Tuition Waiver Award
2001 St. Petersburg Competition of Researcher, Research Excellence Awards, St. Petersburg.
2008 Ad hoc reviewer. Journal of Neurophysiology
2009 Ad hoc reviewer. Journal of Neurophysiology
2010 Ad hoc reviewer. Frontiers in Neuroprosthetics
2010 Ad hoc reviewer. American Journal of Primatology
2010 Reviewer of International Symposium on Bio&Medical Informatics and Cybernetics (BMIC)
2011 Ad hoc reviewer. Journal of Neurophysiology

2014 Ad hoc reviewer. European Journal of Neuroscience
2016 BioNanoScience
2017 Journal of Physical Medicine, Rehabilitation & Disabilities
2017 Reviewer on Biomedical Engineering Society (BMES 2017)
2017 JSM Neurology and Translational Neuroscience

C. Contribution to Science

1. Epidural and intraspinal stimulation for control of locomotion. During my work in the Pavlov Institute of Physiology we described two functional systems located in the lumbar enlargement of the spinal cord participating in control of stepping. One system is localized in spinal segments and can be activated by epidural stimulation to produce bipedal stepping, and the second system is distributed within cervical, thoracic, and partially lumbar segments and can be activated by intraspinal stimulation to produce quadrupedal stepping. During my recent work we further found that effect of epidural stimulation is highly dependent form location of stimulation electrode in relation to the dorsal roots fibers. These experiments helped us to develop new techniques to control spinal networks in experimental models and advance the strategy for stimulation of the spinal cord in human.

Selected Publications

a. Gerasimenko Yu, Avelev V, Nikitin O, Lavrov I. (2003) Initiation of locomotor activity in spinal cats by epidural stimulation of the spinal cord. Neurosci Behav Physiol. 33:247-54.
b. Lavrov I, Musienko PE, Selionov VA, Roy RR, Edgerton VR, Gerasimenko YP. (2015) Locomotion of mesencephalic cat during epidural and intraspinal electrical stimulation. Brain Research 1600:84-92
c. Lavrov I, Makarovsky A, Mokrushin A and Gerasimenko Yu (2000) Biochemical correlates of locomotor activity produced by epidural spinal cord stimulation. Proceedings of the IFESS-2000, Aalborg, Denmark, 205-207.
d. Cuellar CA, Mendez AA, Islam R, Calvert JS, Grahn PJ, Knudsen B, Pham T, Lee KH, and Lavrov IA. The Role of Functional Neuranatomy of the Lumbosacral Spinal Cord in Effect of Epidural Stimulation. (2017) Frontiers in Neuroanatomy (2017) doi: 10.3389/fnana.2017.00082

2. Epidural spinal cord stimulation for restoration of the motor functions in rats with complete paralysis. During work at the UCLA my previous findings were implemented in a chronic rodent model of spinal cord injury. Using this model we found that epidural stimulation can facilitate stepping after a complete chronic SCI and that modulation of the different components of spinal cord motor evoked responses corresponds to the restoration of stepping facilitated with epidural stimulation. Now this technique is commonly used in many preclinical and clinical studies.

Selected Publications

a. Lavrov I, Dy CJ, Fong AJ, Gerasimenko YP, Courtine G, Zhong H, Roy RR and Edgerton VR. (2008) Epidural Stimulation Induced Modulation of Spinal Locomotor Networks in Adult Spinal Rats. Journal of Neuroscience. 28:6022-9.
b. Lavrov I, Courtine G, Dy CJ, van den Brand R, Fong AJ, Gerasimenko YP, Zhong H, Roy RR and Edgerton VR. (2008) Facilitation of Stepping with Epidural Stimulation in Spinal Rats: Role of Sensory Input. Journal of Neuroscience. 28:7774-80.
c. Grégoire Courtine, van den Brand R, Musienko PE, Gerasimenko YP, Zhong H, Roy RR, Lavrov I, V. Reggie Edgerton, and M. Sofroniev. (2009) Transformation of nonfunctional spinal circuits into functional and adaptive states after complete loss of supraspinal input. Nature Neuroscience. 12:1333-1342.
d. Lavrov I, Gerasimenko YP, Burdick JW, Zhong H, Roy RR, Edgerton VR. (2015) Integrating multiple sensory systems to modulate neural networks controlling posture. J Neurophysiol. 114(6):3306-14
e. Lavrov I, Musienko PE, Selionov VA, Roy RR, Edgerton VR, Gerasimenko YP. (2015) Locomotion of mesencephalic cat during epidural and intraspinal electrical stimulation. Brain Research 1600:84-92

3. Epidural spinal cord stimulation for restoration of the motor functions in human. We have been successfully implementing pre-clinical studies to develop neuromodulation therapy for spinal cord injury. We found that selective stimulation with multielectrode array can facilitate stepping in complete SCI rats as

earlier as 1-2 weeks after injury and implemented focal epidural stimulation paradigm in clinical study. Weight-bearing training is the most successful intervention in paraplegic patients has been primarily effective in subjects with incomplete injuries and our new approaches, which combines epidural stimulation of the spinal circuitry along with physical rehabilitation have been tested and successfully implemented in recovery of motor functions in patients with clinically complete SCI.

Selected Publications

a. Lavrov I, Nandra M, Choe J, Gad P, Zhong H, Roy RR, Burdick JW, Tai Y.C, and Edgerton VR. (2009) Further Development of a High-Density Multi-Electrode Array to Facilitate Stepping and Assess Spinal Cord Function After a Spinal Cord Injury. Society for Neuroscience, Planner: 770.17
b. Rodger DC, Fong AJ, Li W, Ameri H; Ahuja AK, Gutierrez C, Lavrov I, Zhong H, Menon PR, Meng E, Burdick JW, Roy RR, Edgerton VR, Weiland JD, Humayun MS, Tai YC. (2008) Flexible Parylene-based Multielectrode Array Technology for High-density Neural Stimulation and Recording. Sensors & Actuators: B. Chemical. 132:449-460.
c. Edgerton VR, Courtine G, Gerasimenko YP, Lavrov I, Ichiyama RM, Fong AJ, Cai LL, Otoshi CK, Tillakaratne NJ, Burdick JW, Roy RR. (2008) Training locomotor networks. Brain Res Rev. 57:241-54.
d. Grahn PJ, Lavrov IA, Sayenko DG, Van Straaten MG, Gill ML, Strommen JA, Calvert JS, Drubach DI, Beck LA, Linde MB, Thoreson AR, Lopez C, Mendez AA, Gad PN, Gerasimenko YP, Edgerton VR, Zhao KD, Lee KH. Enabling Task-Specific Volitional Motor Functions via Spinal Cord Neuromodulation in a Human with Paraplegia. (2017) Mayo Clinic Proceedings 92:544-554.
e. Shah PK and Lavrov I. Spinal Epidural Stimulation Strategies: Clinical Implications of Locomotor Studies in Spinal Rats. (2017) The Neuroscientist doi: 10.1177/1073858417699554.
f. Hachmann JT, Grahn PJ, Calvert JS, Drubach DI, Lee KH, and Lavrov IA. Electrical neuromodulation of the respiratory system after spinal cord injury. (2017) Mayo Clinic Proceedings 92(9):1401-1414
g. Hachmann JT, Calvert JS, Grahn PJ, Drubach DI, Lee KH, and Lavrov IA. Review of epidural spinal cord stimulation for augmenting cough after spinal cord injury. (2017) Frontiers in Human Neuroscience 11:144

4. Interneuronal mechanisms for the control of locomotion. The fact that spinal cord when isolated from brain can initiate walking movements remains a significant evidence to believe that spinal cord segments have all required elements to produce stepping movements. During work at the University of Louisville my efforts were devoted to understand this key phenomenon. Using in vitro preparation of the mudpuppy spinal cord (Necturus Maculatus) we have explored two main cellular mechanisms of rhythm initiation and modulation - NMDA oscillatory membrane properties and electrical coupling between neurons and found that NMDA receptors are required for initiation and maintenance of walking-like activity in isolated spinal cord preparation.

Selected Publications

a. Lavrov I, Cheng J. (2008) Mudpuppy (Necturus Maculatus) Spinal Cord in vitro Preparation: Methodological Aspects of CPG Investigation, Chemical Application and Delivery. (Comparison of two approaches of applying neuroactive agents in the control of locomotor-like activity in the mudpuppy.) Journal of Neuroscience Methods. 174:97-102.
b. Lavrov I, Cheng J. (2004) Activation of NMDA Receptors is required for the initiation and maintenance of walking in the mudpuppy (Necturus Maculatus). Canadian Journal of Physiology and Pharmacology, 82:637-644.
c. Lavrov I, Fox L, Shen J, Han Y, Cheng J. Gap junctions contribute to the regulation of walking-like activity in the adult mudpuppy (Necturus Maculatus). (2016) PLoS One. 11(3): e0152650

5. Treatment in acute period of traumatic injury. Although treatment of secondary changes has been proven to be effective on spinal cord injured animal models, it is still unclear how to improve local delivery of active substances to the injury area and whether acute treatment would improve a long-term restoration of motor functions. Recently we described the effect of oxidative modification on micellar and drug delivery properties of copolymers of ethylene oxide and propylene oxide after SCI. The copolymer was tested as an enhancer for topical drug delivery to the spinal cord when applied subdurally and was able to facilitate the delivery of rhodamine 123 into the spinal cord tissues. These results show the potential of using oxidized copolymers for non-invasive delivery of neuroprotective therapy during acute period of spinal cord injury.

We have also described a positive effect cell-mediated gene therapy applied in acute period in rats and in mini pigs, which is an excellent translational model for future studies of SCI treatment.

Selected Publications

a. Islamov RR, Sokolov ME, Bashirov FV, Fadeev FO, Shmarov MM, Naroditskiy BS Povysheva TV, Shaymardanova GF, Yakupov RA, Chelyshev YA, and Lavrov IA. A pilot study of cell-mediated gene therapy for spinal cord injury in mini pigs. (2017) Neuroscience Letters doi: 10.1016/j.neulet.2017.02.034.
b. Kamalov MI, Lavrov I, Yergeshov A, Siraeva ZY, Baltin ME, Rizvanov AA, Kuznetcova SV, Petrova NV, Savina IN, Abdullin TI. Non-invasive topical drug delivery to spinal cord with carboxyl-modified trifunctional copolymer of ethylene oxide and propylene oxide. (2016) Colloids and Surfaces B: Biointerfaces.
c. Islamov RR, Izmailov AA, Sokolov ME, Fadeev PO, Bashirov FV, Eremeev AA, Shaymardanova GF, Shmarov MM, Naroditskiy BS, Lavrov IA, Chelyshev YA, Palotás A. Evaluation of direct and cell-mediated triple-gene therapy in spinal cord injury in rats. (2017) Brain Research Bulletin doi: 10.1016/j.brainresbull.2017.05.005
d. Islamov RR, Sokolov ME, Bashirov FV, Fadeev FO, Shmarov MM, Naroditskiy BS Povysheva TV, Shaymardanova GF, Yakupov RA, Chelyshev YA, and Lavrov IA. A pilot study of cell-mediated gene therapy for spinal cord injury in mini pigs. (2017) Neuroscience Letters doi: 10.1016/j.neulet.2017.02.034.
e. Izmailov AA, Povysheva TV, Bashirov FV, Sokolov ME, Fadeev FO, Garifulin RR, Naroditsky BS, Logunov DY, Salafutdinov II, Chelyshev YA, Islamov RR, and Lavrov IA. Spinal cord molecular and cellular changes induced by adenoviral vector- and cell-mediated triple gene therapy after severe contusion. (2017) Frontiers in Pharmacology doi: 10.3389/fphar.2017.00813

Complete List of Published Work: http://scholar.google.com/citations?user=F3csvfUAAAAJ&hl=ru

D. Research Support
Ongoing
Minnesota Spinal Cord and Traumatic Brain Injury Research Grant Program (Lavrov, PI) 2017 – 2018
Augmenting spinal cord lesion environment and sublesional circuitry using epidural stimulation with electrically-conductive, Schwann cell seeded hydrogel scaffolds.

Alena Militskova, Undegraduate student
Kazan (Volga Region) Federal University

(no CV uploaded)

Elza Fatykhova, MD, PhD
Children's Republican Clinical Hospital of the Ministry of Health of the Republic of Tatarstan

(no CV uploaded)

Safar Sharifullin, MD
Dicom Clinic

(no CV uploaded)

Carlos Cuellar, PhD
Mayo Clinic

(no CV uploaded)

Jonathan Calvert, Graduate student
Mayo Clinic

(no CV uploaded)

Peter Grahn, PhD
Mayo Clinic

(no CV uploaded)

Alexander Shein, PhD, DSci
Kazan (Volga Region) Federal University

(no CV uploaded)

Tatyana Baltina, PhD
Kazan (Volga Region) Federal University

(no CV uploaded)

Using mixed methods to explore the causes and consequences of falls among wheelchair users with SCI

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Hardeep Singh, OT
University of Toronto

CV:
Name: Hardeep Singh, OT Reg. (Ont.), PhD Candidate
Position Title: PhD candidate, Rehabilitation Sciences Institute, University of Toronto

HONORS
2016 – 2019 TRI Student Scholarship, Toronto Rehabilitation Institute
2016 – 2019 CIHR Project Grant, CIHR, co-investigator
2017 – 2019 Craig H. Neilsen Psychosocial Research Grant, co-investigator
2016 – 2019 UHN OSOTF Unilever/Lipton Graduate Fellowship in Neuroscience
2017 – 2018 ORT Conference Travel Award, Toronto Rehabilitation Institute
2016 – 2017 Fellowship - Rehabilitation Science, University of Toronto
2016 School of Graduate Studies Conference Grant, University of Toronto
2014 – 2016 UTAPS, University of Toronto
2016 Medical Graduate Student Bursary Funds, University of Toronto
2016 Rehabilitation Institute of Toronto Bursary, University of Toronto
2013 Dean's Honor Roll, Magna Cum Laude, York University

TEXTBOOK CHAPTER
Singh, H., Unger, J., & Musselman, K. E. (2018, Accepted). Shaping rehabilitation after spinal cord injury: The impact of qualitative research. In Muller, D., & Hayre, C. (Eds.). Enhancing Healthcare and Rehabilitation: The Impact of Qualitative Research. Ipswich, England: CRC Press.

PEER REVIEWED PUBLICATIONS
Kilburn, C. M., Singh, H., Makowski, A., & Musselman, K. E. (2018, Submitted). Perspectives and experiences of physical therapists regarding use and value of screening assessments and preventative programs for elite-level dancers. Physical Therapy.
Singh, H., Craven, B. Flett, H., C., Kerry, C., Jaglal, S. B., Silver, M. P., & Musselman, K. E. (2018, Submitted). Factors influencing fall prevention for patients with spinal cord injury from the perspectives of administrators in Canadian rehabilitation hospitals. Qualitative Health Research.
Singh, H., Shah, M., Flett, H., Craven, B. C., Verrier, M., & Musselman, K. E. (2018). Life after Personalized Adaptive Locomotor Therapy: A qualitative follow-up study. Spinal Cord Series & Cases. doi: 10.1038/s41394-018-0037-z
Singh, H., Unger, J., Pakosh, M., Zariffa, J., Jaglal, S., Craven, B. C., & Musselman, K. E. (2018). Therapeutic use of robotics for upper extremity spinal cord injury rehabilitation: A systematic scoping review. Disability & Rehabilitation: Assistive Technology. doi: 10.1080/17483107.2018.1425747
Unger, J., Singh, H., Mansfield, A., Sander, H., Lenton, E., Musselman, K. E. (2018). The experiences of physical rehabilitation in individuals with spinal cord injuries: A qualitative thematic synthesis. Disability & Rehabilitation. doi: 10.1080/09638288.2018.1425745
Silver, M. P., McRoberts, S., & Singh, H. (2017). When working out works out: Community Program Administrators' Perspectives on Mature Adult Exercise Participation. Activities, Adaptation & Aging, 41(4), 1-22. DOI: 10.1080/01924788.2017.1376177
Singh, H., Shah, M., Flett, H., Craven, C. B., Verrier, M. C., & Musselman, K. E. (2017). Perspectives on Personalized Adapted Locomotor Training from Individuals with Sub-acute Spinal Cord Injury. Disability & Rehabilitation, 13, 1-9. doi: 10.1080/09638288.1277395

NON-PEER REVIEWED PUBLICATIONS
Singh, H., Gaya, A., Martin, L., Barker, D. (2017). Volunteer work as a foundation for private practice

fieldwork learning. OT Now, 19(2), 17-19.

Carol Scovil, OT, PhD
Toronto Rehabilitation Institute-University Health Network

(no CV uploaded)

Geoff Bostick, PT, PhD
University of Alberta

(no CV uploaded)

Anita Kaiser, MSc
Toronto Rehabilitation Institute-University Health Network

(no CV uploaded)

Beverly Craven, BA, MSc, MD, FRCPC
Toronto Rehabilitation Institute-University Health Network

(no CV uploaded)

Kristin Musselman, P
Toronto Rehabilitation Institute-University Health Network

(no CV uploaded)

Is anorgasmia a side effect of pregabalin? A case series

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

George Marzloff, MD
Case Western Reserve University/Metrohealth Rehabilitation Institute of Ohio, Dept. of Physical Medicine and Rehabilitation

CV:
AWARDS AND HONORS

2017 Association of Academic Physiatrists Innovation Award, for innovative use of technology to promote the ideals of academic physiatry.

2016 SinaiMedMaker hackathon 3rd place team winner, Icahn School of Medicine at Mount Sinai. Project: bioLumen, a biofeedback system for chronic low back pain using surface electromyography to control the lighting, sound, and data interactions within a patient's environment. $1500 awarded to team.

PUBLICATIONS

Cansev M, Marzloff G, Sakamoto T, Ulus IH, Wurtman RJ (2009). Giving Uridine Plus Docosahexaenoic Acid Orally To Rat Dams During Gestation and Nursing Increases Synaptic Elements in Brains of Weanling Pups. Dev Neurosci, 2009 Jan 15.

Wurtman RJ, Ulus IH, Cansev C, Watkins CJ, Wang L, Marzloff G (2006). Synaptic Proteins and Phospholipids are Increased in Gerbil Brain by Administering Uridine Plus Docosahexaenoic Acid Orally. Brain Research 1088(1):83-92.

I am a named study investigator for the following publications

Landau SM, Horng A, Fero A, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2016). Amyloid negativity in patients with clinically diagnosed Alzheimer disease and MCI. (collaborator). Neurology. Apr 12;86(15):1377-85.

Palmqvist S, Zetterberg H, Mattsson N, Johansson P; Alzheimer's Disease Neuroimaging Initiative, Minthon L, Blennow K, Olsson M; Swedish BioFINDER study group, Hansson O (2015). Detailed comparison of amyloid PET and CSF biomarkers for identifying early Alzheimer disease. (collaborator). Neurology. Oct 6;85(14):1240-9.

Schreiber S, Landau SM, Fero A, Schreiber F, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2015). Comparison of Visual and Quantitative Florbetapir F 18 Positron Emission Tomography Analysis in Predicting Mild Cognitive Impairment Outcomes. (collaborator). JAMA Neurol. Oct;72(10):1183-90.

Apostolova LG, Hwang KS, Avila D, Elashoff D, Kohannim O, Teng E, Sokolow S, Jack CR, Jagust WJ, Shaw L, Trojanowski JQ, Weiner MW, Thompson PM, Alzheimer's Disease Neuroimaging Initiative (2015). Brain amyloidosis ascertainment from cognitive, imaging, and peripheral blood protein measures. (collaborator). Neurology. 84(7):729-37.

Caroli A, Prestia A, Galluzzi S, Ferrari C, van der Flier WM, Ossenkoppele R, Van Berckel B, Barkhof F, Teunissen C, Wall AE, Carter SF, Schöll M, Choo IH, Grimmer T, Redolfi A, Nordberg A, Scheltens P, Drzezga A, Frisoni GB; Alzheimer's Disease Neuroimaging Initiative. Mild cognitive impairment with suspected nonamyloid pathology (SNAP): Prediction of progression. (collaborator). Neurology 2015 Feb 3;84(5):508-15

Salloway S, Sperling R, Fox N, Blennow K, Klink W, Raskind M, Sabbagh M, honig L, Porsteinsson AP, Ferris S, Reichert M, Ketter N, Nejadnik B, Guenzler V, Miloslavsky M, Wang D, Lu Y, Lull J, Tudor JC, Liu E, Grundman M, Yuen E, Black R, Brashear HR, Bapineuzumab 301 and 302 Clinical Trial Investigators (2014). Two phase 3 trials of bapineuzumab in mild-to-moderate Alzheimer's disease. (collaborator). New England Journal of Medicine 370(4):322-333.

Lo RY, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2012). Predicting missing biomarker data in a longitudinal study of Alzheimer disease. (collaborator). Neurology 78(18):1376-82.

Heister D, Brewer JB, Magda S, Biennow K, McEvoy LK, Alzheimer's Disease Neuroimaging Initiative (2011). Predicting MCI outcome with clinically available MRI and CSF biomarkers. (collaborator). Neurology 77(17):1619-28.

Kim S, Swaminathan S, Shen L, Risacher SL, Nho K, Foroud T, Shaw LM, Trojanowski JQ, Potkin SG, Huentelman MJ, Craig DW, DeChairo BM, Aisen PS, Petersen RC, Weiner MW, Saykin AJ; Alzheimer's Disease Neuroimaging Initiative (2011). Genome-wide association study of CSF biomarkers Abeta1-42, t-tau, and p-tau181p in the ADNI cohort. (collaborator). Neurology 76(1):69-79.

Lo RY, Hubbard AE, Shaw LM, Trojanowski JQ, Petersen RC, Aisen PS, Weiner MW, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2011). Longitudinal change of biomarkers in cognitive decline. (collaborator). Arch Neurol. 68(10):1257-66.

Shen L, Kim S, Risacher SL, Nho K, Swaminathan S, West JD, Foroud T, Pankratz N, Moore JH, Sloan CD, Huentelman MJ, Craig DW, Dechairo BM, Potkin SG, Jack CR Jr, Weiner MW, Saykin AJ; Alzheimer's Disease Neuroimaging Initiative (2010). Whole genome association study of brain-wide imaging phenotypes for identifying quantitative trait loci in MCI and AD: A study of the ADNI cohort. (collaborator). Neuroimage 53(3):1051-63.

Stein JL, Hua X, Lee S, Ho AJ, Leow AD, Toga AW, Saykin AJ, Shen L, Foroud T, Pankratz N, Huentelman MJ, Craig DW, Gerber JD, Allen AN, Corneveaux JJ, Dechairo BM, Potkin SG, Weiner MW, Thompson P; Alzheimer's Disease Neuroimaging Initiative (2010). Voxelwise genome-wide association study (vGWAS). (collaborator). Neuroimage 53(3):1160-74.

Keihaninejad S, Heckemann RA, Fagiolo G, Symms MR, Hajnal JV, Hammers A; Alzheimer's Disease Neuroimaging Initiative (2010). A robust method to estimate the intracranial volume across MRI field strengths (1.5T and 3T). (collaborator). Neuroimage 50(4):1427-37.

Schott JM, Bartlett JW, Barnes J, Leung KK, Ourselin S, Fox NC; Alzheimer's Disease Neuroimaging Initiative investigators (2010). Reduced sample sizes for atrophy outcomes in Alzheimer's disease trials: baseline adjustment. (collaborator). Neurobiol Aging 31(8):1452-62, 1462.e1-2.

Vounou M, Nichols TE, Montana G; Alzheimer's Disease Neuroimaging Initiative (2010). Discovering genetic associations with high-dimensional neuroimaging phenotypes: A sparse reduced-rank regression approach. (collaborator). Neuroimage 53(3):1147-59.

Walhovd KB, Fjell AM, Dale AM, McEvoy LK, Brewer J, Karow DS, Salmon DP, Fennema-Notestine C, Alzheimer's Disease Neuroimaging Initiative (2010). Multi-modal imaging predicts memory performance in normal aging and cognitive decline. (collaborator). Neurobiol Aging 31(7):1107-21.

Xu C, Wang Z, Fan M, Liu B, Song M, Zhen X, Jiang T; Alzheimer's Disease Neuroimaging Initiative (2010). Effects of BDNF Val66Met polymorphism on brain metabolism in Alzheimer's disease. (collaborator). Neuroreport 21(12):802-7.

Holland D, Brewer JB, Hagler DJ, Fennema-Notestine C, Dale AM; Alzheimer's Disease Neuroimaging Initiative. Subregional neuroanatomical change as a biomarker for Alzheimer's disease. (collaborator). Proc Natl Acad Sci U S A. 2009 Dec 8;106(49):20954-9.

Aisen P, Schneider L, Sano M, Diaz-Arrastia R, van Dyck C, Weiner M, Bottiglieri T, Jin S, Stokes K, Thomas R, Thal L, Alzheimer Disease Cooperative Study (2008). High-dose B vitamin supplementation and cognitive decline in Alzheimer disease: a randomized controlled trial. (collaborator). JAMA 300(15):1774-83.

POSTER PRESENTATIONS

Marzloff G, Abdou A, Mehta A, Escalon MX, Bryce TN. Open-source rehabilitation reference mobile web application: A novel approach to creating collaborative resources for physiatrists in training. Poster session presented at the Icahn School of Medicine at Mount Sinai Consortium Research Day. New York, NY, June 2017.

Marzloff G, Zakhary M, Adamov E, Nori S. Sensory ataxia, weakness and hyperreflexia in a patient with neurofibromatosis type 1: a case report. Poster session presented at AAP Annual Meeting. Las Vegas, NV, February 2017.

Patel PB, Marzloff G, Shetreat-Klein A. Zika Virus associated Guillain-Barré Syndrome: a case report. Poster session presented at AAP Annual Meeting. Las Vegas, NV, February 2017.

Marzloff G, Yang A, Ambrose AF. Nonsystemic vasculitic neuropathy misdiagnosed as acute motor and sensory axonal neuropathy: a case report. Poster session presented at AAP Annual Meeting. Sacramento, CA, February 2016.

Patel A, Marzloff G, Weiss L. Laser treatment of trismus after gunshot wound to face: a case report. Poster session presented at AAPM&R Annual Assembly. San Diego, CA, November 2014.

Grossman H, Marzloff G, Luo X, LeRoith D, Sano M, Pasinetti G. NIC5-15 as a treatment for Alzheimer's: Safety, pharmacokinetics, and clinical variables. Poster session presented at International Conference for Alzheimer's Disease. Vienna, Austria, July 2009

Marzloff G, Cansev M, Wurtman RJ. Uridine plus docosahexaenoic acid increase phospholipids and synaptic proteins in brains of developing rat pups. Poster session presented at Neuroscience 2006. Atlanta, GA, October 2006.

Cansev M, Wurtman RJ, Ulus IH, Watkins CJ, Wang L, Marzloff G, Sakamoto T. Characterization of polyunsaturated fatty acids that affect synaptic proteins and phospholipids in gerbil brain. Poster session presented at Neuroscience 2006. Atlanta, GA, October 2006.

Wurtman R, Ulus IH, Cansev M, Watkins CJ, Wang L, Marzloff G. Synaptic phospholipids and proteins are increased in gerbil brain by administering uridine plus docosahexaenoic acid orally. Poster session presented at Experimental Biology 2006. San Francisco, CA, April 2006.

Cansev M, Wurtman RJ, Ulus IH, Watkins CJ, Wang L, and Marzloff G. Oral uridine (UMP) plus docosahexaenoic acid increases phospholipids and synaptic proteins in gerbil brain. Poster session presented at International Society for Neurochemistry. Portland, OR, March 2006.

Marzloff G, Chin AB, Tenenbaum J. The role of theory of mind in making inferences about novel objects. Poster session presented at MIT Brain & Cognitive Sciences Undergraduate Research. Cambridge, MA, April 2004.

OTHER ACADEMIC WRITINGS

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 3 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. May 2, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-3

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 2 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. May 2, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-2

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 1 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. April 26, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-1

George Marzloff. Using MyoWare: a low-cost surface electromyography sensor for developing rehabilitation devices (Tutorial). Association of Academic Physiatrists News: Rehab Tech. Nov 8, 2016. Available online at http://bit.ly/myoware-for-rehab-tutorial

Ajax Yang and George Marzloff. Getting started with prospective research studies during residency training: Q&A with resident and researcher Ajax Yang. Association of Academic Physiatrists: Physiatry in Motion. Oct 25, 2016. Available online at http://bit.ly/getting-started-with-research

George Marzloff. Using Consumer Biometric Sensors for Physiatric Research: An Introduction. Association of Academic Physiatrists: Physiatry in Motion. Sep 8, 2016. Available online at http://bit.ly/using-consumer-biometric-sensors

INVITED TALKS

George Marzloff. Enhancing adaptive sports with functional electrical stimulation. Grand Rounds, Icahn School of Medicine at Mount Sinai, New York, NY, May 22, 2018.

George Marzloff. bioLumen: An EMG-controlled biofeedback system for chronic low back pain. Presented at Sinai Innovations, Icahn School of Medicine at Mount Sinai, New York, NY. October 25, 2016.

RESEARCH EXPERIENCE

2015-2018 Icahn School of Medicine at Mount Sinai Dept. of Rehabilitation Medicine New York, NY
Projects:
- Vibrational feedback system for exoskeleton training in patients with spinal cord injury
- Open-source rehabilitation reference mobile web applications: a novel approach to creating collaborative resources for physiatrists in training
- The effects of an exercise training program on truncal balance in patients with spinal cord injury
- A mobile application for home evaluation and durable medical equipment appropriateness for space: a pilot study

2007-2010 Icahn School of Medicine at Mount Sinai Alzheimer's Disease Research Ctr, New York, NY
Clinical Research Coordinator: Recruited patients for national clinical trials, administered cognitive testing and collected data, prepared IRB/NIH submissions, and maintained regulatory documents. Analyzed safety, tolerability, and pharmacokinetic data for nutraceutical study.
Served as liaison between the research center and the national Alzheimer's Disease Cooperative Society.

2005-2007 Richard Wurtman, MD Lab for Neuroendocrine Regulation, Cambridge, MA
Research Assistant: Performed dietary experimentation in rats and gerbils to study neuroprotective benefits of chronic supplementation of uridine and docosahexaenoic acid.

2006 Saoirse Corporation, Cambridge, MA
Research Intern: Aided in research and development of nanoparticle-based delivery of neuropharmaceuticals.

2004 Computational Cognitive Science Group, Cambridge, MA

Research Assistant: Designed and programmed computer-based cognitive experiments, and analyzed data to construct computational models of thought processes.

TEACHING EXPERIENCE

2018-present Spinal Cord Injury Medicine Fellow, taught and mentored residents and medical students daily

2015-2018 Physical Medicine and Rehabilitation Resident, taught and mentored medical students daily

2014-2015 Internal Medicine Resident, taught and mentored medical students daily

2009-2010 Mount Sinai Alzheimer's Disease Research Center Volunteer Mentor: Supervised and trained undergraduates in research operations, neuropsychiatric assessments and regulatory filing.

2006-2007 MIT "Pre-UROP" Mentor: Trained new undergraduate researchers in relevant material in neuroendocrinology and chemistry lab techniques.

LEADERSHIP ROLES AND SERVICE INVOLVEMENT

2017 Mount Sinai Rehabilitation Medicine Residency Technology Chair
advised department on website management and introduced new educational content for residents.

2016-2017 Residents & Fellows Council, Association of Academic Physiatrists
Technology Representative: Advisor for the national association's website, launched AAP News on the social publishing platform Medium to increase authorship and audience. Recruited authors for new content focused on rehabilitation technology.

2015-2017 Rock 'n Roll Half Marathon Medical Team (annually), New York, NY

2010-2014 MarzloffMedia.com Flashcards
Software Developer: Designed and programmed a web application of flashcards based on material specific to every basic science lecture. Ross students have used this application more than 100,000 times.

James Wilson, MD
Louis Stokes Cleveland Va Medical Center, Spinal Cord Injuries and Disorders Center, Case Western Reserve University/Metrohealth Rehabilitation Institute of Ohio, Dept of Physical Medicine and Rehabilitation

(no CV uploaded)

M Kristi Henzel, MD, PhD
Louis Stokes Cleveland Va Medical Center, Spinal Cord Injuries and Disorders Center, Case Western Reserve University/Metrohealth Rehabilitation Institute of Ohio, Dept of Physical Medicine and Rehabilitation

(no CV uploaded)

The Influence of Injury Level on the Outcome of Powered Exoskeleton Walking Training in Adults with Chronic Spinal Cord Injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Ting-Yu Tu, PT
Taipei Veterans General Hospital

CV:
Name: Ting-Yu Tu
Position Title: Research fellow, Neural Rehabilitation Center of Taipei Veterans General Hospital.
Personal Statement
In neural rehabilitation center of Taipei Veterans General Hospital, we focus on the effect and the outcome of walking training with powered exoskeleton in spinal cord injury(SCI) individuals. The feasibility and safety of powered exoskeleton in SCI had been proved by many studies but the outcome of SCI with a different background(gender, age, injury level,...etc.) and it's training effect are uncleared. I especially interesting in the effect on cardiopulmonary function due to the high mortality result in cardiovascular disease in SCI individual. Not only the potential in rehabilitation, I am also working on developing the training programs for SCI with different characters and for them to walk in a different environment.

Yu-chen Lan, MS
Taipei Veterans General Hospital

(no CV uploaded)

Yun-An Tsai, MD
Taipei Veterans General Hospital

(no CV uploaded)

Shih-Feng Huang, MD
Taipei Veterans General Hospital

(no CV uploaded)

Ting-Yun Wang, PhD
Free Bionics Inc.

(no CV uploaded)

Effect of exercise mode and intensity on subsequent postprandial carbohydrate and fat metabolism in persons with spinal cord injury.

Thursday, April 04, 2019 01:25 PM - 02:25 PM

David McMillan, MS
University of Miami

CV:
Name: David W. McMillan, MS

Position Title: Doctoral Candidate, Department of Exercise and Sport Sciences, University of Miami, Coral Gables, FL

A. Personal Statement

See “Short Bio” above.

B. Positions and Honors
Positions
2013-2015 Exercise Science Lecturer, Department of Kinesiology and Nutritional Science, California State University Los Angeles
2014 Sally Casanova Research Fellow, Department of Neurological Surgery (The Miami Project to Cure Paralysis), University of Miami Miller School of Medicine, Miami, FL
2015-current Doctoral Researcher, The Miami Project to Cure Paralysis and Department of Exercise and Sport Sciences, University of Miami, Miami, FL
Honors/Appointments
2013 California State University San Marcos Dean’s Award
2014 California State University System, Sally Casanova Fellowship
2015 California State University Los Angeles “Special Recognition in Graduate Studies”
2017-2018 Chair, Graduate Activity Fee Allocation Committee, University of Miami
2018 “Best Poster” Award, American Spinal Injury Association annual scientific meeting

C. Contributions to Science – full McMillan citation list at:
https://www.ncbi.nlm.nih.gov/sites/myncbi/1zcavUcdlOjAj/bibliography/53529527/public/?sort=date&direction=ascending

1. Therapeutic lifestyle interventions for cardioendocrine disease abatement in persons with spinal cord injury
1. Maher JL, McMillan DW, Nash MS. The Cardiometabolic Syndrome in SCI: the Role of Physical Deconditioning and Evidence-based Countermeasures. In AJ Taylor (Ed. 1), in The Physiology of Exercise in Spinal Cord Injury. American Physiological Society and Springerbook, 202–215, 2016.
2. Lem A, McMillan DW, Kressler J, Nash M. Annual Meeting of the American College of Sports Medicine: Poster: Energy Expenditure and Fuel Homeostasis During and After a Single Bout of Circuit Resistance Exercise in Persons with and without Spinal Cord Injury. Boston, MA. May 31 – June 4, 2016.
3. Maher JL, McMillan DW, Nash MS. Exercise and Health-Related Risks of Physical Deconditioning after Spinal Cord Injury. Top Spinal Cord Inj Rehabil. 23(3): 234-44, 2017.
4. McMillan DW, Freeman D, Bellman M, Jacobs KA, Nash MS. Annual Scientific Meeting of the American Spinal Injury Association: Poster: Energy Expenditure and Fuel Homeostasis During and After Bouts of FES Cycling with Different FES Devices. Albuquerque, NM. April 26 – 29, 2017.

2. Systems neural circuitry during locomotion
1. Nessler JA, McMillan DW, Schoulten M, Shallow T, Stewart B, Delone C. Side by side treadmill walking with intentionally desynchronized gait. Annals of Biomedical Engineering. 41(8), 1680–91, 2013.
2. McMillan DW, de Leon R, Guertin PA, Dy CJ. The Utility of Interappendicular Connections in Bipedal Locomotion. Current Pharmacological Design, 23(12), 1734-40, 2017.

3. Physiological adaptations to high intensity exercise
1. Astornio TA, Schubert MM, Palumbo E, Sterling D, McMillan DW, Cooper C, Gallant R. Comparing the magnitude and time course of changes in maximal oxygen uptake in response to distinct regimens of chronic interval training in sedentary women. Eur J Appl Physiol, 113 (9), 2361–9, 2013.
2. Astorino TA, Schubert MM, Palumbo E, Sterling D, McMillan DW. Effects of two doses of interval training on maximal fat oxidation in sedentary women. Med Sci Sports Exerc, 45(10), 1878–86, 2013.
3. Astorino TA, Schubert MM, Palumbo E, Stirling D, McMillan DW, Gallant R, Dewoskin R. Perceptual changes in response to two regimens of interval training in sedentary women. J Strength Cond Res, 30(4), 1067-76, 2015.
4. Astornio TA, McMillan DW, Edmunds RM, Sanchez E. Increased cardiac output elicits higher VO2max in response to self-paced exercise. Appl Physiol Nutr Metab, 40(3), 223–9, 2015.

D. Research Support
Ongoing Research Support
Project #: 545472 PI: Kevin A. Jacobs Funding Agency: Neilsen Foundation
Grant Title: Postprandial triglyceride and free fatty acid metabolism following exercise in persons with SCI
Grant Dates: July 2018 – July 2020 Role: Collaborator

Completed Research Support
N/A

Jennifer Maher, PhD
University of Miami

CV:
N/A

Kevin Jacobs, PhD
University of Miami

CV:
N/A

James Bilzon, PhD
University of Bath

CV:
N/A

Mark Nash, PhD
University of Miami

CV:
N/A

Reigning in Controlled Substance Prescription while Addressing Pain in SCI Patients Followed in a Resource Constrained County Funded Safety Net Rehabilitation Center

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Mindy Aisen, MD
Rancho Los Amigos

CV:

Virtual reality applications for addressing the needs of those aging with disability. Rizzo A, Requejo P, Winstein CJ, Lange B, Ragusa G, Merians A, Patton J, Banerjee P, Aisen M. Stud Health Technol Inform.;163:510-6, 2011.

Cerebral palsy: clinical care and neurological rehabilitation. Aisen ML, Kerkovich D, Mast J, Mulroy S, Wren TA, Kay RM, Rethlefsen SA. Lancet Neurology;10(9):844-52, Sep 2011.

Tapering opioid prescriptions and reducing polypharmacy for inpatients with spinal cord injury at Rancho Los Amigos National Rehabilitation Center. Alan Marc Atkins; Fernando Gonzalez, PhD; Brian Joyo, PharmD; Mindy Lipson Aisen, M.D. Journal of Rehabilitation Research and Development, 2015.

Sexual concerns after Spinal Cord Injury: An update on managemen. Alexander, Marcalee Sipski, Aisen, Carrie Mlynarczyk; Alexander, Sterling Morrison; Aisen, Mindy. NeuroRehabilitation, vol. 41, no. 2, pp. 343-357, 2017

Michal Atkins, OT
Rancho Los Amigos

(no CV uploaded)

Judith Salazar, RN
Rancho Los Amigos

(no CV uploaded)

Robert Boucher, P.A
Rancho Los Amigos

(no CV uploaded)

Fesoterodine ameliorates autonomic dysreflexia while improving lower urinary tract function in individuals following spinal cord injury

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Matthias Walter, MD, PhD, FEBU
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

CV:
SHORT BIO
Matthias Walter graduated in 2006 with a degree in medicine from the Friedrich-Schiller-University Jena, Germany. In January 2014, he completed his doctorate in medicine investigating the outcome and complications of intrathecal baclofen therapy in children at the University of Zurich. His residency included clinical training in General Surgery, Pediatric Surgery and Urology. Between December 2011 and 2014 he worked as a full-time PhD candidate at the Spinal Cord Injury Centre and Research, University of Zürich, Balgrist University Hospital, Zürich, Switzerland. He completed his residency in Urology and passed the board certification examination of the Swiss Association of Urology at the Cantonal Hospital Aarau in September 2016. He has been board certified as a Urologist by the Swiss Society of Urology and is a fellow of the European Board of Urology (FEBU). In March 2018, he completed his second doctorate using multi-methodological approaches to investigate lower urinary tract function in health and disease. Currently, he is pursuing postdoctoral research fellowship as a Michael Smith Foundation for Health Research (MSFHR) Trainee Award recipient (in partnership with the Rick Hansen Foundation, RHF) at the International Collaboration on Repair Discoveries, University of British Columbia, in Vancouver, Canada.

EDUCATION
University
PhD - Maastricht University, Netherlands - 03/2018
Doctorate in Medicine (Dr. med.) - University of Zurich, Switzerland - 2014
Medicine (MD) - Friedrich Schiller University Jena, Germany - 2006

Board Certification - Urology
Swiss Medical Association - Urologist - 2016
European Board of Urology - Fellow of the European Board of Urology (FEBU) -2016

EXTENTED BIO
Personal Statement
Since November 2016, I am a postdoctoral research fellow at the International Collaboration on Repair Discoveries (ICORD), University of British Columbia (UBC), in Vancouver, Canada I am currently involved in numerous research studies and clinical trials focusing on amelioration of autonomic dysfunctions among individuals with spinal cord injury (SCI). In addition, I am one of three principal investigators (i.e. John Steeves and Brett Finlay) investigating gastrointestinal and urinary tract microbiome after spinal cord injury in an international multicenter trial.

Academic Positions
2017 - present Honorary Postdoctoral Fellow, ICORD, UBC, Vancouver, BC, Canada
2014 - 2016 Adjunct Postdoctoral Fellow, University of Zurich, Switzerland (CH)
2011 - 2014 Doctoral Candidate, Universities Zurich and Maastricht

Clinical Positions
2016 Consultant, Urology, Cantonal Hospital, Aarau, CH
2014 - 2015 Chief Resident, Urology, Cantonal Hospital, Aarau, CH
2013 - 2014 Resident, Neuro-Urology, SCI Centre, Balgrist University Hospital, Zurich, CH
2010 - 2011 Resident, Urology, University Hospital, Basel, CH
2009 - 2010 Resident, Pediatric Surgery, Children's University Hospital, Zurich, CH

2007 - 2008 Resident, Urology, Cantonal Hospital, Baden, CH
2006 - 2007 Resident, General Surgery, Cantonal Hospital, Frauenfeld, CH

Honors
2018 BEST POSTER PRESENTATION - annual meeting of the European Association of Urology (EAU)
2018 CONFERENCE TRAVEL AWARD - BC Regenerative Medicine (BCREGMED) Initiative
2018 CONFERENCE TRAVEL AWARD - Faculty of Medicine, UBC
2017 POSTDOCTORAL RESEARCH FELLOWSHIP - Michael Smith Foundation for Health Research and Rick Hansen Foundation
2017 INTERNATIONAL AUTONOMIC AWARD - Best overall presentation at 4th International Autonomic Symposium in Vancouver, Canada
2016 UROLOGIST - Swiss Board Examination in Urology
2016 FELLOW OF THE EUROPEAN BOARD OF UROLOGY (FEBU)
2015 CONFERENCE TRAVEL AWARD - annual meeting of the International Continence Society (ICS)
2014 BEST POSTER PRESENTATION - annual meeting of the EAU

Contribution to Science
1. West CR, Phillips AA, Squair JW, Williams AM, Walter M, Lam T, Krassioukov AV. Association of Epidural Stimulation With Cardiovascular Function in an Individual With Spinal Cord Injury. JAMA Neurol. 2018 May 1;75(5):630-632. PubMed PMID: 29459943
2. Walter M, Krassioukov AV. Autonomic Nervous System in Paralympic Athletes with Spinal Cord Injury. Phys Med Rehabil Clin N Am. 2018 May;29(2):245-266. PubMed PMID: 29627087.
3. Walter M, Knüpfer SC, Cragg JJ, Leitner L, Schneider MP, Mehnert U, Krassioukov AV, Schubert M, Curt A, Kessler TM. Prediction of autonomic dysreflexia during urodynamics: a prospective cohort study. BMC Med. 2018 Apr 13;16(1):53. doi: 10.1186/s12916-018-1040-8. PubMed PMID: 29650001
4. Christison K, Walter M, Wyndaele JJM, Kennelly M, Kessler TM, Noonan VK, Fallah N, Krassioukov AV. Intermittent Catheterization: The Devil Is in the Details. J Neurotrauma. 2018 Feb 1. doi: 10.1089/neu.2017.5413. PubMed PMID: 29108476
5. Leitner L, Walter M, Jarrahi B, Wanek J, Diefenbacher J, Michels L, Liechti MD, Kollias SS, Kessler TM, Mehnert U. A novel infusion-drainage device to assess lower urinary tract function in neuro-imaging. BJU Int. 2017 Feb;119(2):305-316. PubMed PMID: 27617867.
6. Leitner L, Walter M, Sammer U, Knüpfer SC, Mehnert U, Kessler TM. Urodynamic Investigation: A Valid Tool to Define Normal Lower Urinary Tract Function? PLoS One. 2016 Oct 13;11(10):e0163847. PubMed PMID: 27736908.
7. Leitner L, Sammer U, Walter M, Knüpfer SC, Schneider MP, Seifert B, Tornic J, Mehnert U, Kessler TM. Antibiotic prophylaxis may not be necessary in patients with asymptomatic bacteriuria undergoing intradetrusor onabotulinumtoxinA injections for neurogenic detrusor overactivity. Sci Rep. 2016 Sep 12;6:33197. PubMed PMID: 27616488
8. Leitner L, Guggenbühl-Roy S, Knüpfer SC, Walter M, Schneider MP, Tornic J, Sammer U, Mehnert U, Kessler TM. More Than 15 Years of Experience with Intradetrusor OnabotulinumtoxinA Injections for Treating Refractory Neurogenic Detrusor Overactivity: Lessons to Be Learned. Eur Urol. 2016 Sep;70(3):522-8. PubMed PMID: 27106070.
9. Walter M, Wetterauer C, Bruder E, Obermann EC, Subotic S, Wyler S. Renal Cell Carcinoma in a Young Adult - Do We Need Further Investigations? Urol Case Rep. 2016 Mar 12;6:27-9. doi: 10.1016/j.eucr.2016.02.005. eCollection 2016 May. PubMed PMID: 27169022
10. Walter M, Knüpfer SC, Leitner L, Mehnert U, Schubert M, Curt A, Kessler TM. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat urodynamic investigation in women with spinal cord injury. World J Urol. 2016 Mar;34(3):391-7. PubMed PMID: 26055644.
11. Sammer U, Walter M, Knüpfer SC, Mehnert U, Bode-Lesniewska B, Kessler TM. Do We Need Surveillance Urethro-Cystoscopy in Patients with Neurogenic Lower Urinary Tract Dysfunction? PLoS One. 2015 Oct 29;10(10):e0140970. PubMed PMID: 26513149
12. Walter M, Altermatt S, Furrer C, Meyer-Heim A. Intrathecal baclofen therapy in children with acquired brain injuries after drowning: A case series. Brain Inj. 2015;29(1):98-103. PubMed PMID: 25264924.
13. Walter M, Altermatt S, Furrer C, Meyer-Heim A. Intrathecal baclofen therapy in children with severe spasticity: Outcome and complications. Dev Neurorehabil. 2014 Dec;17(6):368-74. PubMed PMID: 23977869.
14. Leitner L, Walter M, Freund P, Mehnert U, Michels L, Kollias S, Kessler TM. Protocol for a prospective

magnetic resonance imaging study on supraspinal lower urinary tract control in healthy subjects and spinal cord injury patients undergoing intradetrusor onabotulinumtoxinA injections for treating neurogenic detrusor overactivity. BMC Urol. 2014 Aug 18;14:68. PubMed PMID: 25132340
15. Walter M, Michels L, Kollias S, van Kerrebroeck PE, Kessler TM, Mehnert U. Protocol for a prospective neuroimaging study investigating the supraspinal control of lower urinary tract function in healthy controls and patients with non-neurogenic lower urinary tract symptoms. BMJ Open. 2014 May 21;4(5):e004357. PubMed PMID: 24848086.
16. Walter M, Sammer U, Kessler TM. [Chronic pelvic pain syndrome: neurostimulation, neuromodulation and acupuncture]. Urologe A. 2012 Dec;51(12):1683-91. PubMed PMID:23224254.

Presentations (selected since 2013)
Previous ASIA workshop/course
1. Point/Counter Point: Opposing Views - Urology Re-use of Catheters: Yea or Nay (ASIA 2018 – Rochester, USA)

Podium presentations
1. OnabotulinumtoxinA for neurogenic detrusor overactivity reduces frequency and severity of autonomic dysreflexia and improves quality of life for individuals with spinal cord injury (AUA 2018 – San Francisco, USA)
2. Prediction of autonomic dysreflexia during urodynamics (AUA 2018 – San Francisco, USA)
3. Urethral injury and associated complications in individuals following spinal cord injury (ICS 2017 – Florence, Italy)
4. Reproducibility of supraspinal responses to automated, repetitive bladder filling – An fMRI study (AUA 2016 – San Diego, USA)
5. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (ICS 2016 – Tokyo, Japan)
6. Supraspinal responses to automated, repetitive bladder filling in healthy subjects - An fMRI study (ICS 2015 – Montreal)
7. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat urodynamic investigation in women with suprasacral spinal cord injury (ASIA/ISCoS 2015 – Montreal)
8. Do we need surveillance cystoscopy in patients with a neurogenic lower urinary tract dysfuntion? (ASIA 2014 – San Antonio, USA)
9. Influence of spinal cord area and neuropathic pain on cardiovascular changes in patients with spinal cord injury during urodynamic investigation (ISCoS 2014 – Maastricht, The Netherlands)

Short oral presentations
1. OnabotulinumtoxinA ameliorates autonomic dysreflexia while improving lower urinary tract function and quality of life in individuals with spinal cord injury (ICS 2018 – Philadelphia, USA)
2. Epidural Spinal Cord Stimulation Affects Bladder And Bowel Function: A Case Report (ASIA 2018 – Rochester, USA)
3. OnabotulinumtoxinA for neurogenic detrusor overactivity not only reduces the frequency and severity of autonomic dysreflexia safely but significantly improves quality of life for individuals with spinal cord injury (EAU 2018 – Copenhagen, Denmark)
4. Prediction of autonomic dysreflexia during urodynamic investigation (EAU 2018 – Copenhagen, Denmark)
5. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (EAU 2016 – Munich, Germany)
6. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (AUA 2016 – San Diego, USA)
7. Supraspinal responses to automated, repetitive bladder filling - An fMRI study (EAU 2015 – Madrid, Spain)
8. Supraspinal responses to automated, repetitive bladder filling - An fMRI study (AUA 2015 – New Orleans, USA)
9. Supraspinal response to bladder cold sensation in healthy subjects using fMRI (EAU 2015 – Madrid, Spain)
10. Supraspinal response to bladder cold sensation in healthy subjects using fMRI (AUA 2015 – New Orleans, USA)
11. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat

urodynamic investigation in women with suprasacral spinal cord injury (IUGA 2015 – Nice, France)
12. Pay attention to autonomic dysreflexia in patients with spinal cord injury during urodynamic investigation (EAU 2014 – Stockholm, Sweden)

Research Support
Principal investigator
1. Coloplast Project Grant (2018 – 2019) with Andrei V. Krassioukov
Title: The Burden of Intermittent Catheterization in Adult Individuals with Neurogenic Lower Urinary Tract Dysfunction (NLUTD) following Spinal Cord Injury (SCI)
Total Funding (Project grant) – C$ 30,355 (competitive)
2. Wellspect HealthCare (2017) with Andrei V. Krassioukov
Title: Urethral injury and bladder function assessment following SCI
Total Funding (Project grant) – C$ 14,900 (competitive)
3. Rick Hansen Institute (2016 – 2019) with John Steeves and Brett Finlay
Title: Gastrointestinal and Urinary Tract Microbiome after Spinal Cord Injury
Total Funding (Project grant) – C$ 74,200 (competitive)

Co-investigator
4. MSFHR Innovation to Commercialization Program (2017 – 2019)
Title: Servo-controlled Device to Maintain Physiological Functioning
Total Funding – C$ 300,000 (competitive)
5. Heart and Stroke Foundation of Canada (2016 – 2020)
Title: When are blood vessels “ready to rupture”? Cerebrovascular health following SCI
Total Funding – C$ 266,891 (competitive)
6. Rick Hansen Institute (2015 – 2019)
Title: Development of a mobile app (telephone/iPod application) for Emergency Medicine Physician (EMP) on recognition and management of life threatening episodes of autonomic dysreflexia (AD): “ABC of AD for EMP”
Total Funding – C$ 35,000 (competitive)
7. Pfizer Canada Inc (2015 – 2019)
Title: A Phase II, Open-Label Exploratory Study Investigating the Efficacy of Toviaz for Treatment of Adult Patients with Spinal Cord Injury (SCI) with Neurogenic Detrusor Overactivity (NDO) for Amelioration of Autonomic Dysreflexia (AD
Total Funding – C$ 102,388 (competitive)
8. Rick Hansen Institute (2012 – 2017)
Title: BOTOX treatment for neurogenic detrusor hyperreflexia and prevention of autonomic dysreflexia following spinal cord injury
Total Funding – C$ 193,000 (competitive)

PhD Scholarship
Swiss National Science Foundation (2011 – 2014)

Andrea Ramirez, BSc
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Amanda Lee, MSc
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Thomas Nightingale, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Alex Kavanagh, PEng, MPH, MD, FRCSC
Department of Urologic Sciences, Faculty of Medicine, University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Long-term neurogenic lower urinary tract dysfunction - A case of cardiovascular nightmares

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Andrea Ramirez, BSc
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

CV:
Personal Statement:
In August 2015, I joined the International Collaboration on Repair Discoveries (ICORD), University of British Columbia (UBC), in Vancouver, Canada as a Clinical Research Facilitator. I am currently involved in research studies and clinical trials with aims to study and treat complications following spinal cord injury.

Positions:
2015 - present
Clinical Research Facilitator, ICORD, UBC, Vancouver, BC, Canada
2013 - 2015
Clinical Research Administrator, Department of Dermatology Clinical Trials Unit, UBC, Vancouver, BC, Canada
2013 - 2013
Clinical Research Coordinator, End of Life Program, Fraser Health Authority, Vancouver, BC, Canada
2011 - 2012
Clinical Research Coordinator, Tom Baker Cancer Center, Calgary, AB, Canada
2009 - 2011
Research Assistant, Department of Clinical Neurosciences, University of Calgary, Calgary, AB, Canada

Honors:
2018
Best Autonomic Poster Presentation â€“ 2018 GF Strong Rehabilitation Center Research Day, Vancouver, BC, Canada

2018
Mario Cruz Award for best poster presentation by a staff member â€“ 2018 ICORD Annual Research Meeting, Vancouver, British Columbia, Canada
2017
Spinal Cord Award for Staff Excellence in Service at the ICORD's SCI symposium in honor of the retirement of founding director Dr. John Steeves, Vancouver, British Columbia, Canada

Contribution to Science (Presentations):
1. Efficacy of FESOTERODINE to reduce the severity of autonomic dysreflexia in individuals with neurogenic detrusor overactivity following spinal cord injury (2018 GF Strong Rehabilitation Center Research Day, Vancouver, BC, Canada)
2. Efficacy of FESOTERODINE to reduce the severity of autonomic dysreflexia in individuals with neurogenic detrusor overactivity following spinal cord injury (2018 ICORD Annual Research Meeting, Vancouver, BC, Canada)

Amanda Lee, MSc
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Matthias Walter, MD, PhD, FEBU
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

The Validity of Interview Based Examination for Spinal Cord Injury (VIBES) for the Assessment of Sacral Sparing

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Audrey Chun, MD
Icahn School of Medicine at Mount Sinai Hospital

CV:
CURRICULUM VITAE
Name: AUDREY CHUN, MD

Positions:
Current (2016-2019): PGY4 Resident Physician, Department of Physical Medicine & Rehabilitation (PM&R), Mount Sinai Hospital (MSH), NY
2015-2016: Preliminary Medicine Intern, Department of Internal Medicine, Greenwich Hospital, CT
2011-2015: Medical Student, Icahn School of Medicine at Mount Sinai (ISMMS), NY

Research:
Presentations
Chun A, Kolakowsky-Hayner S, Worobey L, Bird EA, Boninger ML. Assistive technology use: disparities within the spinal cord injury population.
Poster presentation, Academy of Spinal Cord Injury Professionals (ASCIP) Annual Educational Conference & Expo, New Orleans, LA [September 2018]

Chun A, Zakhary MA, Escalon MX. Rehabilitation of traumatic brain injury in a patient with a prior history of spinal cord injury (Case report).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, Atlanta, GA [February 2018]

Chun A, Escalon MX. Spinal cord injury rehabilitation following spinal metastasis of renal cell carcinoma (Case series).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, Atlanta, GA [February 2018]

Chun A, Ambrose A. Prescribing patterns for anticoagulation in patients sustaining intracerebral hemorrhage secondary to brain injury in the acute inpatient rehabilitation setting (Original research).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, San Antonio, TX [March 2015]

Publications
Chun A, Reinhardt JP, Ramirez M, Ellis JM, Silver S, Burack O, Eimicke JP, Cimarolli V, Teresi JA. Depression recognition and capacity for self-report among ethnically diverse nursing home residents: Evidence of disparities in screening. J Clin Nurs. July 2017.

Ongoing Research
Title: The Validity of Interview Based Examination for Spinal Cord Injury (VIBES) for the Assessment of Sacral Sparing.
Objective: To design and validate the use of a comprehensive interview based equivalent of the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) exam that could possibly allow the determination of the approximate level of spinal cord injury and injury severity without a hands-on physical exam. The first module of this study involves trialing a short questionnaire based on the anorectal portion of the ISNCSCI exam. Future developments will include further questionnaires corresponding to its motor and sensory portions.
Principal investigator: Bryce TN.
[December 2017 - present]

Title: Disparities in computer and mobile technology use among individuals with spinal cord injury and their

relationship to health-related behaviors and beliefs.
Objective: To assess baseline prevalence of computer, mobile device, e-mail and internet use among individuals with spinal cord injury. To identify any disparities that may exist between various demographic groups within this population. To explore whether computer, mobile device, e-mail and internet use has any relationship to health-related behaviors or beliefs within this population.
Principal investigator: Boninger ML.
[December 2017 - present]

Andrew Delgado, MS
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Chung-ying Tsai, PT, PhD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Stephanie Kolakowsky-Hayner, PhD, CBIST, FACRM
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Kristell Taylor, BA
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Arianny Ramirez, BA
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Vincent Huang, MD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Thomas Bryce, MD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Early Locomotion training with EksoSkeleton followed by traditional overground gait training results in Functional Gains and ability to regain ambulation after suffering incomplete SCI from Neurocysticercosis

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Roberto Rapalo, PT, DPT, CBIS
Mount Sinai Rehabilitation

CV:
Education
2012 New York Medical College, Valhalla, NY Doctorate of Physical Therapy
2009 State University of New York, University at Buffalo, Buffalo NY Bachelors of Science in Exercise Science
Research
Spinal Cord Stem Cell Research, 2014-2016
o Primary blinded assessor in Stem cell research assessing Spinal Cord Patients ASIA scale, GRASSP, and Modified Ashworth Scale 3mo 6mo,9mo, 1 year. Recorded data and reported data in PRISM online tool. Also participated as unblinded assessor during phase 1 of the research study.
Work Experience
Mount Sinai Hospital
o Inpatient Rehab Spinal Cord Injury floor Senior Physical Therapist 1/16-present
In-service : Doc, Will I Walk again?
In-service: Importance of trunk control in neurological patients
o Outpatient Physical Medicine & Rehab 1/15-1-/16
• In-Service: Running review
o Spine team- Head, neck, back floor. NSICU, MiCU, SICU 7/13- 12/14
In-service- Creating a culture of mobility in the acute care setting
in service- Introduction to stem cell and research
In service- Lab value in the acute care population
In service- ICU mobility protocol
In service- Saving your back: teaching Rn's proper mechanics in mobilizing patients.
Baylor University Medical Center Dallas, TX 11/12-6/13
o Transplant Team acute care and Medical Surgery ICU
Symmetry Physical Therapy and Athletic Enhancement Pelham, NY 2008-11/12
o Physical Therapist, PT aide, Volunteer
Clinical Experiences
Neurosurgery, NSICU, Respiratory ICU, Mount Sinai Hospital NY, NY 01/12-03/12
Cardiopulmonary Rehab at Pulmonary Wellness Rehabilitation Center, NY, NY 09/11-11/11
Outpatient Orthopedics Premier Physical Therapy , Hartsdale, NY 02/11-04/11
Outpatient Wound Care at Renown Hospital Reno, NV 01/11-02/11
Outpatient Orthopedics at St. Barnabas Hospital Bronx, NY 05/10-06/11

CE courses
• Lower Extremity Prosthetic Gait Deviation 9/30/2013
• APTA webinar- Creating a Culture of Mobility in Acute Care 5/15/2014
• New Kinesio Taping KT 1 & KT 2 6/1/2014
• Perspectives in Functional Gait Biomechanics 6/4/2014
• Evidence-based Examination and Management of Shoulder, hip, and knee joint replacement 9/14/2014
• Fit for Running 9/15/2014
• HSS Rehabilitation of the runner 9/19/2014
• NYPTA Mechanical Ventilation 10/1/2014
• APTA Keep Runners Running 5/30/2015
• Institute of Physical ART Functional Mobilization 1 6/28/2015
• SCI Seminars 05/2016

• Spinal Mobility 1 09/2016
• Spinal Mobility II and III 05/2017

Presentations:
Case Study: A patient with intellectual deficits due to Aarskog- Scott syndrome demonstrates ability to make neurological and functional gain after suffering a traumatic spinal cord injury
Presented at ASiA conference 2018,
Pending approval APTA CSM conference 2019

Case Study; Locomotion training with Ekso training assists with patient return to ambulation after suffering SCI from neurocsystercosis
Pending Approval APTA CSM conference 2019

Organizations: American Physical Therapy Association, American Spinal Injury Associaion
Leadership:
• ASiA Media Committee
• ASIA Member committee
• American Heart Association heart walk/run team leader
Certificates
• ASIA InSTep certification 11/2014
• CBIS 11/2017
Additional Skills: Fluent in English and Spanish, Restorative Therapist RT300, W/C mobility skills, NMES, TENS, LIteGait, Amputee prosthetic training, Spinal Mobility, Guldman Sling Body Weight Support

---

Elizabeth Pike, PT, DPT, NCS
Mount Sinai

CV:
LICENSE and
CERTIFICATIONS

WORK
EXPERIENCE
PT License: GA PT 010502 Active until Dec 2017
Neurological Clinical Specialist (NCS): 44137 Active until May 2024
Dry Needling, Mercer University Course, April 2015

Advanced Clinician, Outpatient Rehabilitation Mount Sinai, New York, NE January 2018 to present
-Physical therapist for patients with neurological disorders
-leads groups to assist patients with spinal cord injuries to improve strength and mobility post injury

Lead Physical Therapist, Post-Acute Spinal Cord Injury, Shepherd Center, Atlanta, GA August 2013-December 2017
• Physical therapist for patients with spinal cord injuries and various diagnoses that cause changes to the spinal cord
• Treat patients with a wide range of functional statuses in both acute and chronic phases of their injury
• Refer to internal and external resources, co-treat with other disciplines, and attend weekly team meetings to provide comprehensive care.
• Educate heavily about spinal cord injury, management of spinal cord injury impairments, exercise, and caregiver training.
• Empower patients to actively participate in their own care and disease management.
• Cross-trained to inpatient rehabilitation units for spinal cord injury, acquired brain injury, skin rehabilitation, ICU, outpatient brain injury, and multiple sclerosis
• Efficient with RT 300 FES bike, Lokomat, Zero G, WAVE, Erigo, Bioness

Neurological Resident, Mercer University and Shepherd Center, Atlanta, GA Aug 2012- Aug 2013
• Treated wide variety of neurological diagnoses during a one-year clinical residency program with guided mentorship
• Gained exposure to traumatic brain injury, cerebrovascular disease, central nervous tumors, multiple sclerosis, Parkinson's disease, spinal cord injuries, Guillian-Barre syndrome, Amyotrophic lateral sclerosis
• Gained evidence-based knowledge through Neurologic Physical Therapy Professional Education Consortium Webinars and Neurology APTA Home Study Guide

Outpatient Physical Therapist, Wesley Woods Geriatric Hospital, Atlanta, GA Nov 2011- August 2012

• Physical therapy in a geriatric outpatient facility
• Treated both orthopedic and neurologic diagnoses
• Cross trained in neuropsychology unit and LTAC
• Developed home exercise and wellness programs for all clients

TEACHING
EXPERIENCE

Gait training with the Patient with Neurological Dysfunction, Georgia State University, Atlanta GA Oct 4th 2016 & Emory University September 2017
American Spinal Cord Injury Examination, Mercer University, Atlanta, GA Feb 7th, 2013

Bowel and Bladder Post Spinal Cord Injury, Shepherd Center SCI Specialty day, Atlanta, GA Feb 15th, 2013, Oct 7th 2013

Interventions with patients with Spinal Cord Injury, Mercer University, Atlanta, GA Feb 22nd, 2013

PRESENTATIONS

Refereed Oral:
• Academy of Spinal Cord Injury Professionals Conference 2017. Educational sessions: Pike E, Luecke K. "Rehabilitation strategies to enhance learning for physical and carry over of education."; "Sensory Challenges- visual, vestibular, auditory, and alternative techniques."; "Interdisciplinary Cross-Training: Spinal Cord Injury Specialists for Acquired Brain Injury."
• NEXT Conference and Exposition 2016: Education session: Pike E, Bonner D, Nash L, Caston S. "A comprehensive Approach to the Complex Patient with the Dual Diagnosis of TBI and SCI."
• Combined Sections Meeting 2011: Platform Presentation: Randall E, Lewek M, "Reliability of Spatiotemporal Asymmetry During Overground Walking for Individuals Following Chronic Stroke."
• NARRTC 34th Annual Conference 2012: Backus D, Pike E,
"Insights Gained from Assessment of Research Bias and Reported Utilization of Evidence after a Specialized Training Program."

Refereed Poster:
• NCPTA Conference Fall 2009: Poster Presentation: Randall E, Lewek M. "Reliability of Spatiotemporal Asymmetry During Overground Walking for Individuals Following Chronic Stroke."

Non-refereed oral:
• Physicaltherapy.com Pike, E, Bonner, D. "Treatment approaches and equipment needs for patients with Dual Diagnosis: Spinal Cord injury and Brain injury. February 8, 2017.
• Stroke Day at Carolinas Medical Center, Charlotte, NC, April, 16th 2010, "Physical Therapy and Occupational Therapy Management of Post-Stroke Patients."

PUBLICATIONS:

Lewek M, Randall E. Reliability of Spatiotemporal Asymmetry During Overground Walking for Individuals Following Chronic Stroke. JNPT. Sept 2011; 35:116-121.

Impact of Injury Duration to Start Regenerative Treatment in Chronic Spinal Cord Injury: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Yagiz Yolcu, MD
Mayo Clinic

CV:
Name: Yagiz U Yolcu, MD

Position Title: Postdoctoral Research Fellow, Mayo Clinic Neuro-Informatics Lab, Department of Neurological Surgery

Personal Statement

I currently work as a Post-Doctoral Research Fellowat the Department of Neurologic Surgery of Mayo Clinic, Rochester. I recently graduated from Acibadem University School of Medicine. My interest in research started with the basic labs in the medical school and had been growing since then. After graduation, I decided to take at least 2 years off after graduation to be able to involve more in research. As a member of Mayo Clinic Neuro-informatics Lab, my focus is mainly patient outcomes in diseases of spinal cord and spinal columns with spinal cord injury being the main area of interest.

Contributions to Science
1. Scherdel, P. et al. Survey highlights important discrepancies between definitions of paediatric abnormal growth taught to medical students in 23 European countries. Acta Paediatr. 107, 1218–1222 (2018).
2. Goyal, A., Lu, V. M., Yolcu, Y. U., Elminawy, M. & Daniels, D. J. Endoscopic versus open approach in craniosynostosis repair: a systematic review and meta-analysis of perioperative outcomes. Childs. Nerv. Syst. (2018). doi:10.1007/s00381-018-3852-4
3. Texakalidis, P. et al. Impact of Powdered Vancomycin on Preventing Surgical Site Infections in Neurosurgery: A Systematic Review and Meta-analysis. Neurosurgery (2018). doi:10.1093/neuros/nyy288
4. Orlando, Florida • March 14–17, 2018. Abstracts of the 2018 AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves Annual Meeting. Neurosurg. Focus 44, A1–A109 (2018).
5. Hitti FL, McShane BJ, Yang AI, Rinehart C, Albayar A, Branche M, Yolcu Y, Ali ZS, Schuster JM, Ozturk AK. Predictors of neurological outcome following subaxial spine trauma. Clinical Neurology and Neurosurgery, 2018. [submitted]
6. Aral Surmeli, Tuana Tolunay, Yesim Yasin, Hulya Kusoglu, Abdullah Arcan, Anuradha Jaiswal, Beril Gökmen, Bishal Acharya, Burcu Arslan, Busra Ecem, Baka, Gizem Söylemez Imamoglu, Larissa Okke, Melike Sahiner, Piril Yildiz, Resul Altınayak, Sangam Pokharel, Serpil Yaylaci, Silasu Arikan, Yagiz Ugur Yolcu, Ozgur Kurt. Child Health, Parasites and Lower Socioeconomic Status: Outcomes of a Long-Term Voluntary Screening, Intervention and Training Study in Rural Nepal. Acta Tropica, 2018. [submitted]
7. Wanderman N, Alvi MA, Yolcu Y, Carlson B, Sebastian A, Bydon M, Freedman B. Is Teriparatide Beneficial to Spinal Fusion Surgery in the Older Patient? – A Narrative Review. Clinical Spine Surgery, 2018. [submitted]

Research Support

PI: Dr. Mohamad Bydon 2016 - Ongoing
“Investigating the Molecular Underpinnings of Black Disk Disease”.
Funded by the Center of Individualized Medicine
Role: Co-investigator

PI: Dr. Mohamad Bydon 2017 - Ongoing
“Safety and Feasibility Study of Autologous Culture Expanded Adipose Derived Mesenchymal Stem Cells in the Treatment of Traumatic Spinal Cord Injury”.
Funded by Mayo Clinic-Center for Regenerative Medicine
Role: Co-investigator

PI: Dr. Mohamad Bydon 2017 - Ongoing
“Safety and Feasibility Study of Umbilical Cord Derived Stem Cell Injections in Rat Models of Spinal Contusion”
Funded by Sabes Foundation
Role: Co-investigator

Waseem Wahood, MS
Mayo Clinic

(no CV uploaded)

F M Moinuddin, MBBS, PhD
Mayo Clinic

(no CV uploaded)

Mohamad Bydon, MD
Mayo Clinic

(no CV uploaded)

Associations between Insurance Provider and Assistive Technology Use One Year after Tetraplegia Spinal Cord Injury: Findings from the Spinal Cord Injury Model Systems National Database

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

Kimberley Monden, PhD
Craig Hospital

CV:
A. Personal Statement
As a Licensed Psychologist I have clinical and research expertise working with individuals with traumatic injuries such as spinal cord injury, amputation, other musculoskeletal traumas, brain injury, and chronic pain. I have an interest in identifying psychological factors and interventions that foster resilience and adaptive psychosocial adjustment after injury; thus my clinical and research efforts aim to improve quality of life, long-term psychosocial outcomes, and clinical effectiveness. These clinical/research interests have been the catalyst for my investigations of pain, perceived injustice, pain-related fear, and other psychological factors and interventions that impact adaptation to injury. I have served as a Principal Investigator, Co-Investigator, and Consultant on multi-site trials and longitudinal observational studies in the area of physical rehabilitation after neurological and physical injury. In the area of SCI, I currently serve as Co-Principal Investigator on a National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) funded multi-site randomized controlled trial of an intervention to improve outcomes after spinal cord injury, Co-Principal Investigator on a DoD funded qualitative study of assistive technology use following spinal cord injury, and Principal Investigator of a study funded by the American Psychological Foundation on stigma following spinal cord injury. I also serve as Co-Project Director of the Rocky Mountain Region Brain Injury System (RMRBIS), Site Principal Investigator for a multi-site study of sleep apnea after brain injury funded through the Patient-Centered Outcomes Research Institute (PCORI), and Site Principal Investigator on a study of aging and glutathione as determinants of injury and recovery from traumatic brain injury.

B. Positions and Honors
Positions and Employment
2008-2009 Intern in Clinical Psychology, University of Kansas Medical Center, Kansas City, KS
2009-2010 Fellow in Health Psychology, University of Wisconsin Hospital & Clinics; Access Community Health Centers, Madison, WI
2010-2011 Staff Psychology, Geropsychology & Rehabilitation Support Services, Vericare, Dallas, TX
2011-2013 Clinical Health/Rehabilitation Psychologist, Baylor Institute for Rehabilitation, Dallas, TX
2013-2015 Research & Surgical Education Associate, Baylor University Medical Center, Dallas, TX
2014-2016 Clinical Assistant Professor, Texas A&M Health Science Center, College of Medicine
2015-2016 Director of Surgical Education & Program Development, Baylor University Medical Center, Dallas, TX
2015-2016 Adjunct Lecturer, Southern Methodist University, Dallas, TX
2016- Principal Investigator, Craig Hospital, Englewood, CO
2016- Licensed Psychologist, CO
2018- Co-Project Director, Rocky Mountain Region Brain Injury System (RMRBIS)

Other Experience and Professional Memberships
2002- Member, American Psychological Association
2005-2006 Student Affiliate Group (SAG) Regional Representative, American Psychological Association
2010- Member, National Register of Health Service Providers
2011- Member, Academy of Spinal Cord Injury Professionals
2013-2017 Member, Association for Surgical Education
2014-2016 Chair, Communications Committee, Division 22 (Rehabilitation Psychology), American Psychological Association
2014-2016 Member, Physician Support Committee, Baylor University Medical Center.
2014-2016 Member, Simulation Education and Research Council, Baylor University Medical Center

2014-2016 Member, Multi-Institutional Education Research Group (MERG), Association for Surgical
2015-2017 Member, American College of Healthcare Executives.
2016- Treasurer, Division 22 (Rehabilitation Psychology), American Psychological Association
2016- Member, American Spinal Injury Association
2017- Member, International Spinal Cord Society
2017- Member, American Congress of Rehabilitation Medicine

Honors
2003 Psi Chi National Research Award. Presented by the American Psychological Association.
2006 Richard M. Rundquist Scholarship. Presented by the University of Kansas, Department of Psychology and Research in Education to encourage students to prepare for careers in education.
2006 & 2008 School of Education Achievement Scholarship. Presented by the University of Kansas, Department of Psychology and Research in Education for academic excellence and scholastic and professional accomplishments.
2007 Helen Walton Ellsworth Scholarship. Merit based scholarship presented by the University of Kansas, Department of Psychology and Research in Education.
2008 Mary Oyster O'Guinn Scholarship. Merit based doctoral level scholarship presented by the University of Kansas, Department of Psychology and Research in Education.
2015 Presidential Citation Award. Presented by the Division of Rehabilitation Psychology of the American Psychological Association for extraordinary service to the Division as Chair of the Communications Committee, member of the Rehabilitation Psychology 2015 Program Committee, and member of the Renaming the Division Taskforce.
2016 Surgical Education Research Fellowship (SERF). Presented by the Association for Surgical Education for a one year fellowship designed to equip investigators to implement and report research studies in the field of surgical education.
2016 Presidential Citation Award. Presented by the Division of Rehabilitation Psychology of the American Psychological Association for extraordinary service to the Division as Chair of the Communications Committee, member of the Rehabilitation Psychology 2016 Program Committee, and development and maintenance of the Division's website.
2017 Harold Yuker Award for Research Excellence. Presented by the Division of Rehabilitation Psychology of the American Psychological Association for the best paper published in the journal Rehabilitation Psychology, 2016.

C. Contributions to Science
1. My long-term goal is to develop, implement, and disseminate evidence-based interventions to improve patient outcomes. From 2013 to 2016, I led a multi-institutional research team working to identify individuals who are at greater risk for developing/experiencing detrimental psychosocial outcomes and secondary chronic health issues post spinal cord injury (SCI). I am currently Co-Principal Investigator on a National Institute of Disability, Independent Living, and Rehabilitation Research (NIDILRR) funded multi-site randomized controlled trial of a self-efficacy intervention to improve outcomes after SCI.

In an attempt to identify individuals "at risk" for secondary and chronic health issues post SCI, my efforts have historically focused on patients' resilience and more recently on perceived injustice. Several important findings have emerged from this work. First, we identified that resilient individuals (either during inpatient rehabilitation or at 3-month follow-up), were less likely to be depressed, had more positive thoughts (e.g., optimism, hope, and positive attitude) and reported greater perseverance, determination, and social support from friends and family than individuals with low resilience. Second, we found that resilience was a trait-like characteristic as it remained stable across inpatient rehabilitation, 3-month follow-up, and at 12-month follow-up. We have also published findings that suggest perceived injustice is a key factor in adjustment to physical injury/trauma. Our research is the first to examine the role of injustice in the spinal cord injury population. As a result of this body of work, we are beginning to understand important factors that may leave patients' at higher risk for poor psychosocial and health-related outcomes (e.g., pain) after injury.
a. Trost, Z., Scott, W., Buelow, M., Nowling, L., Turan, B., Boals, A., & Monden, K.R. (2017). The association between injustice perception and psychological outcomes in an inpatient spinal cord injury sample: The mediating effects of anger. Spinal Cord, 55(10), 898-905. PMID: 28555664
b. Monden, K.R., Trost, Z., Scott, W., Bogart, K.R., & Driver, S.J. (2016). The unfairness of it all: Exploring the role of injustice appraisals in rehabilitation outcomes. Rehabilitation Psychology, 61(1), 44–53. PMID:

26881306
c. Trost, Z., Monden, K.R. (2016). Perceived injustice predicts intent to litigate: Findings from a spinal cord injury sample. Psychological Injury & Law, 9(1), 31–40.
d. Monden, K.R., Trost, Z., Catalano, D., Garner, A., Symcox, J., Driver, S., Hamilton, R.G., & Warren, A.M. (2014). Resilience following spinal cord injury: A phenomenological view. Spinal Cord, 52(3), 197–201. PMID: 24418959

2. In addition to the contributions described above, my publications have also addressed access to care and utilization of behavioral health services in the primary care setting and spinal cord injury population. These studies emphasized the effectiveness of integrated behavioral health services for treatment of depression as well as barriers to treatment for patients' with physical disabilities, specifically spinal cord injury.
a. Hamilton, R., Driver, S.J., Noorani, S., Callender, L., & Monden, K.R. (2016). Utilization and access to healthcare services among community dwelling people living with spinal cord injury. Journal of Spinal Cord Medicine, 40(3), 321-329. PMID: 27221396
b. Seranno, N., Molander, R., Monden, K.R., Grosshans, A., & Krahn, D. (2012). Exemplars in the use of technology for management of depression in primary care. Wisconsin Medical Journal, 111, 112–118. PMID: 22870556
c. Seranno, N., & Monden, K.R. (2011). The effect of behavioral health consultation on the care of depression by primary care clinicians. Wisconsin Medical Journal, 110, 113–118. PMID: 27148995

Complete List of Published Works in my Bibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1tIelpsOXCgQz/bibliography/45830206/public/?sort=date&direction=ascending

D. Research Support
Ongoing Research Support
90DP0084 (NIDILRR) Monden, Harrison-Felix, Hoffman (Co-PI) 09/30/2018 – 09/26/2023
Characterization and Treatment of Chronic Pain after Moderate to Severe Traumatic Brain Injury
The aims of this study are to 1) determine chronic pain classification, prevalence, location, duration, and associations with demographic, injury severity, current level of functioning and comorbidities, 2) identify chronic pain phenotypes, and 3) identify treatment practices of clinicians who treat comorbid TBI and chronic pain to determine gaps in availability and accessibility of guideline level treatment.

SC170159 (Department of Defense) Monden, Charlifue (Co-PI) 10/01/2018 – 09/30/2021
Assistive Technology and Functional Outcomes following Spinal Cord Injury
The goals of this project are to (1) examine perceived barriers to or facilitators of AT access and utilization and the impact on functional and psychosocial outcomes after tetraplegia, (2) assess for variations in use of AT among individuals with tetraplegia across insurance providers and socioeconomic status in Veterans and civilians with tetraplegia, (3) assess the relationship between AT use and productivity (employment/school) in Veterans and civilians with tetraplegia, and (4) assess the relationship between AT and psychosocial outcomes (e.g., mood, self-efficacy) in Veterans and civilians with tetraplegia.

Craig Hospital Foundation Grant Monden (PI) 10/1/2018 – 09/30/2019
Validating the Injustice Experience Questionnaire in a Spinal Cord Injury Sample
The goals of this project are to (1) validate the Injustice Experience Questionnaire (IEQ) among individuals with SCI, (2) test the reliability and validity of the IEQ in the same sample, and (3) examine associations between IEQ scores and measures of pain, injury-appraisal measures, psychological distress, and quality of life to evaluate its clinical relevance.

American Psychological Foundation, Pearsall Grant Monden (PI) 01/01/2018 – 12/31/2018
Stigma following Spinal Cord Injury and its Impact on Psychosocial Outcomes
The goals of the proposed study are to: (1) assess the relationship between stigma and psychosocial outcomes (mood disturbance, quality of life, social participation, self-efficacy, perceived disability, and return to work/school) among individuals with spinal cord injury (SCI), and (2) examine the potential mediating and/or moderating effects of sociodemographic (gender, race) and injury factors (level of injury, time since injury, injury etiology, injury completeness) with stigma on psychosocial outcomes.

90OHF0002-01-00 (NIDILRR) Monden, Charlifue, Coker (Co-PI) 09/30/2017 – 09/29/2022
Re-Inventing Yourself after Spinal Cord Injury: A Multi-Site Randomized Controlled Trial of an Intervention to Improve Outcomes after Spinal Cord Injury
The goal of this study is to test the an intervention to help individuals with SCI build skills that help them adapt to the stresses associated with a chronic physical disability, alleviate the consequences of anxiety and depression, and enhance subjective well-being.

90DPTB0007-01-00 (NIDLRR) Harrison-Felix, Whiteneck, Monden (Co-PI) 09/30/2017 – 09/29/2022
Rocky Mountain Region Brain Injury System
The goal of this project is to evaluate a comprehensive lifetime system of care, participate in a multi-center longitudinal database, and conduct site-specific studies and multi-center collaborative studies to study outcomes after traumatic brain injury.

R-1511-33005 (PCORI) Richardson (PI) 10/01/2016 – 09/30/2019
Comparative Effectiveness of Sleep Apnea Assessment Strategies to Maximize TBI Rehabilitation Outcomes (C-SAS)
This study is a multi-center comparative effectiveness study of sleep apnea screening (Aim 1) and diagnostic (Aim 2) measurement tools.
Role: Site PI

Knoebel Center for the Study of Aging Linseman (PI) 10/01/2016 – 12/31/2019
Aging and Glutathione Antioxidant Status as Major Determinants of Injury and Recovery from Traumatic Injury
Collaborative study with the University of Denver to examine the relationship between blood glutathione levels and functional recovery following traumatic brain injury.
Role: Site PI

90SI5015-01-00 (NIDILRR) Charlifue, Morse (Co-PI) 10/01/2016 – 09/31/2021
Rocky Mountain Regional Spinal Injury System
The goal of this project is to evaluate a comprehensive lifetime system of care, participate in a multi-center longitudinal database, and conduct site-specific studies and multi-center collaborative studies to study outcomes after spinal cord injury.
Role: Investigator

Pending Research Support
Craig H. Neilsen Foundation Monden (PI) 04/30/2019 – 04/29/2021
Biofeedback for treatment of anxiety associated with chronic spinal cord injury.
The goal of this study is to provide evidence of a signal of a treatment effect of biofeedback to treat anxiety after spinal cord injury and demonstrate the feasibility of conducting a larger randomized controlled trial.

Completed Research Support
Craig Hospital Foundation Grant Monden (PI) 02/01/2017 – 01/31/2018
Source of Injustice among Individuals Living with Spinal Cord Injury
The goal of this project was to use a qualitative approach to develop an in-depth characterization of injustice perception (e.g., sources, contributing factors) following spinal cord injury to help inform future intervention.

Colorado Traumatic Brain Injury Trust Fund Makley (PI) 08/01/2016 – 06/30/2017
Optimized sleep after brain injury: A pilot study
The goal of this study was to determine the feasibility of implanting a sleep hygiene protocol within an inpatient TBI rehabilitation setting. Responsibilities include study implementation, data analysis, and dissemination.
Role: Co-I

Mitch Sevigny, MS
Craig Hospital

(no CV uploaded)

Susan Charlifue, PhD
Craig Hospital

(no CV uploaded)

Jennifer Coker, MPH
Craig Hospital

(no CV uploaded)

Ellen Severe, OTR
Craig Hospital

(no CV uploaded)

Jeffery Berliner, DO
Craig Hospital

(no CV uploaded)

Heather Taylor, PhD
Texas Model Spinal Cord Injury System, Tirr Memorial Hermann

(no CV uploaded)

Leslie Morse, DO
Craig Hospital

(no CV uploaded)

Efficacy of water spray to dissipate heat during exercise in persons with spinal cord injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Michelle Trbovich, MD
Ut Health Science Center at San Antonio

CV:
OMB No. 0925-0001 and 0925-0002 (Rev. 10/15 Approved Through 10/31/2018)
BIOGRAPHICAL SKETCH
Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.
NAME: Trbovich, Michelle Brand
eRA COMMONS USER NAME (credential, e.g., agency login): TRBOVICHM
POSITION TITLE: Assistant Professor of Rehabilitation Medicine, UT Health Science Center at San Antonio; Staff Physician, South Texas Veteran's Health Care System
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)
INSTITUTION AND LOCATION DEGREE
(if applicable)
Completion Date
MM/YYYY
FIELD OF STUDY

Rice University, Houston, TX B.A. 5/01 Kinesiology
University of TX Health Science Ctr at San Antonio M.D. 05/05 Medicine
University of TX Health Science Ctr at San Antonio Residency 06/09 Physical Medicine & Rehabilitation
Stanford University, Stanford, CA Fellowship 07/10 Spinal Cord Injury
Veterans Affairs, Palo Alto, CA
Advanced
Research Fellowship 12/10 Spinal Cord Injury
A. Personal Statement
My main research interest is thermoregulation in persons with SCI. More specifically my goals are to gain a better understanding of the pathophysiology of autonomic dysfunction as it relates to thermoregulation post-SCI and to determine optimal cooling interventions during heat stress. I began studying thermoregulation in persons with SCI as a PMR resident in 2007, specifically looking at the efficacy of cooling vests in regulating core body temperature in SCI athletes. I later completed a study comparing the efficacy of artificial sweat, ice slush and cooling vest in reducing core temperature of SCI wheelchair athletes under heat stress, the results of which are in preparation for submission. During my SCI clinical fellowship, I studied heat acclimation in persons with SCI alongside Dr. Mike Price, PhD who is well published in thermoregulation in SCI and has recently invited me to co-author a chapter entitled "Thermoregulation after Spinal Trauma" in a Thermoregulation textbook. This study was continued during my SCI Advanced Research fellowship. As a staff physician since 2011, I mentored resident physicians in a project to determine the accuracy of the Center for Disease Control (CDC) definition of fever to define infection in persons with SCI. Since 2013, I have served as an expert consultant on Dr. Kellogg's RO3 study, which aims to investigate vasomotor and blood pressure responses to heating in persons with SCI. Most recently in 2016, I received a Career Development Award through the VA Rehabilitation and Research Development Department studying "Vasomotor and Sudomotor Activity During Heat Stress in Persons with SCI." In addition to my research and outpatient SCI clinic work, I serve on the International Autonomic Standards Committee as part of ASIA/IsCOS, remain an active member of national SCI organizations, review journal articles for multiple spinal cord and rehabilitation journals, review SCI research grants, and mentor PM&R residents in SCI clinical care and research.

Price MJ, Trbovich MB: Handbook of Clinical Neurology, 3rd Series; Thermoregulation: From Basic Neurosciences to Clinical Neurology; Chapter 32: Thermoregulation in spinal trauma (In Press)

Handrakis JP, Trbovich MB, Hagen EM, Price M. Thermodysregulation in Persons with Spinal Cord Injury: Case Series on Use of the Autonomic Standards. Spinal Cord Series and Cases. (In Press)

B. Positions and Honors

Positions/Employment

2011 Staff Physician, Veterans Affairs Palo Alto, CA
2011 Clinical Instructor in Department of Orthopedics, Stanford University, Stanford, CA
2011-present Staff Physician, South Texas Veterans Health Care system, San Antonio, TX.
2011-present Assistant Professor, Faculty, UT Health Science Center at San Antonio, Department of Rehabilitation Medicine

Other Experience and Professional Memberships

2004 Elected medical student representative. Medical School Admissions Committee. UTHSCSA
2005 Member: American Academy of PM&R
2005 Member: Association of Academic Physiatrists
2008 Resident Liason to the Program Committee, Association of Academic Physiatrists (AAP)
2010 Board Certification in Spinal Cord Injury. Certificate number 564
2010 Board Certified in Physical Medicine and Rehabilitation. Certificate number 9615
2010 Member: American Spinal Injury Association (ASIA)
2011 Expert consultant: Jazz Pharmaceuticals, Palo Alto, CA
2012 Member: Academy of Spinal Cord Injury Professionals (ASCIP)
2013-2017 Director: SCI Home Care Program, STVHCS
2014 Chairman: Clinical Competency Committee, UTHSCSA PM&R program
2015 Peer Reviewer: American Journal of Physical Medicine and Rehabilitation
2016 Member: International Autonomic Standards for Spinal Cord Injury Committee, Thermoregulatory subcommittee
2016 Peer Reviewer: Spinal Cord Series and Cases journal
2017 Grant peer reviewer: VA Rehabilitation and Research Development, SPIRE award

Honors

2005 Humanism in Medicine Award, Gold Humanism Honor Society, UTHSCSA, 2004-2005
2007 ERF New Investigator Research Award, Foundation of PM&R
2007 Invited Faculty for poster presentation. Congress on Spinal Cord Medicine and Rehabilitation. Orlando, FL
2008 Invited Lecturer. International Convention on Science, Education and Medicine in Sport (ICSEMIS). Guangzhou, China
2008 Invited Faculty for poster presentation. Congress on Spinal Cord Medicine and Rehabilitation. Orlando, FL
2009 Invited Lecturer. American Academy of Physical Medicine and Rehabilitation (APM&R)
Austin, TX
2012 Invited Lecturer. International Convention on Science, Education and Medicine in Sport (ICSEMIS). Glasgow, Scotland
2013 Invited Faculty for poster presentation. Academy of Spinal Cord Injury Professionals. Las Vegas, NV
2014 Invited Lecturer. American Spinal Injury Association annual meeting. San Antonio, TX.
2014 Invited Faculty for poster presentation. American Spinal Injury Association annual meeting. San Antonio, TX.
2014 Invited Faculty for poster presentation Academy of Academic Physiatrist national meeting. Nashville, TN.
2016 Invited Faculty for poster presentation. Academy of Academic Physiatrists, Sacramento, CA
2017 Foundation for PMR, Milbank Award for SCI Rehabilitation
2017 Invited Faculty for oral presentation. American Spinal Injury Association, Albuquerque, NM
2018 Invited Faculty for poster presentation, American Spinal Injury Association,

C. Contributions to Science

1. Given the reported ability of a cooling vest to maintain core temperature in the non-SCI and multiple

sclerosis populations, we sought to test its efficacy in SCI athletes in a “field based” setting. As the PI, I obtained an “ERF New Investigator Award” from the Foundation of PM&R in the amount of $10,000 as a PGY2 to support the research. We recruited the largest number of participants of any cooling intervention study in SCI to date from local wheelchair basketball and rugby teams and examined core temperature during exercise with and without a cooling vest. The vest was not effective at maintaining core temperature in persons with SCI during exercise. This work led me to hypothesize that the lack efficacy of cooling vest in the SCI population is either due to the vest precluding evaporative cooling and/or triggering a local cutaneous vasoconstriction that reduces heat conduction due from the cold vest in the skin. My goal is to evaluate this hypothesis with mechanistic and physiologic studies in the future. The proposed study for this CDA award will provide me with the experience I need in physiologic research techniques to examine local thermoregulatory reflexes (i.e.,sweating and vasodilation) so I will be equipped to apply these state of the art techniques for future studies.
Trbovich M; Ortega C; Schroeder J; Fredrickson M. The Effect of a Cooling Vest on Core Temperature in Athletes with and without Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. January 2014: 70-80.

2. Per the National SCI Database, the causes of death that appear to have the greatest impact on reduced life expectancy in SCI are pneumonia and septicemia. One of the most common presenting symptoms of infection is fever, defined as 100.4°F by the Center for Disease Control (CDC). We hypothesized that thermoregulatory dysfunction in SCI may preclude temperature elevation amidst infection. Utilizing the VISN 17 database of all SCI person diagnosed with an infection from 2008-2013 (about 1000 in number), we examined the frequency at which aural temperature exceeded the CDC definition of 100.4°F at the time an infection was diagnosed. We concluded that veterans with SCI do not frequently mount temperatures consistent with the CDC definition of fever (100.4°F). Ninety percent of persons with SCI identify family physicians as their primary providers who may not have an appreciation for such thermoregulatory dysfunction. Therefore in absence of a fever, diagnosis and workup for infection might be delayed. Our results challenge the accuracy and sensitivity of the CDC fever definition to diagnose infection in SCI. We aim to conduct a prospective study to further validate these findings. I served as a mentor to a PMR resident on this project.
Trbovich M, Li C, Lee S. Does the CDC Definition of Fever (100.4 deg F) Accurately Define Infection in Persons with Spinal Cord Injury? Topics in Spinal Cord Injury Rehabilitation. Vol. 22, No. 4, Fall 2016: 260-268.
3. Persons without SCI are able to acclimate to heat over 1-2 weeks, however given the thermoregulatory dysfunction in persons with SCI, we sought to determine the length of time required for heat acclimatization in the SCI population. Dr. Mike Price, a well-published exercise physiologist in the area of thermoregulation in SCI obtained a grant to travel from his Coventry University, Coventry, UK to Stanford, CA to collaborate with me on this study during my Advanced SCI Research Fellowship in 2010. I obtained funding, recruited all subjects and was present to oversee all data collection. This study concluded that the 7 day heat acclimation protocol did not elicit traditional heat acclimation changes in non-athletic persons with SCI. Dr. Mike Price presented these findings in Greece in 2011 and we were subsequently invited to give an oral presentation of these findings at the International Convention of Exercise and Medicine in Sport in Glasgow Scotland in 2012. I was later invited to present these findings at the American Spinal Injury Association annual scientific meeting in 2014.
Trbovich M, Price MJ, Kiratli J. The Effects of 7-day Heat acclimation Protocol in Persons with Spinal Cord Injury. Journal of Thermal Biology. 2016 Dec;62(Pt A):56-62.

4. Pain in persons with SCI is often refractory to traditional pharmacologic agents and may have a negative impact on quality of life. Capsaicin 8% patch is a recently approved FDA medication for neuropathic pain however the efficacy to reduce pain in the SCI population has not been tested. Encouraging retrospective data on 2 patients suggests significant improvement in pain scores for prolonged periods of time after one application of the patch. The Texas chapter of the Paralyzed Veterans of America funded a pilot/feasibility study that gave data to help us obtain funding from the Foundation for PMR in Jan 2017 for a prospective randomized crossover trial of the Capsaicin 8% patch in persons with SCI and we are currently enrolling patients for this study of which I am the PI.

Trbovich M, Yang H. Capsaicin 8% Patch for Central and Peripheral Neuropathic Pain of Persons with Incomplete Spinal Cord Injury: Two Case Reports. Am J Phys Med Rehabil. 2015 Aug;94(8):e66-72

5. Shoulder dysfunction is common in persons with SCI due to muscle imbalance created by neurological injury to the cord and nerve roots supplying rotator cuff muscles utilized during wheelchair propulsion. Muscle fatigue over prolonged propulsion can contribute to shoulder injury. As the PI, I collaborated with Dr. Sakiko Oyama, PhD from University of Texas at San Antonio (UTSA) and Dr. Cathy Ortega, EdD, PT from the UTHSCSA physical therapy department as Co-PIs for this project. This study aimed to determine which arm stroke technique, pump (P) or semicircular (SC), is most energy efficient for long periods of propulsion. Motion-capture software (VICON), EMG, BORG scores and dynamometer testing were main outcome measures. For feasibility we tested the model in 18 able-bodied males, measuring BORG scores and dynamometer strength testing after P vs. SC propulsion. While the sample size was too small for statistical significance, the SC trended towards resulting in greater fatigue in both dynamometer readings and Borg RPE scores. These trends could become significant should the sample size be larger. During long distance propulsion, the Pump technique may help conserve energy and thus prevent fatigue and overuse injuries. Two posters have been presented on this project at various phases in our study. Manuscript for this pilot study has been submitted. To validate these findings in the SCI population, a follow up study is planned in persons with SCI via continued collaboration with Dr. Oyama at UTSA and her doctoral and post doc students.

Trbovich M, Bickelhaupt B, Benfield J, Burau K, and Oyama S. Effect of Wheelchair Stroke Pattern on Arm Muscle Fatigue. Academy of Academic Physiatrist's national meeting. Sacramento, CA. Feb 16-20, 2016.

Trbovich M, Bickelhaupt B, Benfield J, Burau K, and Oyama S. Stroke Pattern Efficiency and Muscle Fatigue during Wheelchair Propulsion using Electromyography, VICON Nexus, and SmartWheel Technology. Academy of Spinal Cord Injury Professionals national meeting, Minneapolis, MN. August 31-Sep 3, 2014.

Bickelhaupt B, Benfield J, Burau K, Oyama S, Lee S, Trbovich M. Effect of Wheelchair Stroke Pattern on Upper Extremity Muscle Fatigue. Journal of PM&R. Accepted for publication 1.8.18

Complete list of Published Work in My Bibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1pIx3_MKz55QW/bibliograpahy/48903152/public/?sort=date&direction=ascending

D. Research Support and Scholastic Performance
Ongoing:

Vasomotor and Sudomotor Activity During Heat Stress in Persons with Spinal Cord Injury
Agency: Career Development Award-2, Rehabilitation and Research Development 1/2017- 12/2022
The goal of this project is to examine the vasomotor and sudomotor responses during heat stress and then utilize topical agents to manipulate areas of intact skin blood flow and sweating responses to elucidate the underlying neurological controls of each.

Capsaicin 8% patch in persons with spinal cord injury, a randomized controlled trial
Agency: Foundation for PMR – Milbank SCI Rehabilitation Award Trbovich (PI) 1/2017-1/2019
The goal of this project is to collect pilot data on the efficacy of the capsaicin 8% patch for neuropathic pain in persons with spinal cord injury.
Role: PI

Book Chapter:
Price MJ, Trbovich MB: Handbook of Clinical Neurology, 3rd Series; Thermoregulation: From Basic Neurosciences to Clinical Neurology; Chapter 32: Thermoregulation in spinal trauma (In Press)

Incorporating patient concerns and neurological outcomes in drug safety evaluations: a longitudinal study of acute baclofen use in spinal cord injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Jacquelyn Cragg, MPH PhD
University of British Columbia

CV:
A. Education and Training History

University of British Columbia (Vancouver, BC), BSc 2002-2007

University of British Columbia (Vancouver, BC), MPH 2010-2011

University of British Columbia (Vancouver, BC), PhD 2011-2015

Harvard T.H Chan School of Public Health (Boston, MA), Fellowship 2015-2016

University of British Columbia (Vancouver, BC), Fellowship 2016-2018

B. Awards (dollar amounts in CAD)

2017 Society for Epidemiologic Research Travel Award- 500
2017 Canadian Institutes of Health Research Institute of Community Support Travel Award- 1000
2016 Society in Science Branco Weiss Postdoctoral Fellowship [international]- 240,000 (2 years)
2015 International Symposium on Neural Regeneration Travel Award (Pacific Grove, California)- 500
2015 Michael Smith Foundation for Health Research Postdoctoral Fellowship-124,500 (3 years)
2015 Tim E. Noel Postdoctoral Fellowship in ALS Research- 165,000 (for three years); national award (top applicant in Canada), ALS Society of Canada
2015 Margaret McWilliams Fellowship, Canadian Federation of University Women (CFUW)- 11,000 (national award across all disciplines; declined)
2015 International Collaboration on Repair Discoveries (ICORD) Annual Meeting Poster Award- 500
2015 Mary Adele Norman Postgraduate Award in Medical Research- 2600
2014 Top Poster Award, UBC Neuroscience Extravaganza
2014 ICORD Trainee Travel Award, ICORD- 1000
2014 American Spinal Injury Association (ASIA) Apple Award for “excellence in publishing in spinal cord injury research” (international award)- 2000
2014 National Spinal Cord Injury Conference (Toronto, ON) Abstract Award
2014 War Memorial Doctoral Scholarship, IODE Canada (national award)- 15,000
2014 Aaron Moser Award (Top poster presented at ICORD Annual Research Meeting)- 750
2014 Harry and Florence Dennison Fellowship in Medical Research, UBC Faculty of Medicine- 7150
2013 Women in Science Award: Emerging Leader in Science, Minerva Foundation of British Columbia
2013 Canadian Institute of Health Research Institute of Community Support Travel Award- 1500
2013 Vancouver Coastal Health Research Institute Top Graduating Doctoral Student Award- 2000
2013 Honourable Mention for top oral presentation, ICORD Trainee Symposium 2013
2013 Capilano University ‘One to Watch Award’
2013 ICORD Trainee Travel Award- 1000
2013 Travel Award, International Symposium on Neural Regeneration (Pacific Grove, California)- 350
2012 Killam Doctoral Award, University of British Columbia- 60,000 CAD (for two years); only 20 awards given university-wide and only one in Faculty of Medicine; UBC’s “most prestigious Doctoral Award”
2012 Alexander Graham Bell Canada Graduate Scholarship, Natural Sciences and Engineering Research Council of Canada (NSERC)- 105,000 CAD (for three years; declined; national award)- NSERC’s top Doctoral scholarship
2012 Multiple Sclerosis Society of Canada PhD Studentship- 40,000 (for two years; declined; national

award); top applicant in Canada
2012 Four Year Doctoral Fellowship (FYF), University of British Columbia-72,000 (four years; declined)
2012 Silver Medal for Paralympic Research (London 2012), International Paralympic Committee
2012 ICORD Trainee Travel Award- 1000
2011 Leadership Award, Toastmaster's International
2011 ICORD Trainee Travel Award- 1000
2011 ICORD Annual Research Meeting Poster Award- 500
2009 Graduate Student Travel Award, Disabilities Health Research Network- 1500
2009 Travel Award, International Symposium on Neural Regeneration, 350
2009 ICORD Annual Research Meeting Poster Award (best poster presented by a Master's level student) 700
2007 United Spinal Association Award (poster presented at the International Symposium on Neural Regeneration, Pacific Grove, California)
2007 Travel Award, International Symposium on Neural Regeneration- 350
2007 ICORD Student Travel Award - 500
2007 Natural Sciences and Engineering Research Council of Canada Undergraduate Student Research Award (national award)- 4500
2007 Science Scholar Designation (for achieving over 90% average in graduating year), UBC

C. Peer Reviewed Publications

H-index: 11; 820 total citations (https://scholar.google.com/citations?user=4Vr1nowAAAAJ&hl=en)

Peer-reviewed Publications (*Supervisory role)

1. Cragg JJ, Warner F*, Schupler M*, Jutzeler C, Whithurst D, Kramer J. Prevalence of pain among neurological disorders: a national study. In Press at Health Reports 2018.

2. Walter M, Kupfer SC, Cragg JJ, Leitner L, Krassioukov AV, Curt A, Kessler T. Prediction of autonomic dysrefexia during urodynamics: a prospective cohort study. BMC Medicine 2018;16(1):53. Impact Factor 7.2

3. Jutzeler C, Cragg JJ, Kramer JLK. Placebo response in neuropathic pain after spinal cord injury- a meta-analysis of individual participant data. Accepted at Journal of Pain Research 2018;11:901-912.

4. Tong B*, Jutzeler C, Cragg JJ, Grassner L, Schwab J, Casha S, Geisler F, Kramer JLK. Serum albumin predicts long-term neurological outcomes after acute spinal cord injury. Neurorehabilitation and Neural Repair 2018;32(1):7-17.

5. Warner F*, Cragg JJ, Jutzeler C, EMSCI Study Group, Curt A, Kramer JLK. The beneficial effects of anticonvulsants on motor recovery following spinal cord injury. Cell Reports 2017;18(7):1614-1618. Impact Factor 8.3

6. Warner FM, Tong B, Jutzeler CR, Cragg JJ, Scheuren PS, Kramer JLK. Long-term functional outcome in patients with acquired infections after acute spinal cord injury. Neurology 2017;89(7))e5-e76-e78 (journal club). Impact Factor 8.3

7. Kramer JLK, Geisler F, Ramer L, Plunet W, Cragg JJ. Open access platforms in spinal cord injury. Neurorehabilitation and Neural Repair 2017;31(5):399-401.

8. Jutzeler C, Cragg JJ, Warner FM, Archibald J, Thomas C, Kramer JLK. Pregnancy outcome following maternal exposure to pregabalin may call for concern. Neurology 2017;88(1)e5-e7 (journal club). Impact Factor 8.3

9. Cragg JJ, Johnson N, Weisskopf M. Military service and amyotrophic lateral sclerosis in a population based cohort: 1979-2011. Epidemiology 2017;28(2):e15-16.

10. Golby R*, Poirier B, Fabros M, Cragg JJ, Yousefi M, Cashman N. 5-year incidence of ALS in British Columbia (2010-2015). Canadian Journal of Neurological Sciences 2016;43(6):791-795.

11. Cragg JJ, Seals R, Cashman N, Weisskopf MG. Depression before and after diagnosis with ALS. Neurology 2016;87(21):e257-259 (journal club). Impact Factor 8.3

12. Cragg JJ, Haefeli J, Jutzeler C, Rohrich F, Weidner N, Maier DD, Kalke YB, EM-SCI Study Group, Curt A, Kramer JK. Effect of pain and pain management on motor recovery of spinal cord-injured patients: a longitudinal study. Neurorehabilitation and Neural Repair 2016;30(8):753-61. Top Poster Award.

13. Cragg JJ, Warner FM*, Finnerup NB, Jensen M, Mercier C, Richards JS, Wrigley P, Soler D, Kramer JK. Meta-Analysis of Placebo Responses in Central Neuropathic Pain: Impact of Subject, Study, and Pain Characteristics. Pain 2016;157(3);530-40.

14. Cragg JJ, Cudkowicz ME, Weisskopf MG. The role of environmental toxins in ALS risk. JAMA Neurology;73(7):779-80 (editorial). Impact Factor 10.0

15. Warner F*, Cragg JJ, Weisskopf M, Kramer, JK. Migraine and spinal cord injury: a population-based study. PloS One 2015;10(8):e0135550.

16. Cragg JJ, Noonan V, Noreau L, Borisoff J, Kramer JK. Neuropathic pain and cardiovascular disease: a national multi-centre study. Neuroepidemiology 2015;44(3):130-7.

17. Cragg JJ, Kramer JK, Borisoff J. Relationship between neurological disorders and heart disease: a Canada-wide study. Neuroepidemiology 2015;44(1):64-65.

18. Cragg JJ, Warner F*, Kramer JK, Borisoff J. A Canada-wide survey of chronic respiratory disease and spinal cord injury. Neurology 2015;84(13):1341-5. Impact Factor 8.3

19. Krassioukov A, Cragg JJ, West C, Voss C, Krassioukov-Enns D. The good, the bad, and the ugly of urinary bladder management among elite athletes with spinal cord injury: a global study. Spinal Cord 2015; 53(1):78-82.

20. Cragg JJ, Ravensbergen R, Borisoff J, Claydon V. Optimal scaling of weight and waist circumference to height for adiposity and cardiovascular disease risk in individuals with spinal cord injury. Spinal Cord 2014;53(1):64-8. Featured in Editorial Note.

21. Kuramoto L, Cragg J, Nandhagopal R, Mak E, Sossi V, de la Fuente-Fernandez R, Stoessl AJ, Schulzer, M. The nature of progression in Parkinson's Disease: an application of non-linear, multivariate, longitudinal random effects modelling. PLoS One 2013; 8(10): e76595 1-9.

22. Cragg J, Noonan V, Dvorak M, Krassioukov A, Mancini GBJ, Borisoff J. Type 2 diabetes and spinal cord injury: results from a national population health survey. Neurology 2013; 81: 1864-8. Featured in Neurology Comment. Impact Factor 8.3

23. Cragg JJ, Noonan V, Krassioukov A, Borisoff J. Cardiovascular disease and spinal cord injury: results from a national population health survey. Neurology 2013; 81:723-728. Featured in Neurology Editorial, Top Poster Award, ASIA Apple Award. Impact Factor 8.3

24. Cragg JJ, Krassioukov A. Case report of transient Horner's syndrome associated with autonomic dysreflexia. Neurology 2013;81(6):e35-7. Impact Factor 8.3

25. Cragg J, Schulzer M, Mancini GB. Commentary on the risk and benefit of aspirin therapy: an application of the concepts of unqualified success and unmitigated failure. J Clin Epidemiol. 2013 Jul;66(7):803-5.

26. Cragg J, Krassioukov A. Autonomic dysreflexia. CMAJ 2012; 184(1): 66.

27. Cragg JJ, Stone JA, Krassioukov AV. Management of cardiovascular disease risk factors in individuals with chronic spinal cord injury: an evidence-based review. J Neurotrauma 2012; 29(11): 1999-2012.

28. Cragg JJ*, Plemel JR*. Motor Axonal Regeneration following Cord Transection. J Neurosci 2012; 32(45): 15645-6. *Authors contributed equally (journal club).

29. De la Fuente-Fernandez R, Schulzer M, Kuramoto L, Cragg J, Ramachandiran N, Au WL, et al. Age-specific progression of nigrostriatal dysfunction in Parkinson's disease. Annals of Neurology 2011; 69(5): 803-10. Impact Factor 9.9

30. Nandhagopal R, Kuramoto L, Schulzer M, Mak E, Cragg J, McKenzie J, et al. Longitudinal evolution of compensatory changes in striatal dopamine processing in Parkinson's disease. Brain 2011; 134(Pt 11): 3290-8. Impact Factor 10.2

31. Cragg JJ, Scott AL, Ramer MS. Depletion of spinal 5-HT accelerates mechanosensory recovery in the deafferented rat spinal cord. Exp Neurol 2010; 222(2): 277-84.

32. Gaudet AD, Ramer LM, Nakonechny J, Cragg JJ, Ramer MS. Small-group learning in an upper-level university biology class enhances academic performance and student attitudes toward group work. PLoS One 2010; 5(12): e15821.

33. Nandhagopal R, Kuramoto L, Schulzer M, Mak E, Cragg J, Lee CS, et al. Longitudinal progression of sporadic Parkinson's disease: a multi-tracer positron emission tomography study. Brain 2009; 132(Pt 11): 2970-9. Impact Factor 10.2

Textbook Chapters
1. Warner F, Cragg JJ, Steeves J, Kramer JLK. Clinical trials in spinal cord injury. The Neurological Aspects of Spinal Cord Injury, Springer 2017 (Editor: Norbert Weidner).

E. Research Support (Research Grants)

Michael J. Fox Foundation (MJFF 2018)- Computational Tools for PD Therapeutic Development
“Identifying homogeneous subgroups in Parkinson’s disease: an application of unbiased recursive partitioning“
Total Funding: 117,812.50 USD (competitive)
Role: Principal Investigator

Wings for Life Project Grant (2018-2020)
“Hematological and serum biomarkers to predict outcome after spinal cord injury”
Total Funding: 240,000 CAD (competitive)
Role: Co-applicant

International Foundation for Research in Paraplegia (IRP 2017-2019)
“High throughput of clinical trial data: how commonly used drugs affect neurological outcomes.”
Total Funding: 140,000 CAD (competitive)
Role: Co-applicant

Wings for Life Project Grant (2016-2109)
“No Pain, No Gain?” The effects of pain on motor outcomes following SCI
Total Funding: 220,000 CAD (competitive)
Role: Co-applicant

Canadian Institutes of Health Research (2017-2020; TEAM GRANT WITH ERA-NET)
Repurposing acute pharmacological and rehabilitation therapies for enhanced recovery after spinal cord injury

Total Funding: 600,000 CAD (competitive)
Role: Co-applicant

Friedman Foundation Research Grant in Health Sciences (2015-2016)
Constance Livingstone-Friedman and Sydney Friedman Foundation
Total Funding: 25,000 CAD (competitive)
Role: Principal Applicant

ICORD Seed Grant (2015-2016)
International Collaboration on Repair Discoveries (ICORD)
“Does Spinal Cord Injury have a distinct impact on secondary health outcomes compared with other neurological conditions?”
Total Funding: 20,000 CAD (competitive)
Role: Co-applicant

Café Scientifique (2013)
Canadian Institutes of Health Research (CIHR)
“Bladder Health and Spinal Cord Injury”
Total Funding: 3,000 CAD (competitive)
Role: Principal Applicant

Café Scientifique (2012)
Canadian Institutes of Health Research (CIHR)
“Cardiovascular Complications of Spinal Cord Injury”
Total Funding: 3,000 CAD (competitive)
Role: Principal Applicant

Bobo Tong, BSc
University of British Columbia

(no CV uploaded)

Catherine Jutzeler, PhD
University of British Columbia

(no CV uploaded)

Neil Cashman, MD FRCPC
University of British Columbia

(no CV uploaded)

Fred Geisler, MD FRCSC
University of Saskatchewan

(no CV uploaded)

John Kramer, PhD
University of British Columbia

(no CV uploaded)

Step it up! The use of exoskeleton technology in rehabilitation

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Kaitlin Hays, PT, DPT, NCS
Craig Hospital

CV:
Curriculum Vitae

Kaitlin Hays PT, DPT, NCS

DATE: August 2018

CONTACT INFORMATION:
Craig Hospital
3425 S Clarkson St. Englewood, CO 80113
Work Phone: 303-789-8276
Cell Phone: 719-237-3772
E-mail: khays@craighospital.org

CERTIFICATION:
2009-present Certified Clinical Instructor by the American Physical Therapy Association
2013-present Certified Neurologic Clinical Specialist (NCS) by the American Physical Therapy Association
2018-present Certified Indego Exoskeleton Instructor

LICENSURE:
2008-Present Active-State of Colorado, Physical Therapist Licensure

ADMINISTRATIVE SERVICE:
2010-2016 Complementary and Alternative Medicine Committee member

Assist in evaluation and implementation of CAM techniques including acupuncture, massage, and hippotherapy into hospital practice.

2010-2016 Pikes Peak Challenge Team Craig Coordinator

2012-2014 Disorders of Consciousness Task Force Chair

Lead team to evaluate use of various disorders of consciousness scales, responsible for determining and implementing the best option at Craig Hospital.

2012-2013 TBI EDGE Task Force

Member of nationwide task force to evaluate and recommend use of best outcome measures in traumatic brain injury rehabilitation

2013-2015 Colorado Acute/Rehab Special Interest Group (CAReSIG) secretary

Attend meetings, take notes, provide minutes, assist with continuing education development

2015-2017 Clinical Practice Guidelines (CPG) reviewer for a core set of outcome measures for neurologic physical therapy practice

Review articles on various outcome measures for psychometric properties and strength of the study to

assist in development of CPGs

2018 indePTh series presenter

Presented 2 topics (exoskeleton use and Erigo tilt table use) to PT staff including hands on experience to explore the locomotor training continuum and opportunities

2018 Advisory Panel for TBI Medical Treatment Guidelines

Reviewed and provided feedback for TBI medical treatment guidelines for the Colorado division of worker's compensation

2018 Virtual Scientific Advisory Board Member (Helius Medical Technologies)

Participated in online advisory panel focused on current balance treatments for patients with mild to severe TBI

2018-present Indego Exoskeleton instructor

Travel nationally to instruct clinicians who have purchased an Indego exoskeleton device, assist with problem solving, personal use assessments, and demos as needed.

RESEARCH/PUBLICATIONS:
Two approaches to manual wheelchair configuration and effects on function for individuals with acquired brain injury Neurorehabilitation 2014 35(3). Angela Regier, Amy Berryman, Kaitlin Hays, Don Gerber

Virtual reality-based therapy for the treatment of balance deficits in patients receiving inpatient rehabilitation for traumatic brain injury
Brain Injury 2014, Vol. 28, No. 2 , Pages 181-188. Jeffrey P. Cuthbert, Kristi Staniszewski, Kaitlin Hays, Don Gerber, Audrey Natale, & Denise O'Dell

Outcome Measures for Individuals with Moderate to Severe Traumatic Brain Injury: Recommendations from the American Physical Therapy Association Neurology Section TBI EDGE Task Force Journal of Neurologic Physical Therapy 2016, Vol 40 Issue 4, Pages 269-280. McCulloch, Karen L. PT, PhD, NCS; de Joya, Anna Lisa PT, DSc, NCS; Hays, Kaitlin PT, DPT; Donnelly, Erin PT, MS, NCS; Johnson, Tammie Keller PT, DPT, MS, ATP, CBIS; Nirider, Coby D. PT, DPT; Roth, Heidi PT, DHS, NCS; Saliga, Sue PT, MS, DHSc; Ward, Irene PT, DPT, NCS

Initial Outcomes from a Multicenter Study Utilizing the Indego Powered Exoskeleton in Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation 2017. Tefertiller, Candy, Katie Hays, Janell Jones, Arun Jayaraman, Clare Hartigan, Tamara Bushnik, and Gail Forrest.

2012-Present Home-Based Virtual Reality Treatment for Chronic Balance Problems in Adults with TBI (Ready To Be Steady)
PT Clinical Coordinator of study, involved in study development, grant write up, and responsible for training and implementation of all PT treatments and outcome measures for study. Baseline manuscript submitted to Archives of Physical Medicine and Rehabilitation, decision pending.

2014-2016 Indego ® Exoskeleton trial
PT Clinical Coordinator of study, multi-site industry sponsored trial seeking FDA approval of the Indego® exoskeleton in the SCI population. Responsible for screening of potential participants, scheduling for tech and PTs involved in the trial, maintaining regulatory binder, and treatments of subjects using the device.

2017 Rhythmic Auditory Stimulation and Gait Training in the Traumatic Brain Injury Population
PT coordinator of trial, including assisting with study design, scheduling, co-treating with music therapist for all eval and treatment sessions, training/scheduling back up PT for study, planning larger trial. Manuscript submitted for publication, decision pending

2017-Present Effects of exoskeleton-assisted gait training on Bone Health and Quality of Life: A Randomized Clinical Trial
RCT to evaluate whether exoskeleton-assisted gait training increases bone strength in the paralyzed lower extremity for individuals with SCI. Assist with screening and treatment of subjects.

2017 Indego ® Exoskeleton trial
PT Clinical Coordinator of study, multi-site trial seeking FDA approval of the device for use in the CVA population. Responsible for screening of participants, scheduling, data entry and review, performing treatments and assessments, and maintaining regulatory binder.

2017-present A Double-Blind, Controlled Phase 2 Study of the Safety and Efficacy of Modified Stem Cells (SB623) in Patients with Chronic Motor Deficit from Traumatic Brain Injury
Blinded PT tester including screening eligible patients and performing all motor assessments on enrolled patients at our site.

PRESENTATIONS/POSTERS:
2013 TBI EDGE Recommendations: Application to Practice, Teaching, and Research presentation- Combined Sections Meeting (APTA)

2013 Two Approaches to Manual Wheelchair Configuration and Effects on Function for Individuals with Acquired Brain Injury poster- Craig/Swedish research symposium

2015 The Use of Specific Balance Assessments to Guide Development of a Balance-Focused Virtual Reality Intervention in Adults with TBI poster- Brain Injury Summit

2015 The Use of Specific Balance Assessments to Guide Development of a Balance-Focused Virtual Reality Intervention in Adults with TBI platform- Combined Sections Meeting (APTA)

2015 Traumatic Brain Injury Interdisciplinary Team Approach- presentation- Craig Hospital Board of Directors Meeting

2015 Virtual-Reality Based Therapy for Balance Deficits During Traumatic Brain Injury Inpatient Rehabilitation. Poster- American Congress of Rehabilitation Medicine Annual meeting

2016 Exoskeleton-Assisted Walking: Current Evidence and Clinical Translation- presentation- American Spinal Injury Association Annual Scientific Meeting

2016 Enhancing participation in a home based virtual reality balance program by using balance assessment scores to guide game choices in adults with TBI-poster- IV Step APTA neurologic and pediatric conference

2016 Research in Healthcare Presentation and Panel discussion—University of Phoenix Knowledge Without Boundaries workshop series

2016 Comparison of the Sensory Organization Test and the Balance Evaluation Systems Test in Traumatic Brain Injury. Poster- American Congress of Rehabilitation Medicine annual meeting

2017 Comparison of the Sensory Organization Test and the Balance Evaluation Systems Test in Traumatic Brain Injury. Poster- International Brain Injury Association meeting

2017 Exoskeleton Use and Clinical Rehabilitation in the Rehabilitation Setting. Preconference course—Academy of Spinal Cord Injury Professionals

2017 Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury: A Feasibility Study. Poster- American Congress of Rehabilitation Medicine annual meeting

2018 The Use of the Balance Evaluation Systems Test for individuals with chronic Traumatic Brain Injury.

Poster- Brain Injury Summit

2018 Translating Motor Rehabilitation Research into Clinical Practice. Presentation- Brain Injury Summit

2018 Disorders of Consciousness: The Clinical Usefulness of Performing the CRS R. Presentation- Brain Injury Summit

2018 Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury: A Feasibility Study. Poster —Combined Sections Meeting

2018 The Use of the Balance Evaluation Systems Test for individuals with chronic Traumatic Brain Injury. Platform—Combined Sections Meeting

2018 Neurorehabilitation in Disorders of Consciousness: Recent Advances and clinical Implications Part 2: Diagnostic Challenges in Assessment- A Hands on Approach Preconference course--NABIS

2018 Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury: A Feasibility Study. Poster —NABIS

2018 The Use of the Balance Evaluation Systems Test for individuals with chronic Traumatic Brain Injury. Paper presentation—NABIS

2018 Rhythmic Auditory Stimulation and Gait Training in Traumatic Brain Injury- A Feasibility Study. Poster —interagency

2018 The Use of the Balance Evaluation Systems Test for Individuals with Chronic Traumatic Brain Injury. Oral presentation—interagency

2018 Comparison of the Sensory Organization Test and Balance Evaluation Systems Test in Traumatic Brain Injury. Oral presentation-- interagency

---

Candace Tefertiller, PT, DPT, ATP, NCS
Craig Hospital

(no CV uploaded)

Epidural Electrical Stimulation Enables Modulation of Evoked Motor Responses During Stepping by Humans with Complete Paraplegia

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Jonathan Calvert, B.S.
Mayo Clinic

CV:
BIOGRAPHICAL SKETCH

NAME: Jonathan Scott Calvert
POSITION TITLE: Predoctoral Student
EDUCATION/TRAINING
INSTITUTION AND LOCATION
University of Pittsburgh B.S. 08/2011 04/2015 Bioengineering
Mayo Clinic Graduate School of
Biomedical Sciences
Ph.D. 07/2015 07/2020 Biomedical
Engineering and
Physiology
A. Personal Statement
My long term research interests involve the development of physiological techniques to restore function following severe central nervous system damage. My academic and research background has provided me with an extensive background in biomedical engineering and physiology. As an undergraduate student at the University of Pittsburgh, I worked for two summers as a research intern under Dr. Gelsy Torres-Oviedo Ph.D., studying the mechanisms of motor training on individuals following stroke. This work resulted in a co-author publication as well as an invitation to present a poster at a national conference at the Biomedical Engineering Society annual meeting and a podium presentation at the American Society of Biomechanics conference. For my graduate training, I have moved into the field of electrophysiology and spinal cord injury by studying the effects of epidural spinal cord stimulation on individuals with severe spinal cord injury under the mentorship of Dr. Kendall Lee M.D., Ph.D. Dr. Lee is an internationally recognized leader in the field of neuromodulation and neurosurgery, and has an extensive training record for predoctoral and postdoctoral fellows. The proposed project will give me new conceptual and technical training along with a set of career development activities and workshops (e.g. public speaking, presentation skills, leadership opportunities, etc.) For my initial project, I evaluated motor evoked responses from individuals with chronic paraplegia intraoperatively and immediately following surgical recovery, which has been recently submitted as a first author publication. I will continue my development as a scientist as I delve into further into the neuroscience aspect of my project by examining remaining neural connections and changes that develop during motor recovery with physical therapy combined with epidural stimulation. Overall, I feel that my choice of sponsor, research project, and the training I will receive from this fellowship will enable me to have a solid foundation for my long-term goal of becoming an independent academic researcher.

B. Positions and Honors
Undergraduate
Research
Experience
05/13 05/15 Bioengineering University of Pittsburgh
Dr. Gelsy Torres-
Oviedo, Ph.D.
Predoctoral Student
07/15
Present
Biomedical

Engineering and
Physiology
Mayo Clinic Graduate
School of Biomedical
Sciences
Dr. Kendall Lee,
M.D., Ph.D.
Academic and Professional Honors
National Merit Scholarship, 2011
B.S., Magna Cum Laude awarded by University of Pittsburgh 2015
Deanâ€™s Fellowship, Mayo Clinic Graduate School of Biomedical Sciences, 2015-2017
Memberships in Professional Societies
Biomedical Engineering Society
Institute of Electrical and Electronics Engineers
Society for Neuroscience

C. Contributions to Science
My contributions to science are organized to reflect the different research projects I have worked on to date, during my time as an undergraduate and now in graduate school.
I. Undergraduate Research: I spent two summers and part time during the school year in the Human Movement Research Laboratory under Dr. Gelsy Torres-Oviedo. Dr. Torres-Oviedo studies motor learning dynamics, and specifically their relation to understanding how to apply this knowledge to enhance walking ability in individuals following stroke. During my time in the lab, I investigated the role of propulsive and breaking forces during learning of a motor task. This work was particularly exciting because our results suggested that propulsive forces may enhance locomotor learning ability, potentially providing a strategy to augment gait retraining in stroke patients with hemiparesis.
Presentations
Calvert JS, Sombric CJ, and Torres-Oviedo G. Uphill Walking Enhances The Retention Of A New Stepping Pattern Learned On A Split-Belt Treadmill, Biomedical Engineering Society Annual Meeting 2014. Poster Presentation.
Calvert JS, Sombric CJ, and Torres-Oviedo G. Uphill Walking Enhances The Retention Of A New Stepping Pattern Learned On A Split-Belt Treadmill, American Society of Biomechanics 2015. Podium Presentation.
Publications
Sombric CJ, Calvert JS, and Torres-Oviedo G, Large propulsion demands increase locomotor learning at the expense of step length symmetry. Journal of Physiology. In Review.
II. Graduate Research: My ongoing graduate research involves the use of epidural stimulation to evoke motor activity in individuals with chronic paraplegia. The work has already produced exciting results as we recently had a publication demonstrating an individual with the chronic, motor complete paraplegia taking independent steps. My work is focused on developing a greater understanding of the underlying physiological mechanisms of epidural stimulation enabled motor activity by examining the motor evoked potentials caused by stimulation during locomotion.
Presentations
Calvert JS, Grahn PJ, Mendez AA, et al. Developing a high-resolution, three-dimensional atlas of spinal cord stimulation-evoked muscle activity in a swine model. Neural Interfaces Conference 2016. Poster Presentation.
Calvert JS, Grahn PJ, Mendez AA, et al. Characterization of Stimulation-Evoked Muscle Activity via Intraspinal Microstimulation in a Swine Model. Society for Neuroscience 2016. Poster Presentation.
Calvert JS, Lavrov IA, Grahn PJ, et al. Subfunctional Neural Connections in Motor Complete Paralysis and Implications for Their Role in Epidural Stimulation Enabled Motor Function. Society for Neuroscience 2017. Poster Presentation.
Calvert JS. Intraoperative Electrophysiology to Guide Epidural Electrode Array Surgical Placement for Stimulation Following Spinal Cord Injury. Minnesota State Spinal Cord Injury and Traumatic Brain Injury Symposium 2018. Podium Presentation.
Calvert JS, Grahn PJ, Strommen JA, et al. Electrophysiological guidance of epidural electrode array implantation over the human lumbosacral spinal cord to enable motor function. Neural Interfaces Conference

2018. Poster Presentation.
Calvert JS, Grahn PJ, Gill ML, et al. Characterization of Epidural Electrical Stimulation Evoked Motor Responses During Stepping in Humans with Complete Spinal Cord Injury. Society for Neuroscience 2018. Poster Presentation
Publications
Grahn PJ, Lavrov IA, Sayenko DG, Van Straaten MG, Gill ML, Strommen JA, Calvert JS, et al. (2017) Enabling task-specific volitional motor functions via spinal cord neuromodulation in a human with paraplegia. Mayo Clinic Proceedings, 92, 4.
Hachmann JT, Calvert JS, Grahn PJ, Drubach DI, Lee KH, & Lavrov IA. (2017). Review of epidural spinal cord stimulation for augmenting cough after spinal cord injury. Frontiers in human neuroscience, 11, 144.
Hachmann JT, Grahn PJ, Calvert JS, Drubach DI, Lee KH, & Lavrov IA. (2017). Electrical Neuromodulation of the Respiratory System After Spinal Cord Injury. Mayo Clinic Proceedings 92, 9.
Cuellar CA, Mendez AA, Islam R, Calvert JS, Grahn PJ, Knudsen B, Pham T, Lee KH and Lavrov IA. (2017). The role of functional neuroanatomy of the lumbar spinal cord in effect of epidural stimulation. Frontiers in neuroanatomy, 11, 82.
Gill ML, Grahn PJ, Calvert JS, et al. Neuromodulation of Lumbosacral Spinal Networks Enables Independent Stepping After Complete Paraplegia. Nat Med. In Press
Calvert JS, Grahn PJ, Strommen JA, et al. Electrophysiological guidance of epidural electrode array implantation over the human lumbosacral spinal cord to enable motor function after chronic paralysis. Neurotrauma. In Review
Calvert JS, Grahn PJ, Zhao KD, and Lee KH. Emergence of epidural electrical stimulation to facilitate sensorimotor network functionality after spinal cord injury. Neuromodulation. In Review

---

Megan Gill, D.P.T.
Mayo Clinic

(no CV uploaded)

Peter Grahn, Ph.D.
Mayo Clinic

(no CV uploaded)

Igor Lavrov, M.D., Ph.D.
Mayo Clinic

(no CV uploaded)

Margaux Linde, B.S.
Mayo Clinic

(no CV uploaded)

Meegan van Straaten, P.T.
Mayo Clinic

(no CV uploaded)

Jeffrey Strommen, M.D.

Mayo Clinic

(no CV uploaded)

Lisa Beck, M.S.
Mayo Clinic

(no CV uploaded)

Andrew Thoreson, M.S.
Mayo Clinic

(no CV uploaded)

Cesar Lopez, M.S.
Mayo Clinic

(no CV uploaded)

Daniel Veith, M.S.
Mayo Clinic

(no CV uploaded)

Dimitry Sayenko, M.D., Ph.D.
University of California, Los Angeles

(no CV uploaded)

Yury Gerasimenko, Ph.D.
University of California, Los Angeles

(no CV uploaded)

Reggie Edgerton, Ph.D.
University of California, Los Angeles

(no CV uploaded)

Kristin Zhao, Ph.D.
Mayo Clinic

(no CV uploaded)

Kendall Lee, M.D., Ph.D.
Mayo Clinic

(no CV uploaded)

Combining neural transplantation with therapeutic intermittent hypoxia to treat the injured spinal cord

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Lyandysha Zholudeva, BS
Drexel University College of Medicine

CV:
Biographical Sketch

Name: Lyandysha Zholudeva, B.S.

Position Title: Graduate Research Fellow (Ph.D. Candiate)

My interests in a research career began as an undergraduate in biochemistry and physics, where I worked on developing non-invasive optical techniques for quantification of metabolism in vitro as well as in situ preparations. My work in this field lead to the demonstration that aminoglycoside antibiotics differentially alter cellular metabolism of neural sensory cells (cochlear hair cells) when compared to supporting cells (pillar cells) within the cochlea, contributing to my fascination with the central nervous system. I decided to build upon this growing interest by pursuing a graduate career focused on studying the regenerative capacity of the central nervous system, neuroplasticity exhibited after injury, and investigate therapeutics aimed at enhancing this plasticity after spinal cord injury. Currently, the focus on my thesis work stems from a collaborative project I began between Drs. Itzhak Fischer (Professor and Chair of Department of Neurobiology and Anatomy) and Michael Lane (Assistant Professor in the Department of Neurobiology and Anatomy). As part of Dr. Fischer's laboratory, I was able to master the methods necessary for isolating and culturing neural progenitor cells (NPCs), and testing the therapeutic potential of neuronal and glial restricted progenitors following transplantation into the injured adult spinal cord. As part of Dr. Lane's laboratory, I utilized my knowledge of NPCs to test whether transplantation of these cells can promote repair of a specific motor circuit – the phrenic circuit - that controls the diaphragm. Building upon this work, my present research focus is enriching these NPCs with a population of excitatory interneurons and transplanting these cells into a cervical spinal cord injury. In order to develop this project, our research team has established a collaboration with Dr. Shelly Sakiyama-Elbert (University of Texas), whose research team has successfully generated an interneuronal cell-line. Building upon this collaboration, my thesis work assesses the therapeutic efficacy of specific neuronal subtypes after transplantation into a clinically relevant model of spinal cord injury using a comprehensive battery of anatomical, behavioral and electrophysiological outcome measures.

1. Vergen J, Hecht C, Zholudeva LV, Marquardt MM, Hallworth R, Nichols MG. Metabolic imaging using two-photon excited NADH intensity and fluorescence lifetime imaging. Microsc Microanal. 2012 Aug;18(4):761-70. doi: 10.1017/S1431927612000529. PubMed PMID: 22832200; PubMed Central PMCID: PMC3842212.

2. Zholudeva LV, Ward KG, Nichols MG, Smith HJ. Gentamicin differentially alters cellular metabolism of cochlear hair cells as revealed by NAD(P)H fluorescence lifetime imaging. J Biomed Opt. 2015 May;20(5):051032. doi: 10.1117/1.JBO.20.5.051032. PubMed PMID: 25688541; PubMed Central PMCID: PMC4405084.

3. Nichols M, Ward K, Zholudeva LV, Jensen-Smith H (2014). Autofluorescence Lifetime Imaging. Natural Markers for Cellular Metabolism: Biology, Techniques, Applications, V. Ghukasyan and A. Heikal. Series in Cellular and Clinical Imaging, CRC Press, Boca Raton, FL, 2013. ISBN 9781466509986.

4. Reier PJ, Zholudeva LV, Lane MA (2016). Axonal Degeneration and Regeneration in the Peripheral and Central Nervous Systems. In: Conn PM (Ed). Conn's Translational Neuroscience. 1st Edition. Elsevier Inc.. Chapter 25 ISBN 9780128023815.

5. Hormigo KM, Zholudeva LV, Spruance VM, Marchenko V, Cote MP, Vinit S, Giszter S, Bezdudnaya T, Lane MA. Enhancing neural activity to drive respiratory plasticity following cervical spinal cord injury. Exp Neurol. 2017 Jan;287(Pt 2):276-287. doi: 10.1016/j.expneurol.2016.08.018. Review. PubMed PMID: 27582085; PubMed Central PMCID: PMC5121051.

6. Nair J, Bezdudnaya T, Zholudeva LV, Detloff MR, Reier PJ, Lane MA, Fuller DD. Histological identification of phrenic afferent projections to the spinal cord. Respir Physiol Neurobiol. 2017 Feb;236:57-68. doi: 10.1016/j.resp.2016.11.006. PubMed PMID: 27838334.

7. Zholudeva LV, Karliner J, Dougherty K, Lane MA (2017). Interneuronal recruitment into phrenic motoneuron circuitry after high cervical spinal cord injury. Journal of Neurotrauma. PubMed PMID:28548606.

8. Bezdudnaya T, Marchenko V, Zholudeva LV, Spruance VM, Lane MA (2017). Supraspinal respiratory plasticity following acute cervical spinal cord injury. Experimental Neurology. PubMed PMID: 28433644.

9. Spruance VM, Zholudeva LV, Hormigo KM, Bezdudnaya T, Marchenko V, Lane MA (2018). The effects of neural progenitor transplantation on respiratory circuitry and functional recovery following cervical contusion injury. J Neurotrauma. [PMID:29295654]

10. Zholudeva LV, Qiang L, Marchenko, V, Dougherty K, Sakiyama-Elbert, S, Lane MA (2018). The Neuroplastic and Therapeutic Potential of Interneurons in the Injured Spinal Cord. Trends in Neurosci. [PMID: 30017476]

11. Zholudeva LV, Iyer N, Spruance V, Bezdudnaya T, Sakiyama-Elbert S, Fischer I, Lane MA (2018). Transplantation of Neural Progenitors and V2a Interneurons after Spinal Cord Injury. Journal of Neurotrauma. [PMID: 29873284]

12. Zholudeva LV, Jin Y, Qiang L, Lane MA, Fischer I (2018). Preparation of Neural Stem Cells and Progenitors: Neuronal Production and Grafting Applications. In: Methods in Molecular Biology – Neuronal Culture. Humana Press. In Press

Positions and Employment

2010 - 2014 Biophysical Optics Research Group, Creighton University, Omaha, NE
2012 - 2014 Idea Networks of Biomedical Research Excellence (INBRE), Creighton University, Omaha, NE
2013 - 2014 Biochemistry and Chemistry Teaching Assistant, Creighton University, Omaha, NE
2015 - 2016 Graduate School of Biomedical Sciences and Profession Studies Tutor, Drexel University, PA
2016 Visiting Scholar, University of Kentucky, Lexington, KY
Hosted by Dr. Alexander Rabchevsky
2016 Visiting Scholar, Washington University at St Louis, St Louis, MO
Hosted by Dr. Shelly Sakiyama-Elbert
2016, 2018 Visiting Scholar, University of Florida, Gainesville, FL
Hosted by Dr. Paul Reier
2017 - 2018 Coulter Fellowship Intern, Drexel University, Philadelphia, PA

Other Experience and Professional Memberships
2011 - 2015 Member, Biophysical Society
2011 - Member, National Society of Collegiate Scholars 2012 - 2014 Member, Nebraska Academy of Sciences
2013 - 2014 Member, American Society for Cell Biology 2014 - Member, Phi Sigma Tau Honor Society 2016 - Member, Australasian Neuroscience Society 2017 - Member, Society for Neuroscience
2016 - Member, National Neurotrauma Society

Honors

2011 Best Poster Award – Annual Women in Physics Conference, Lincoln, NE 2012 Best Oral Presentation Award – INBRE Annual Meeting, Grand Island, NE
2013 Outstanding Research – Council on Undergraduate Research, Washington, D.C. 2013 Best Poster Award - NBRE Annual Meeting, Grand Island, NE
2013 Best Poster Award - Annual Women in Physics Conference, Lincoln, NE
2014 Best Poster Award – Annual Research Day, Creighton University, Omaha, NE
2015 Best Poster Award – International Symposium on Neural Regeneration, Pacific Grove, CA 2015 Graduate Student Association Travel Award – Drexel University College of Medicine
2016 International Travel Award - Drexel University College of Medicine
2016 Biomedical Sciences Fellowship Award - Drexel University College of Medicine
2017-18 Fellowship - Dean's Fellowship for Excellence in Collaborative or Themed Research
2017 Travel Award - Dean's Graduate Student Travel Award, Philadelphia, PA
2017 Best Poster Award – International Symposium on Neural Regeneration, Pacific Grove, CA
2018 Fellowship – Coulter Foundation Fellowship Program, Drexel University, PA
2018 Travel Award – Intermittent Hypoxia Retreat, University of Florida, Gainesville, FL
2018 Travel Award – Intern. Symposium on Neural Transplantation & Repair, Clearwater, FL
2018 Achievement Award - Outstanding Mentorship Award, Drexel University, PA
2018 Travel Award - International Travel Award, Drexel University, PA

1. Cellular metabolism and mitochondrial dysfunction as measured by fluorescence lifetime imaging (FLIM). As an undergraduate, I joined a research team that utilized two-photon confocal microscopy as a non-invasive optical technique for quantification of metabolism in vitro as well as in situ preparations. My contribution in this field lead to the demonstration that multiphoton microscopy can be used to measure various states of cellular metabolism via intensity and fluorescence lifetime changes of cellular NAD(P)H. Using this technique, we demonstrated that aminoglycoside antibiotics rapidly alter mitochondrial metabolism, providing evidence for significant aminoglycoside-induced changes in metabolism specific to neural sensory cells within the cochlea.

a. Vergen J, Hecht C, Zholudeva LV, Marquardt M, Hallworth R, Nichols M (2012) Metabolic Imaging Using Two-Photon Excited NADH Intensity and Fluorescence Lifetime Imaging. Microsc Microanal 18(4):761-70. doi: 10.1017/S1431927612000529. PMID: 22832200.

b. Zholudeva LV, Ward K, Nichols M, Jensen Smith H (2015) Gentamicin differentially alters cellular metabolism of cochlear hair cells as revealed by NAD(P)H fluorescence lifetime imaging. J. Biomed. Opt., 20(5), 051032. http://dx.doi.org/10.1117/1.JBO.20.5.051032.

c. Hallworth R, Stark K, Zholudeva LV, Currall B, Nichols M (2013) The Conserved Tetrameric Subunit Stoichiometry of Slc26 Proteins. Microsc. Microanal. 19, 1–9. doi:10.1017/S1431927613000457. PMID: 23642772.

d. Nichols M, Ward K, Zholudeva LV, Jensen-Smith H (2014). Autofluorescence Lifetime Imaging. Natural Markers for Cellular Metabolism: Biology, Techniques, Applications, V. Ghukasyan and A. Heikal. Series in Cellular and Clinical Imaging, CRC Press, Boca Raton, FL, 2013. ISBN 9781466509986.

2. Plasticity following cervical spinal cord injury. As a graduate research fellow, I've mastered several types of spinal cord injury models, transneuronal anatomical tracing and electrophysiological techniques that I now employ for characterizing the extent of spontaneous functional recovery following cervical spinal cord injury. With a focus on phrenic motor pathways after injury, the initial experiments have demonstrated anatomical recruitment of a specific population of excitatory spinal interneurons (V2a) into the phrenic circuit two weeks after injury. This specific population of spinal interneurons have the ability to modulate motor output and functional plasticity, and thus may represent a therapeutic target for enhancing recovery.

a. Zholudeva LV, Qiang L, Marchenko, V, Dougherty K, Sakiyama-Elbert, S, Lane MA (2018). The Neuroplastic and Therapeutic Potential of Interneurons in the Injured Spinal Cord. Trends in Neurosci. [PMID: 30017476]

b. Nair J, Bezdudnaya T, Zholudeva LV, Detloff MR, Reier PJ, Lane MA*, Fuller DD*. Histological identification of phrenic afferent projections to the spinal cord. Respir Physiol Neurobiol. 2017 Feb;236:57-68. PubMed PMID: 27838334. *Dual corresponding authors

c. Hormigo KM, Zholudeva LV, Spruance VM, Marchenko V, Cote MP, Vinit S, Giszter S, Bezdudnaya T, Lane MA. Enhancing neural activity to drive respiratory plasticity following cervical spinal cord injury. Exp Neurol. 2017 Jan;287(Pt 2):276-287. doi: 10.1016/j.expneurol.2016.08.018. Review. PubMed PMID: 27582085; PubMed Central PMCID: PMC5121051.

d. Zholudeva LV, Karliner J, Dougherty K, Lane MA. Interneuronal recruitment into phrenic motoneuron circuitry after high cervical spinal cord injury. Journal of Neurotrauma. 2017 PubMed PMID: 28548606.

e. Bezdudnaya T, Marchenko V, Zholudeva LV, Spruance VM, Lane MA (2017). Supraspinal respiratory plasticity following acute cervical spinal cord injury. Experimental Neurology. PubMed PMID: 28433644.

f. Reier PJ, Zholudeva LV, Lane MA (2016). Axonal Degeneration and Regeneration in the Peripheral and Central Nervous Systems. In: Conn PM (Ed). Conn's Translational Neuroscience. 1st Edition. Elsevier Inc.. Chapter 25 ISBN 9780128023815.

3. Transplantation of neural progenitor cells to improve respiratory recovery after cervical spinal cord injury. My current research is focused on determining the therapeutic benefits of neural progenitor transplantation with the goal of repairing the injured cervical spinal cord and enhancing the recovery of injured phrenic motor pathways. I am actively involved in studies that directly compare the survival, outgrowth and connectivity of either embryonically derived (uncultured and unselected) neural progenitor cells to neural progenitor cells that have been selected for neuronal and glial restricted progenitors. Building upon this work, my present research focus is enriching these cultured neuronal and glial restricted progenitor cells with a population of excitatory interneurons that I've identified to have a role in phrenic plasticity after injury, and transplanting these cells into a cervical spinal cord injury.

a. Zholudeva LV, Iyer N, Spruance V, Bezdudnaya T, Sakiyama-Elbert S, Fischer I, Lane MA (2018). Transplantation of Neural Progenitors and V2a Interneurons after Spinal Cord Injury. Journal of Neurotrauma. [PMID: 29873284]

b. Spruance VM, Zholudeva LV, Hormigo KM, Bezdudnaya T, Marchenko V, Lane MA (2017). The effects of neural progenitor transplantation on respiratory circuitry and functional recovery following cervical contusion injury. J Neurotrauma. [PMID:29295654]

c. Zholudeva LV, Jin Y, Qiang L, Lane MA, Fischer I (2018). Preparation of Neural Stem Cells and Progenitors: Neuronal Production and Grafting Applications. In: Methods in Molecular Biology – Neuronal Culture. Humana Press. In Press

Full Publication List:
https://www.ncbi.nlm.nih.gov/sites/myncbi/1jELnzqV9USAf/bibliography/47007319/public/?sort=date&direction
=ascending

Ongoing Research Support

Title: "Neural transplants to promote respiratory plasticity after spinal cord injury"
Agency: National Institute of Health, NINDS (R01 NS104291)
Project Dates: 2018-2023 (NCE)
Role on project: Graduate Student

PATENTS:
U.S. Provisional Patent Application No.: 62/620,269
Title: COMPOSITIONS AND METHODS FOR TREATMENT OF SPINAL CORD INJURY
Inventors: Lane, Nolan, Qiang & Zholudeva
Applicants: Angiocrine Bioscience, Inc. & Drexel University
Drexel Ref: 17-2036 G&Y Ref: Angiocrine.022.US1

Margo Randelman, BS
Drexel University College of Medicine

(no CV uploaded)

Rima Dilbarova, BS
Drexel University College of Medicine

(no CV uploaded)

Michael Caplan, BS
Drexel University College of Medicine

(no CV uploaded)

Liang Qiang, MD, PhD
Drexel University College of Medicine

(no CV uploaded)

Itzhak Fischer, PhD
Drexel University College of Medicine

(no CV uploaded)

Michael Lane, PhD
Drexel University College of Medicine

(no CV uploaded)

Developing Quality Measures Regarding Genitourinary (GU) Practices in Spinal Cord Injury (SCI) Patients

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Zachary Meyer, BS
Creighton University School of Medicine

CV:

EDUCATION

Creighton University School of Medicine 2015- Present
Omaha, NE
â€¢ Doctor of Medicine, expected graduation May 2019

Marquette University 2011-2015
Milwaukee, WI
â€¢ Bachelor of Science
â€¢ Exercise Physiology, magna cum laude

HONORS
2017- Medical Dean's Magis Scholarship

Karl Sandin, MD, MPH
Creighton University School of Medicine

(no CV uploaded)

Shari McDowell, PT, DPT
Shepherd Center

(no CV uploaded)

Vincent Huang, MD
Shepherd Center

(no CV uploaded)

Adam Stein, MD
Donald and Barbara Zucker School of Medicine at Hofstra/Northwell

(no CV uploaded)

Urologic management in persons with combined SCI/TBI versus SCI alone: A Five Year Review

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Kimberly Seidel-Miller, MD
Mayo Clinic

CV:
Kimberly Seidel-Miller MD, John Franco MD, Cara Prideaux MD. A Unique Trigger for Parsonage Turner Syndrome: A Case Report. To be presented as poster at the American Academy of Physical Medicine and Rehabilitation Annual Meeting, Orlando, FL, October 2018.

Kimberly Seidel-Miller MD, Marianne Luetmer MD, Ronald Reeves MD. Inter-rater Reliability of the Application of the Non-Traumatic SCI Dataset to Degenerative Cases. Poster presentation at The International Spinal Cord Society Annual Scientific Meeting, Sydney, Australia, September 2018.

Kimberly Seidel-Miller MD, John Franco MD, Erin M. Conlee MD, Robert DePompolo MD, Joline E. Brandenburg MD, Sherilyn W. Driscoll MD. Dramatic Deficits Due to Degos Disease: Unusual Neurologic Impairments from a Rare Vasculopathy- A Case Report. Poster presentation at the Association of Academic Physiatrists Annual Meeting, Atlanta, GA, February 2018.

Kimberly Seidel-Miller MD, Karen Andrews MD, Brandon Sampson CP. Unique Considerations and Approaches to Individuals with Quadrimembral Amputation: A Case Series. Oral presentation at the US International Society of Prosthetics and Orthotics Pac Rim, Conference, Lahaina, HA, January 2018.

John K. Evans DO, V. Orhurh MD, JC Watson MD, TP Pittelkow, Kimberly L. Seidel-Miller MD. High Concentration Capsaicin Patch in Neuropathic Pain: A Systematic Review and Meta-Analysis of Randomized Control Trials. Oral presentation by J. Evans at American Society of Regional Anesthesia and Pain Medicine Annual Meeting, Orlando, FL, November 2017.

Kimberly Seidel MD, Marianne Luetmer MD, Ronald Reeves MD. Inter-rater Reliability of the Application of the Non-Traumatic SCI Dataset to Neoplastic Cases. Poster presentation at The International Spinal Cord Society Annual Scientific Meeting, Dublin, Ireland, October 2017.

Kimberly Seidel MD. A Case for Understanding the Early Masquerading Signs of ALS. Oral presentation at the American Medical Womenâ€™s Association Annual Meeting, San Francisco, CA, March 2017.

Lisa Beck, APRN, CNS
Mayo Clinic

(no CV uploaded)

Douglas Husmann, MD
Mayo Clinic

(no CV uploaded)

A review of literature on spinal segmental sensory and motor innervation – are key sensory points and key muscles of the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) valid ?

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Ruediger Rupp, PD Dr.-Ing.
Heidelberg University Hospital - Spinal Cord Injury Center

CV:
14.05.1969 born in Mannheim
1988 Abitur
1990 Intermediate diploma in electrical engineering, Technical University of Karlsruhe, Germany
1994 Diploma in electrical engineering, Technical University of Karlsruhe, Germany
1994-1996 Research assistant at the Institute for Biocybernetics and Biomedical Engineering (Head: Prof. Dr. G. Vossius), Technical University of Karlsruhe, Germany
2008 Ph.D in electrical engineering (Dr.-Ing.), Topic: “Motor rehabilitation of individuals with spinal cord injury by electrical stimulation – an integrative concept for the control of therapy and functional restoration”, Technical University of Karlsruhe, Germany
1996-2009 Head of the Research Department of the Orthopedic University Hospital II (Head: Prof. Dr. H.J. Gerner), Heidelberg, Germany
since 2009 Head of Experimental Neurorehabilitation, Heidelberg University Hospital – Spinal Cord Injury Center (Head: Prof. Dr. N. Weidner), Heidelberg, Germany
2018 venia legend from the University of Heidelberg in “Experimental Neurology”

Research expertise
Spinal cord injury, rehabilitation engineering, neuroprosthetics, functional and therapeutic elektrical stimulation, man-machine interfaces, locomotion therapy and robotics, motion analysis, clinical and neurophysiological assessments
Key indices Google Scholar from 29.08.2018:
citations: 4.796; h-index: 30; i10-index: 63

Awards
2005 Innovation award for promotion of medical technology of the German Federal Ministry of Education and Research (BMBF)
2008 Innovation award of the German Foundation Spinal Cord Injury (DSQ)
2008 Konrad-Biesalski award of the German Society for Orthopedics and orthopedic Surgery (DGOOC)
2010 Poster award of the German Society for Neurorehabilitation (DGNR)
2013 Best platform presentation of the International Spinal Cord Society (ISCoS)
2015 Friedrich-Wilhelm-Meinecke Award of the German-speaking Medical Spinal Cord Injury Society (DMGP)

2018 Friedrich-Wilhelm-Meinecke Award of the German-speaking Medical Spinal Cord Injury Society (DMGP)

Society memberships
Foundation member of the International Functional Electrical Stimulation Society (IFESS)
German Society for Biomedical Engineering (DGBMT) in the VDE
IEEE
German Society of Orthopedics and Orthopedic Surgery (DGOOC)
International Spinal Cord Society (ISCoS)
Scientific Board of the German-speaking Medical Spinal Cord Injury Society (DMGP)
Board of Directors of the German Spinal Cord Injury Foundation (DSQ)
American Spinal Injury Association (ASIA), Chair of the International Standards Committee

Reviewer activities
Organisations

Deutsche Forschungsgemeinschaft (DFG)
German Federal Ministry of Education and Research (BMBF)
Alexander von Humboldt-Foundation (AvHS)
Dutch Technology Foundation (STW)
Swiss National Science Foundation (SNSF)
German Academic Exchange Service (DAAD)
International Spinal Research Trust (ISRT)

Scientific Journals
Medical Engineering and Physics (Editorial Board)
Spinal Cord (Editorial Board)
Orthopädietechnik (Scientific Board)
Automatisierungstechnik, Spinal Cord ,Journal of Spinal Cord Medicine, Journal of Neural Engineering, Journal of Neuro-rehabilitation and Neural Repair, Neuromodulation, Biomedizinische Technik, Der Orthopäde, Experimental Brain Research, Clinical Neurophysiology, Journal of Robotics, PLoS ONE, Frontiers of Neural Circuits, Restorative Neurology and Neuroscience, Engineering and Physics in Medicine, IEEE Trans. on Neural Systems & Rehab. Eng., IEEE Transactions on Biomedical Engineering, IEEE Journal of Biomedical and Health Informatics, Restorative Neurology and Neuroscience, Physiological Measurement, Medical & Biological Engineering & Computing, Lancet Neurology

Publications (last 5 years)
2014
1. Tanadini L.G., Steeves J.D., Hothorn T., Abel R., Maier D., Schubert M., Weidner N., Rupp R., Curt A.: Identifying Homogeneous Subgroups in Neurological Disorders: Unbiased Recursive Partitioning in Cervical Complete Spinal Cord Injury, Neurorehabil Neural Repair 28(6), 507-515, 2014
2. Meyer A.: Alles im Griff, Geist & Gehirn 4/2014, 64-68, 2014
3. Schließmann D., Schuld C., Schneiders M., Derlien S., Glöckner M., Gladow T., Weidner N., Rupp R.: Feasibility of visual instrumented movement feedback therapy in individuals with motor incomplete spinal cord injury walking on a treadmill, Frontiers in Neuroscience 8:416. doi: 10.3389/fnhum.2014.00416, 2014
4. Rupp R., Blesch A., Schad L., Draganski B., Weidner N.: Neues aus Diagnostik und Therapie der spinalen Erkrankungen, Der Nervenarzt 85, 946–954, 2014
5. Castellini C., Artemiadis P., Wininger M., Ajoudani A., Alimusaj M., Bicchi A., Caputo B., Craelius W., Dosen S., Englehart K., Farina D., Gijsberts A., Godfrey S.B., Hargrove L., Ison M., Kuiken T.A., Markovic M., Pilarski P.M., Rupp R., Scheme E.: Proceedings of the first workshop on Peripheral Machine Interfaces: Going beyond traditional surface electromyography, Frontiers in Neurorobotics 8:22, doi: 10.3389/fnbot.2014.00022, 2014
6. Rupp R.: Challenges in clinical applications of brain computer interfaces in individuals with spinal cord injury, Frontiers Neuroengineering 7:38, 2014
7. Rupp R.: Verlust der Handfunktion – was bietet die Technik ?, Orthopädische Nachrichten – Special edition Hand 10.2014, 10-11, 2014
8. Kuni B., Cárdenas-Montemayor E., Bangert Y., Rupp R., Ales J., Friedmann-Bette B., Schmitt H.: Impaired jump landing after exercise in recreational and in high-performance athletes, J Strength Cond Res 28(8), 2306-13, 2014
9. Putz C., Plewa H., Helbig L., Stenzel M., Fürstenberg C.H., Gerner H.J., Akbar M., Weidner N., Rupp R.: Autonomic dysreflexia: a possible trigger for the development of heterotopic ossifications after traumatic spinal cord injury ? A clinical longitudinal study, European Journal for Trauma and Emergency Surgery 40:721–726, 2014
2015
10. Rupp R., Schließmann D., Plewa H., Schuld C., Gerner H.J., Weidner N., Hofer E.P., Knestel M.: Safety and efficacy of at-home robotic locomotion therapy in individuals with chronic incomplete spinal cord injury: A prospective, pre-post intervention, proof-of-concept study, PLOS ONE, 10(3):e0119167, 2015
11. Schuld C., Franz S., van Hedel H.J.A., Moosburger J., Maier D., Abel R., van de Meent H., Curt A., Weidner N., EMSCI study group, Rupp R.: International standards for neurological classification of spinal cord injury: classification skills of clinicians versus computational algorithms, Spinal Cord 53(4), 324-31, 2015
12. Putz C., Gantz S., Bruckner T., Moradi B., Helbig L., Gerner H.J., Weidner N., Rupp R., Akbar M.: Preoperative scoring and limits of prognostication: functional outcome after surgical decompression in

metastatic spinal cord compression, Oncology 86(3): 177-84, 2014 und Erratum in: Oncology 88(4), 260, 2015.
13. Rupp R., Rohm M., Schneiders M., Kreilinger A., Müller-Putz G.R.: Functional rehabilitation of the paralyzed upper extremity after spinal cord injury by noninvasive hybrid neuroprostheses, Proceedings of the IEEE 103(6), 954-968, 2015
14. Müller-Putz G.R., Leeb R., Tangermann M., Höhne J., Kübler A., Cincotti F., Mattia D., Rupp R., Müller K.-R., Millán J. del R.: Towards non-invasive Hybrid Brain-Computer Interfaces: framework, practice, clinical application and beyond, Proceedings of the IEEE 103(6), 926-943, 2015
15. Seeger J.B., Schikschneit J.P., Schuld C., Rupp R., Jäger S., Schmitt H, Maier G.S., Clarius M.: Change of gait in patients with lateral osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty, Knee Surg Sports Traumatol Arthrosc 23(7), 2049-54, 2015
16. Rieger J.S., Jäger S., Kretzer J.P., Rupp R., Bitsch R.G.: Loosening detection of the femoral component of hip prostheses with extracorporeal shockwaves: a pilot study, Medical Engineering & Physics 37(2), 157-64, 2015
17. Günther M.I., Günther M., Schneiders M., Rupp R., Blesch A.: AngleJ: A new tool for the automated measurement of neurite growth orientation in tissue sections, Journal of Neuroscience Methods 251, 143-50, 2015
18. Hänselmann S., Schneiders M., Weidner N., Rupp R.: Transcranial magnetic stimulation for individual identification of the best electrode position for a motor imagery-based brain-computer interface, Journal of Neuroengineering and Rehabilitation 12:71, 2015
19. Doneit W., Tuga M. R., Mikut R., Liebetanz D., Rupp R., Reischl M.: Kalibrierungs- und Trainingsstrategien zur individuellen Signalgenerierung für die myoelektrische Steuerung technischer Hilfsmittel, tm - Technisches Messen 82(9), 411–421, 2015
20. Tanadini L.G., Hothorn T., Jones L.A., Lammertse D.P., Abel R., Maier D., Rupp R., Weidner N., Curt A., Steeves J.D.: Toward Inclusive Trial Protocols in Heterogeneous Neurological Disorders: Prediction-Based Stratification of Participants With Incomplete Cervical Spinal Cord Injury, Neurorehabil Neural Repair 29(9), 867-77, 2015
21. Schmalfuß L., Rupp R., Tuga M.R., Kogut A., Hewitt M., Meincke J., Klinker F., Duttenhöfer W., Eck U., Mikut R., Reischl M., Liebetanz D.: Steer by ear: Myoelectric auricular control of powered wheelchairs for individuals with spinal cord injury, Restorative Neurology and Neuroscience 34(1), 79-95, 2015
22. Berberich M., Franz S., Rohm M., Weidner N., Rupp R.: Nichtinvasive Greifneuroprothesen für Hoch-Querschnittgelähmte – der Schlüssel(griff) zu mehr Lebensqualität, Medizinisch-Orthopädische Technik 6, 29-35, 2015
2016
23. Nees T.A., Tappe-Theodor A., Sliwinski C., Motsch M., Rupp R., Kuner R., Weidner N., Blesch A.: Early-onset treadmill training reduces mechanical allodynia and modulates CGRP fiber density in lamina III/IV in a mouse model of spinal cord contusion injury, Pain 157(3), 687-97, 2016
24. Rupp R., Franz S., Berberich M., Rohm M., Schneiders M., Hessing B., Weidner N., Müller-Putz G.R.: Ich (be)greife, also bin ich – Möglichkeiten und Herausforderungen von nichtinvasiven Greifneuroprothesen für Hoch-Querschnittgelähmte, Orthopädietechnik 05, 56-61, 2016
25. Pavese C., Schneider M.P., Schubert M., Curt A., Scivoletto G., Finazzi-Agrò E., Mehnert U., Maier D., Abel R., Röhrich F., Weidner N., Rupp R., Kessels A.G., Bachmann L.M., Kessler T.M.: Prediction of Bladder Outcomes after Traumatic Spinal Cord Injury: A Longitudinal Cohort Study, PLoS Med. 13(6):e1002041, 2016
26. Schuld C., Franz S., Brüggemann K., Heutehaus L., Weidner N., Kirshblum S.C., Rupp R.: International standards for neurological classification of spinal cord injury: impact of the revised worksheet (revision 02/13) on classification performance, J Spinal Cord Med 39(5):504-512, 2016
27. Franz S., Schuld C., Kirshblum S., Weidner N., Rupp R.: Motor levels in high cervical spinal cord injuries – Implications for the International Standards for Neurological Classification of Spinal Cord Injury, Journal of Spinal Cord Medicine, J Spinal Cord Med. 39(5), 513-517, 2016
28. Maurer-Burkhard B., Smoor I., von Reumont A., Deckstein G., Stierle I., Rupp R., Schuld C.: Validity and reliability of a locomotor stage-based functional rating scale in spinal cord injury, Spinal Cord 54(8):619-625, 2016
29. Rupp R.: Gerätegestützte Neurorehabilitation – was wird die Zukunft bringen ? neuroreha 8:110-116, 2016
30. Reischl M., Tuga M.R., Meister L., Alberg E., Doneit W., Liebetanz D., Rupp R., Mikut R.: Einfluss von Trainingseffekten auf die Parameteradaption für Mensch-Maschine-Schnittstellen in der Medizintechnik, at –

Automatisierungstechnik 64(10), 816–826, 2016
2017
31. Huggins J.E., Guger C., Ziat M., Zander T.O., Taylor D., Tangermann M., Soria-Frisch A., Simeral J., Scherer R., Rupp R., Ruffini G., Robinson D.K.R., Ramsey N.F., Nijholt A., Müller-Putz G.R.,McFarland D.J., Mattia D.,Lance B.J., Kindermans P.-J., Iturrate I., Herff C., Gupta D., Do A.H., Collinger J.L., Chavarriaga R., Chase S.M., Bleichner M.G., Batista A., Anderson C.W., Aarnoutse E.J.: Workshops of the Sixth International Brain-Computer Interface Meeting: brain- computer interfaces past, present, and future, Brain-Computer Interfaces 4:1-2, 3-36, 2017
32. Petersen J., Spiess M., Curt A., Weidner N., Rupp R., Abel R., EM-SCI Study Group, Schubert M.: Upper limb recovery in spinal cord injury: Involvement of central and peripheral motor pathways, Neurorehabilitation & Neural Repair 31(5), 432-441, 2017
33. Reed R., Mehra M., Kirshblum S., Maier D., Lammertse D., Blight A., Rupp R., Jones L., Abel R., Weidner N.; EMSCI Study Group; SCOPE, Curt A., Steeves J.: Spinal cord ability ruler: an interval scale to measure volitional performance after spinal cord injury. Spinal Cord 55(8), 730-738, 2017
34. Hommelsen M., Schneiders M., Schuld C., Keyl P. and Rupp R.: Sensory Feedback Interferes with Mu Rhythm Based Detection of Motor Commands from Electroencephalographic Signals, Frontiers in Human Neuroscience 11:523, 2017
2018
35. Steeves J., Curt A., Mehra M., Rupp R., Blight A., Maier D., Jones L., Lammertse D., Abel R., Kirshblum S., Weidner N.: The Spinal Cord Ability Ruler (SCAR) complements the Spinal Cord Independence Measure (SCIM), Spinal Cord 56(5), 525-526, 2018
36. Velstra I.M., Fellinghauer C., Abel R., Kalsi-Ryan S., Rupp R., Curt A.: The Graded and Redefined Assessment of Strength, Sensibility, and Prehension Version 2 Provides Interval Measure Properties, J Neurotrauma 35(6), 854-863, 2018
37. Seeger J.B., Schikschneit J.P., Schuld C., Rupp R., Rickert M., Jahnke A., Maier G.S., Clarius M.: Instrumented gait analysis in patients with medial osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty. Knee 25(3):392-397, 2018
38. Schließmann D., Nisser M., Schuld C., Gladow T., Derlien S., Heutehaus L., Weidner N., Smolenski U., Rupp R.: Trainer in a pocket - Proof-of-concept of mobile, real-time, foot kinematics feedback for gait pattern normalization in individuals after stroke, incomplete spinal cord injury and elderly patients, Journal of Neuroengineering and Rehabilitation, 15(1):44, 2018
39. Kucher K., Johns D., Maier D., Abel R., Badke A., Baron H., Thietje R., Casha S., Meindl R., Gomez-Mancilla B., Pfister C., Mir A., Rupp R., Weidner N., Schwab M.E., Curt A.: First-in-Man Intrathecal Application of Neurite Growth-Promoting Anti-Nogo-A Antibodies in Acute Spinal Cord Injury, Neurorehabilitation and Neural Repair 32(6-7), 578-589, 2018
40. Leonhäuser D., Castelar C., Schlebusch T., Rohm M., Rupp R., Leonhardt S., Walter M., Grosse J.O.: Evaluation of electrical impedance tomography for determination of urinary bladder volume: comparison with standard ultrasound methods in healthy volunteers, Biomed Eng Online 17(1), 95, 2018
41. Bolliger M. Blight A., Field-Fote E., Musselman K., Rossignol S., Barthélemy D., Bouyer L., Popovic M.R., Schwab J.M., Boninger M.L., Tansey K.E., Scivoletto G., Kleitman N., Jones L., Gagnon D., Nadeau S., Haupt D., Awai L., Easthope C., Zörner B., Rupp R., Lammertse D., Curt A., Steeves J.: Lower Extremities Outcome Measures: Considerations for Clinical Trials in Spinal Cord Injury, Spinal Cord 56(7), 628-642, 2018
42. Rupp R. for the ASIA International Standards Committee and Education Committee: Assessor accuracy of the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) – recommendations for reporting items, Spinal Cord, in press
43. Meincke J., Hewitt M., Reischl M., Rupp R., Schmidt-Samoa C., Liebetanz D.: Cortical representation of auricular muscles in humans: A robot-controlled TMS mapping and fMRI study, PLoS One 13(7):e0201277, 2018
44. Schmalfuß L., Hahne J., Farina D., Hewitt M., Kogut A., Doneit W., Reischl M., Rupp R., Liebetanz D.: A hybrid auricular control system: direct, simultaneous, and proportional myoelectric control of two degrees of freedom in prosthetic hands, Journal of Neural Engineering, in press

Book Chapters:
2014
1. Kreilinger A., Rupp R., Müller-Putz G.R.: Brain-Computer-Interfaces und Neuroprothesen als assistierende Technologien. In: M. Bauche, B. Greitemann, K.-J. Lotz, W. Mittelmaier (Hrsg.) Weißbuch

„Rahmenbedingungen und Strukturen der Technischen Orthopädie in Deutschland“, Verlag Orthopädie-Technik, Dortmund, 191-194, 2014
2. Rupp R., Rohm M., Schneiders M.: Brain-Computer Interfaces for control of upper extremity neuroprostheses in individuals with high spinal cord injury, In: G. Naik (ed.) Emerging Theory and Practice in Neuroprosthetics, IGIGlobal, Hershey, 237-264, 2014
3. Rupp R., Kleih S., Leeb R., del R. Millan J., Kübler A., Müller-Putz G.R.: Brain Computer Interfaces and Assistive Technology. In: Grübler G., Hildt E.. (eds.), Brain-Computer Interfaces in their ethical, social and cultural context, Springer Verlag, London, Dordrecht, Heidelberg, New York, 7-38, 2014
2015
4. Rupp R., Schließmann D., Schuld C., Weidner N.: Chapter 32 – Technology to enhance locomotion. In: Dietz V., Ward N. (eds.), Oxford Textbook for Neurorehabilitation, Oxford University Press, Oxford, 385-398, 2015
2016
5. Wirz M., Rupp R.: Application Issues for Robotics. In: Reinkensmeyer D.J., Dietz V. (eds.), Neurorehabilitation Technology, 2nd edition, Springer London, Dordrecht, Heidelberg, New York, 141-160, 2016
6. Rupp R.: Brain-computer interfaces to enhance function after spinal cord injury. In: Fehlings M., Gomes Vialle L.R., Weidner N. (eds.), AOSpine Masters Series, Volume 7: Spinal Cord Injury and Regeneration, Thieme, New York, 178-190, 2016
2017
7. Nowak E., Euler M., Rupp R.: Neurorehabilitation of the upper extremity. In: Weidner N., Rupp R., Tansey K. (eds.), Neurological aspects of spinal cord injury, Springer International Publishing, Cham, Switzerland, 621-648, 2017
8. Hensel C., Eck U., Alimusaj M., Kaschuba R., von Reumont A., Rupp R., Schmidt E.-M.: Neurorehabilitation: Strategies for lower extremity restoration. In: Weidner N., Rupp R., Tansey K. (eds.), Neurological aspects of spinal cord injury, Springer International Publishing, Cham, Switzerland, 649-688, 2017
9. Rupp R.: Neuroprosthetics. In: Weidner N., Rupp R., Tansey K. (eds.), Neurological aspects of spinal cord injury, Springer International Publishing, Cham, Switzerland, 689-720, 2017
2018
10. Rupp R.: Brain-computer interfaces for motor rehabilitation. In: Müller B., Wolf S. (eds.), Handbook of Human Motion, Springer, Heidelberg, in press
Books:
2017
Weidner N., Rupp R., Tansey K.: Neurological aspects of spinal cord injury, Springer International Publishing, Cham, Switzerland, 2017

Presentations (last 5 years):
2014
1. Rupp R.: Recommendations from the Advisory Board, Retreat BNCI Horizon, Hallstatt, Austria, 24.3.-26.3.2014
2. Rupp R., Franz S., van Hedel H.J.A., Weidner N., Curt A., EMSCI study group, Schuld C.: ISNCSCI scoring, scaling and classification skills - SCI professionals versus personal computers, Scientific meeting of the American Spinal Injury Association (ASIA), San Antonio, Texas, USA, 14.5.-17.5.2014
3. Rupp R.: Technology for enhancement of motor function in SCI – facts, challenges and visions, Joint Congress of European Neurology, Istanbul, Turkey, 31.5.-3.6.2014
4. Rupp R.: Cooperation with ASIA and ISCoS, 13th EMSCI annual meeting, Monastery Banz, Bad Staffelstein, 2.6.2014
5. Rupp R.: Die gelähmte Hand im Griff – Greineuroprothesen für Hochquerschnittgelähmte, Novartis Medicine Congress, Rostock, Germany, 23.7.2014
6. Rupp R.: Neuroprothesen in der Querschnitt-Rehabilitation - praktische Erfahrungen aus der Anwendung implantierbarer und nichtinvasiver Lösungen, 48. Congress of the German Society of Biomedical Enginnering (DGBMT), Hannover, 8.-10.10.2014
7. Rupp R., Schweidler J., Schuld C.: ParaReg – Eine multizentrische Datenbank zur Dokumentation von Querschnittgelähmten mit einer Ateminsuffizienz, Meeting of the AK Ventilation of the DMGP, Heidelberg, 30.10.2014
8. Rupp R.: Verlust der Handfunktion – was bietet die Technik ?, Congress of the DGOU, Berlin, 28.-

31.10.2014
9. Franz S., Rohm M., Berberich M., Hug A., Weidner N., Rupp R.: Klinische Studie zur Überprüfung von Effektivität, Praktikabilität und Lebensqualität der Anwendung einer Greifneuroprothese durch Patienten mit zervikalem Querschnittsyndrom, 5. Joint Annual Meeting of the DGNR and DGNKN, Singen, 04.12.-06.12.2014
10. Rupp R., Rohm M., Schneiders M., Kreilinger A., Kaiser V., Weidner N., Müller-Putz G.R.: Nicht-invasive Brain-Computer Interfaces zur Kontrolle von Greifneuroprothesen für Hochquerschnittgelähmte – Ergebnisse des europäischen TOBI Projekts, 5. Joint Annual Meeting of the DGNR und DGNKN, Singen, 04.12.-06.12.2014

2015
11. Rupp R., Schmalfuß L., Tuga M., Kogut A., Hewitt M., Meincke J., Duttenhöfer W., Eck U., Mikut R., Reischl M., Liebetanz D.: TELMYOS – a telemetric wheelchair control interface based on the bilateral recording of myoelectric signals from ear muscles, 5th Conference on Technically Assisted Rehabilitation (TAR), Berlin, 12.03.-13.03.2015
12. Rupp R., Franz S., Berberich M., Rohm M., Eck U., Weidner N.: Neuroprosthesis for grasp restoration in individuals with high spinal cord injury – lost in translation !?, 5th Conference on Technically Assisted Rehabilitation (TAR), Berlin, 12.03.-13.03.2015
13. Rupp R.: Greifen und Gehen aus der Sicht des Ingenieurs, 4. Frankfurt SCI Symposium, BGU Frankfurt, 15.4.2015
14. Rupp R.: Was wird Technisch in Zukunft möglich sein ?, Symposium „60 Jahre Querschnittgelähmtenzentrum Koblenz“, 18.4.2015
15. Schuld C., Schließmann D., Schneiders S., RehaGait Study Group, Weidner N., Rupp R.: Watch your step – from instrumented gait analysis to real-time feedback therapy, 4th ISCoS and ASIA joint scientific meeting, Montréal, Kanada, 14.05.-16.05.2015
16. Rupp R., Schließmann D., Schneiders M., Schuld C.: Realtime movement feedback therapy in gait rehabilitation, International Neurorehabilitation Symposium (INRS), Valencia, Spain, 10.6.-12.6.2015
17. Schuld C., Schließmann D., Schneiders M., Derlien S., Glöckner M., Gladow T., Weidner N., Rupp R.: Watch your step – from gait analysis to real-time movement feedback therapy, 9th World Congress of the International Society of Physical and Rehabilitation Medicine, Berlin, 19.-23.06.2015
18. Rupp R.: Technological support for the rehabilitation after stroke and spinal cord injury, 1st Congress of the European Academy of Neurology, Berlin, 20.6.-23.6.2015
19. Rupp R.: Updates on the ISNCSCI, 14th EMSCI annual meeting, Orthopädische Klinik Hessisch-Lichtenau, 24.6.2015
20. Rupp R.: Elektrostimulation bei Querschnittlähmung - Ströme im Wechsel !, Keynote-Vortrag on the 28. Congress of the DMGP, Kassel, 25.06.-27.06.2015
21. Rupp R.: Technically assisted neurorehabilitation after SCI – more high-tech for a better outcome ? Spinal Cord Injury & Tissue Regeneration Summit, Salzburg, Austria, 5.11.2015

2016
22. Rupp R.: Von der Diagnostik zur Therapie – die Möglichkeiten von Echtzeit-Bewegungsfeedback in der Rehabilitation von Gangstörungen, Keynotevortrag auf dem 1. Kongress der Gesellschaft für die Analyse menschlicher Motorik und ihre klinische Anwendung (GAMMA), Wien, Austria, 26.02.-27.02.2016
23. Rupp R.: Bewegende Technik – Apparative Neurorehabilitation von Querschnittgelähmten, Scientific Colloquium of the medical faculty of Heidelberg University, Heidelberg, 02.03.2016
24. Rupp R., Hessing B., Rohm M., Schneiders M.: Current Status and next steps of WP3 and WP 7, General Meeting of the MoreGrasp Project, Glasgow, UK, 08.03.-10.03.2016
25. Rupp R.: Echtzeitbewegungsfeedback bei inkomplett Querschnittgelähmten - die instrumentelle Ganganalyse als Therapeutikum, 60. Congress of the DGKN, 16.03.-19.03.2016
26. Rupp R., Schmalfuß L., Tuga M., Kogut A., Hewitt M., Eck U., Mikut R., Reischl M., Liebetanz D.: TELMYOS – a feasibility study of a telemetric wheelchair control interface based on the bilateral recording of myoelectric signals from ear muscles, Annual Meeting of the American Spinal Injury Association, Philadelphia, USA, 14.04.-17.04.2016
27. Rupp R.: Gerätegestützte Neurorehabilitation – Roboter ist nicht gleich Roboter ! OT World, Leipzig, 03.05.-06.05.2016
28. Rupp R.: Rehabilitationstechnik bei Querschnittgelähmten– Was bringt die Zukunft ? OT World, Leipzig, 03.05.-06.05.2016

29. Eck U., Kogut A., Tuga M., Doneit W., Schmalfuß L., Liebetanz D., Reischl M., Rupp R.: Steer by ear – Vergleichsstudie zur Steuerung eines Elektrorollstuhls mittels zweier oberflächlich gemessener Aktivierungsmuster der Ohrmuskulatur, 29.congress of the DMGP, Hamburg, 25.5.-28.5.2016
30. Schuld C., Schweidler J., Tiedemann S., Ketter G., Michel F., Lustenberger H., Walter M., Hensel C., Hug A., Roch S., AK Beatmung, AK EMSCI, Liebscher T., Rupp R.: Die multizentrische, projektübergreifende ParaReg-Datenbank - von EMSCI über Beatmungsverläufe hin zum DMGP-Paraplegie-Register, 29. Congress of the DMGP, Hamburg, 25.5.-28.5.2016
31. Rupp R.: Laudatio für den Ludwig Guttmann Preisträger der DMGP 2016, 29. Congress of the DMGP, Hamburg, 25.5.-28.5.2016
32. Rupp R.: Functional electrical stimulation (FES) for grasping in individuals with high cervical spinal cord injury – lessons learned from working with end users, 6th International BCI Meeting, Asilomar Conference Center, Pacific Grove, California, USA, 31.05.-03.06.2016
33. Rupp R.: 15 years of EMSCI – What makes EMSCI unique and why to continue ? 55th Annual Scientific Meeting of the International Spinal Cord Society, Wien, Austria, 14.9.-16.9.2016
34. Rupp R.: From gait analysis to locomotion therapy - possibilities of real-time movement feedback in the rehabilitation of gait disorders, Keynote Lecture at the 25th ESMAC (European Society for Movement Analysis in Adults and Children) annual meeting, Sevilla, Spain, 29.09.-1.10.2016
35. Rupp R., Schließmann D., Schuld C., Hofer E.P., Gerner H.J., Weidner N., Knestel M.: MoreGait – Studienergebnisse eines von inkomplett Querschnittgelähmten zu Hause durchgeführten robotischen Lokomotionstrainings, 121. Congress of the DGPMR, Giessen, 06.10.-08.10.2016
36. Rupp R.: Noninvasive Hybrid Brain-Computer interfaces as individualized control interface of grasp neuroprosthesis, Össur and Otto Bock Treaty on Neural controlled Man-Machine Interface for Prosthetics, Reykjavik, Iceland, 29.10.2016
37. Rupp R.: Current status of WP3 & WP7, Mid-Term Review Meeting of the MoreGrasp Project, Luxemburg, 16.11.2016
38. Rupp R.: Roboter in der Rehabilitation – Kompensation oder Restauration ?, 6. Joint meeting of the DGNR and DGNKN, Bonn-Bad Godesberg, 01.12.-03.12.2016

2017
39. Rupp R.: Handfester Nutzen oder Griff nach den Sternen? Möglichkeiten von Greifneuroprothesen bei Hoch-Querschnittgelähmten, Annual Meeting of the NervClub, Heidelberg, 31.03.2017
40. Rupp R., Schuld C., Weidner N., Koller R., Schubert M., Curt A.: The European Multicenter Study about Spinal Cord Injury – It's all about networking !, iCord Symposium, Vancouver, Canada, 06.04.-07.04.2017
41. Rupp R., Rohm M., Huesing J., Lehmann M., Weidner N., Schleebusch T., Castelar C., Walter M., Habier A., Leonhaeuser D., Kowollik M., Leistner N., Grosse J., Kirschner-Hermanns R.: UroWatch – proof-of-concept of the feasibility of electrical impedance tomography (EIT) for noninvasive continuous bladder volume measurement in individuals with SCI, 43rd Annual Meeting of the American Spinal Injury Association, Albuquerque, USA, 26.04.-29.04.2017
42. Rupp R., Schuld C., EMSCI study group, Burns S., Walden K., Rick Hansen Institute: ISNCSCI computer algorithms, 43rd Annual Meeting of the American Spinal Injury Association, Albuquerque, USA, 26.04.-29.04.2017
43. Rupp R., ASIA International Standards Committee: International Standards Committee Update – New and Discussed Changes for the International Standards , 43rd Annual Meeting of the American Spinal Injury Association, Albuquerque, USA, 26.04.-29.04.2017
44. Rupp R.: Patient Study and MoreGrasp neuroprosthesis, MoreGrasp OT Workshop, 9.5.2017
45. Rupp R., Hessing B., Schneiders M.: Current Status and next steps of WP3 and WP 7, General Meeting of the MoreGrasp Project, Hamburg, 10.05.-11.05.2017
46. Rupp R., Schuld C., Langpape A., Koller R., Mayer M., Schubert M., Ackermann C., van de Meent H., Mach O., Maier D., Abel R., Curt A., Weidner N.: Changes in the EMSCI certification and proposed ISNCSCI changes, 17th Annual EMSCI Meeting, Ulm, 17.5.2017
47. Rupp R., Schneiders M., Hessing B., Kogut A., Weidner N.,di Sciascio C., Luzhnica G., Veas E., Ramsay A., Murray Smith R., Schwarz A., Ofner P., Müller-Putz G.R.: Denken, um zu (be-)greifen – Evaluierung der intuitiven Brain-Computer Interface gesteuerten sensiblen und motorischen Greifneuroprothese des europäischen MoreGrasp-Projekts, 30. Annual meeting of the DMGP, Ulm, 18.05.-20.05.2017
48. Rupp R.: Laudatio für den Ludwig Guttmann Preisträger der DMGP 2017, 30. Annual meeting of the DMGP, Ulm, 18.05.-20.05.2017
49. Rupp R., Schneiders M., Hessing B., Murray-Smith R., Ramsay A., Luzhnica G., Veas E., Schwarz A.,

Pereira J., Ofner P., Pinegger A., Müller-Putz G.: MoreGrasp – BCI-controlled sensory and motor grasp neuroprosthesis for individuals with high spinal cord injury, Joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, 11.06.-15.06.2017
50. Rupp R.: Wofür baucht die motorische Rehabilitation technische Hilfen, Update Neurorehabilitation, Schmieder Clinic, Allensbach, 15.07.2017
51. Rupp R., Schneiders M., Hessing B., Jersch P., Kogut A., Bertram B., Ramsay A., Murray-Smith R., Müller-Putz G.: The EEG-controlled MoreGrasp grasp neuroprosthesis for individuals with high spinal cord injury – multipad electrodes for screening and closed-loop grasp pattern control, 21st Annual Meeting of the International Funtional Electrical Stimulation Society (IFESS), London, United Kingdom, 17.07.-20.07.2017
52. Rupp R.: ParaReg – ein web-basiertes Register zum lebenslangen Monitoring von Querschnittgelähmten, Kick-Off Meeting ParaReg-registry, Heidelberg, 10.10.2017
53. Rupp R.: Technology moves forward – robot-assisted locomotion in individuals with spinal cord injury, 2nd FoE Day Human & Biotechnology, Technical University Graz, 18.10.2017
54. Rupp R.: Mit dem Gedanken zum Ziel – Gehirn-Computer Interfaces zur Hilfsmittelsteuerung, 11. Münchner außerklinischer Intensiv Kongress (MAIK), Munich, 27.10.2017
55. Rupp R.: The MoreGrasp neuroprosthesis, MoreGrasp Open House Event, Spinal Cord Injury Center, Heidelberg, 27.11.-29.11.2017
56. Rupp R.: MoreGrasp neuroprosthesis -Feasibility study design, MoreGrasp Open House Event, Spinal Cord Injury Center, Heidelberg, 27.11.-29.11.2017
57. Rupp R.: MoreGrasp clinical pathway: Part 1 – FES screening, MoreGrasp Open House Event, Spinal Cord Injury Center, Heidelberg, 27.11.-29.11.2017
58. Rupp R.: MoreGrasp clinical pathway: Part 2 – FES training, MoreGrasp Open House Event, Spinal Cord Injury Center, Heidelberg, 27.11.-29.11.2017
59. Rupp R.: MoreGrasp clinical pathway: Part 3 – FES final application, MoreGrasp Open House Event, Spinal Cord Injury Center, Heidelberg, 27.11.-29.11.2017
60. Rupp R.: Die Neurorehabilitation von Querschnittgelähmten – ein ständiges Experiment ?!, Festsymposium „40 Jahre Paraplegiologie“, SRH Klinikum Karlsbad-Langensteinbach, 29.11.2017
61. Rupp R., Maier D., Hildesheim A., Aach M., Badke A, Weidner N., Knaup-Gregori P., Saur M.: ParaReg – ein web-basiertes Register zum lebenslangen Monitoring von Querschnittgelähmten, Kick-Off Meeting Begleitprojekt “Register für die Versorgungsforschung”, Berlin, 08.11.2017
62. Rupp R.: Konzept und Datenmodell des ParaReg-Registers, Meeting des Begleitprojekts “Register für die Versorgungsforschung”, Berlin, 11.12.2017
2018
63. Rupp R., ATI355 study group, NISCI study group, Weidner N.: Nogo-A-Antikörper – Regeneration nach Rückenmarksverletzung ?, 35. Joint Annual Meeting of the DGNI and DSG, Würzburg, 08.02.-10.02.2018
64. Rupp R.: Technische Hilfsmittel für Querschnittgelähmte - Wie weit sind wir ?, 2. Karlsbad-Langensteinbacher Wirbelsäulentage, 02.03.-03.03.2018
65. Rupp R., Schneiders M., Hessing B., Eck U.: Updates on WP3 and WP7, General Meeting of the MoreGrasp project, Saragossa, Spain, 23.4.-26.4.2018
66. Rupp R., Schuld C., Rodriguez G. Walden K., Biering-Sørensen F., Kirshblum S. for the International Standards Committee: Taxonomy for documentation of non-SCI conditions, 44th Annual Meeting of the American Spinal Injury Association, Rochester, USA, 02.05.-04.05.2018
67. Rupp R., Kirshblum S., Tansey K. for the International Standards Committee: The continued evolution of ISNCSCI - an interactive update, Workshop at the 44th Annual Meeting of the American Spinal Injury Association, Rochester, USA, 02.05.-04.05.2018
68. Rupp R., Schneiders M., Hessing B., Murray-Smith R., Ramsay A., Luzhnica G., Veas E., Schwarz A., Pereira J., Ofner P., Pinegger A., Müller-Putz G.R.: The EEG-controlled noninvasive MoreGrasp neuroprosthesis - decoding of multiple natural single limb movements and multipad-electrodes for closed-loop grasp pattern control, 44th Annual Meeting of the American Spinal Injury Association, Rochester, USA, 02.05.-04.05.2018
69. Rupp R.: Denken, um zu (be)greifen - Möglichkeiten und Grenzen von Brain-Computer-Interface gesteuerten Greifneuroprothesen, OT World, 15.5.2018
70. Rupp R., Schuld C.: Update on upcoming ISNCSCI changes, EMSCI Meeting, Vienna, Austria, 16.05.2018

71. Rupp R., Schuld C., Schweidler J., Weidner N., Knaup P., Aach M., Badke A., Hildesheim A., Maier D., Saur M.: ParaReg – Konzeption des web-basierten DMGP-Registers zur lebenslangen Monitoring von

Querschnittgelähmten, 31. Annual Meeting of the DMGP, Vienna, Austria, 16.05.-19.5.2018
72. Rupp R., Kuppinger S., Kogut A., Weidner N., Gallinat T.: Ich will Pianist werden ! - Eine Fallstudie zur Inklusion eines 15-jährigen Jungen mit Paraplegie mithilfe eines durch eine elektronische Beißschiene gesteuerten Klavierpedalaktuators, 31. Annual Meeting of the DMGP, Vienna, Austria, 16.05.-19.5.2018
73. Rupp R.: State of the art of non-invasive grasp neuroprostheses, Workshop "Noninvasive BCI-control of FES for grasp restoration in high spinal cord injured humans", 7th International BCI Meeting, Asilomar, Pacific Grove, USA, 22.05.-25.05.2018
74. Rupp R., Schneiders M., Hessing B., Murray-Smith R., Ramsay A., Luzhnica G., Veas E., Schwarz A., Pereira J., Ofner P., Pinegger A., Müller-Putz G.R.: The EEG-controlled MoreGrasp neuroprosthesis for Individuals with spinal cord injury – decoding of single limb movements and multipad-electrodes for closed-loop grasp control, World Congress on Medical Physics & Biomedical Engineering (IUESPM), Prague, Czech Republik, 03.06. - 08.06.2018
75. Rupp R.: Overview results of WP3 and WP7, Final Review Meeting of the MoreGrasp project, Spinal Cord injury Center, Heidelberg University Hospital, 17.07.2018
76. Weidner N., Rupp R.: Rehabilitation von Gelähmten – Schritt für Schritt zurück ins Leben, Vortragsreihe „Medizin am Abend", University Hospital Heidelberg, 18.07.2018

Project grants (last 5 years)
„European Multicenter Study about Spinal Cord Injury" (2001 – today)
Role: Co-PI
Sponsors: International Foundation for Research in Paraplegia (IFP), Zuerich, Switzerland
Wings for Life (WfL), Salzburg, Austria
German foundation of paraplegia (DSQ)

„UroWatch – Development and clinical evaluation of a 3-D bladder volume estimation device on the basis of impedance measurements" (2012 – 2015)
Role: Co-PI
Sponsor: German Federal Ministry for Research and Education (BMBF), 01EZ1128B

„TELMYOS – A telemetric myoelectric ear muscle activity recording system for control of assistive devices" (2012 – 2015)
Sponsor: German Federal Ministry for Research and Education (BMBF), 01EZ1122B

„MoreGait – Development of a training device for a physiological locomotion training at home" (2012 – 2015)
Role: Co-PI
Sponsor: German Federal Ministry for economy and energy (BMWi), KF2906701NT1

„RehaGait – Development of a mobile feedback-assisted therapy system for rehabilitation of gait abnormalities" (2013 – 2016)
Role: Co-PI
Sponsor: German Federal Ministry for economy and energy (BMWi), KF2906702KJ2

"MoreGrasp - Restoration of upper limb function in individuals with high spinal cord injury by multimodal neuroprostheses for interaction in daily activities" (2015 – 2018)
Role: 2x WP-leader
Sponsor: European Comission (EC), FP8-643955

"SCI-walker - a novel mobile, user-compliant, motorized body weight support device for safe overground locomotion training" (2015 – 2016)
Role: PI
Sponsor: Promobilia Stiftung, Stockholm, Schweden

„Innovation Cluster– INTAKT" (2016 – 2021)
Role: Co-PI
Sponsor: German Federal Ministry for Research and Education (BMBF), FKZ: 16SV7639

“SensSCI - Feasibility of real-time, individualized haptic sensory feedback for locomotor training of individuals with incomplete spinal cord injury” (2017-2019)
Role: PI
Sponsor: Jacques and Gloria Gossweiler Foundation

„ParaReg – a web-based registry for lifelong monitoring of individuals with spinal cord injury“ (2017-2018)
Role: PI
Sponsor: German Federal Ministry for Research and Education BMBF), FKZ: 01GY1724

Christian Schuld, Dipl.-inform. med.
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Ute Eck, Dipl.-Phys.
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Steffen Franz, Dr. med.
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Norbert Weidner, Prof. Dr. med.
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

A Cautionary Tail and Review of Electrodiagnostics in Amyotrophyic Lateral Sclerosis: A Case Report

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Ryan Fraiser, DO
Stanford Universtiy

(no CV uploaded)

James Crew, MD
Santa Clara Valley Medical Center

CV:
James Dillon Crew, M.D.
Chair, Department of Physical Medicine and Rehabilitation
Chief Physician, Spinal Cord Injury
Santa Clara Valley Medical Center
james.crew@hhs.sccgov.org

PostGraduate Training

2008 - 2009 Spinal Cord Injury Medicine Fellowship
University of Washington/VA Puget Sound Healthcare System, Seattle, WA

2005 - 2008 Physical Medicine and Rehabilitation Residency
University of Washington, Seattle, WA

2004 - 2005 Transitional Year Internship
University of Washington, Seattle, WA

Education

2000 - 2004 Creighton University - Omaha, NE
Doctorate of Medicine

1996 - 2000 Creighton University - Omaha, NE
Bachelor of Arts, Philosophy, Summa Cum Laude

Board Certification

2009 - Present Diplomate, American Board of Physical Medicine and Rehabilitation (ABPMR)
2011 Neuromuscular Medicine Board Certification
2009 Spinal Cord Injury Medicine Board Certification
2008 - 2009 ABPMR Written and Oral Board Examinations – passed first time
2002 - 2007 USMLE Steps 1, 2, and 3 – passed first time

MEDICAL LICENSURE

2009 - Present Full Medical License - California State Department of Health - MD A109047
2008 - 2010 Full Medical License - Washington State Department of Health - MD 60001526
2004 - 2008 Limited Medical License - Washington State Department of Health

PUBLICATIONS

'Manual Insufflation-Exsufflation (MIE) Device Prescription for Outpatients with Tetraplegia'
Crew J, Svircev J, Burns S. Journal of Spinal Cord Medicine, 2010;33(2):128-135.

'Specialized Respiratory Management for Acute Cervical Spinal Cord Injury: A Retrospective Analysis'. Wong SL, Shem K, Crew J. Topics in Spinal Cord Injury Rehabilitation 2012;18(4):283-290.

'Safety and Feasibility of using the Ekso Bionic Exoskeleton to Aid Ambulation after Spinal Cord Injury'. Kolakowsky-Hayner SA, Crew J, Moran S, Shah A. Journal of Spine 2013; S4: 003.

'Low Vitamin D Levels in Persons with Spinal Cord Injury and Increased Incidence of Venous Thromboembolic Events during Acute Inpatient Rehabilitation Stay'
Timmerman M, Crew J, Shem K, Kim M, Kolakowsky S, Wright J. PM&R 2013:5(9):S140.

'Severe Hair Loss during Inpatient Rehabilitation due to Telogen Effluvium: A Case Report'
Varghis N, Crew J. PM&R 2014:6(9):S236.

'An Unusual Case of Tetraplegia from Yoga: A Case Report'
Williams L, Eichenbaum L, Nahm L, Crew J. PM&R 2014:6(9):S296.

'The Value of Maintaining Primary Board Certification in Physical Medicine and Rehabilitation'
Crew J, Gittler M, Kenndey DJ. PM&R 2014;6(7):650-655.

'Pressure ulcers in people with spinal cord injury in developing nations'
Zakrasek ED, Creasey G, Crew J. Spinal Cord 2015:53(1):7-13.

'Subacute Combined Degeneration of the Spinal Cord Secondary to Nitrous Oxide Abuse'
Martin E, Dorr J, Tryhorn A, Crew J. Am J Phys Rehabil 2016:95(3):a112.

'The Effect of Vitamin D Supplementation on Pain, Mood, Depression, and Strength in Patients with Spinal Cord Injury.'
Williams TG, Ehsanian R, Shem KL, Wright J, Isaac L, Crew J. PM&R 2016 Sep;8(9S):S153.

'The Impact of Axial Injury, Extra-Axial Injury, and Combined Injury on Functional Status in Traumatic Brain Injury (TBI).'
Quach NT, Isaac L, Ehsanian R, Sechrist S, Balakrishnan SP, Duong T, Crew J. PM&R 2016 Sep;8(9S):S156-S157.

'Pulmonary outcomes following specialized respiratory management for acute cervical spinal cord injury: a retrospective analysis.'
Zakrasek EC, Nielson JL, Kosarchuk JJ, Crew JD, Ferguson AR, McKenna SL. Spinal Cord 2017; Jun;55(6):559-565.

'Volitional Voiding of the Bladder following Spinal Cord Injury: Validation of Bilateral Lower Extremity Motor Function as a Key Predictor.'
Elliott CS, Dallas KB, Zlatev D, Comiter CV, Crew J, Shem K. J Urol. 2018 Feb 17. Epub ahead of print

INVITED Presentations/Lectures

'Spinal Cord Injury Epidemiology'
University of Washington PM&R Review Course 04/2009

'Acute Management and Rehabilitation Principles Following Spinal Cord Injury'
Totally Trauma Conference, Lake Tahoe, CA 10/2009

‘Acute Management Following Spinal Cord Injury’
Santa Clara Valley Trauma Nursing Conference 03/2010

‘Relevance for the Use of Embryonic Stem Cells in Spinal Cord Injury’
Stanford University Stem Cell Symposium 07/2011

‘Vitamin D and Associated Factors in Spinal Cord Injury’
ASCIP Annual Conference, Las Vegas, NV 09/2011

‘Exoskeleton Use for Ambulation after Spinal Cord Injury’
California Society of Respiratory Care, Lake Tahoe, NV 03/2012

‘Vitamin D: Effect on Health and Relevance in PM&R’
Lecture at Stanford Grand Rounds, Palo Alto, CA 07/2012

‘Description of a 6 Week Pilot Study of the EksoTM Wearable Exoskeleton after SCI’
Presentation at PVA Annual Conference, Las Vegas, NV 08/2012

‘Exoskeleton Use for Ambulation after Spinal Cord Injury’
Presentation at Totally Trauma Conference, Monterey, CA 10/2012

‘Treatment of Hypovitaminosis D in Persons with SCI
ASIA Annual Scientific Meeting, Chicago, IL 12/2013

‘Prognosis and Quality of Life after SCI’
UCSF Neuroscience Conference, San Francisco, CA 12/2013

‘Spinal Cord Injury Rehabilitation and Research Trends’
Stanford/SCVMC 24th Annual Trauma Symposium 08/2014

‘Spinal Cord Injury Acute Medical Management’
Trauma Grand Rounds at Fresno Community Regional Medical Center 02/2014

‘Respiratory Management in Spinal Cord Injury’
Province Rounds at GF Strong Rehabilitation Centre in Vancouver, BC 05/2015

‘Spinal Cord Injury Rehabilitation and Research’
Regional Medical Center Trauma Grand Rounds. San Jose, CA. 08/2016

‘Neurogenic Bowel and Sexual Dysfunction after Spinal Cord Injury’
UCSF Neurotrauma Conference. San Francisco, CA. 11/2017

‘Spinal Cord Injury Acute Rehabilitation’.
Learning Services Symposium. San Jose, CA 11/2017

‘Spinal Cord Injury: Trends in Epidemiology and Prognosis’.
SCVMC Neurosurgery Symposium. San Jose, CA 03/2018

‘Expert Panel: Pathways to Field Testing Clinical Guidelines: Case Study on Ventilator Weaning’
ASIA Annual Scientific Meeting. Rochester, MN 05/2018

‘Heterotopic Ossification after SCI: Best Practice for Prevention and Management’
ASIA Annual Scientific Meeting. Rochester, MN 05/2018

Work Experience and APPOINTMENTS

11/2014 – Present Santa Clara Valley Medical Center
Chair, Physical Medicine and Rehabilitation

8/2011 – Present Santa Clara Valley Medical Center
Chief of Spinal Cord Injury, Physical Medicine and Rehabilitation

3/2016 – Present Stanford School of Medicine
Clinical Associate Professor (Affiliated), Department of Orthopaedic Surgery

8/2011 – 7/2014 Stanford Physical Medicine and Rehabilitation Residency Site Director
Santa Clara Valley Medical Center Site Director for Stanford PM&R Residency

1/2010 – 3/2016 Stanford School of Medicine
Clinical Instructor (Affiliated), Department of Orthopaedic Surgery

8/2009 – 8/2011 Santa Clara Valley Medical Center
Associate Chief, Physical Medicine and Rehabilitation

RESEARCH Experience

2015 - Present Co-PI, SCVMC/Stanford Site, Asterias Stem Cell Clinical Trial in Acute SCI
2014 - Present Chair, Stanford PM&R Residency Research and Quality Committee
2012 - 2015 PI, SCVMC Stie, Asubio SUN13837 Clinical Trial in Acute Spinal Cord Injury (SCI)
2011 - 2013 PI, Treatment of Hypovitaminosis D in SCI
2010 - 2011 Co-PI, Preliminary Evaluation of Exoskeleton Use after SCI
2009 - 2011 Co-PI, SCVMC/Stanford Site, Geron Stem Cell Clinical Trial in Acute SCI
2010 - 2011 PI, Evaluation of Hypovitaminosis D in SCI
2007 - 2009 Investigator, Mechanical Insufflation Exsufflation use in Tetraplegia

Awards

2017 Santa Clara County 2016 Employee of the Year, received 2/2017
2016 Santa Clara County Employee of the Month, February 2016
2014 Santa Clara Valley Medical Rehabilitation Center Leadership Award
2013 Stanford University Physical Medicine and Rehabilitation Humanitarian Award
2011 Sam Schmidt Paralysis Foundation/ASIA Young Investigator Research Grant Award

NATIONAL ACADEMIC INVOLVEMENT

2017 - Present Vice Chair of Education, Central Nervous System Council, AAPMR
2017 - Present Reviewer, Archives of PM&R
2014 - Present Reviewer, PM&R Journal
2014 - Present Reviewer, Spinal Cord Journal
2015 Q Bank question writer, Neuromuscular Medicine, AAPMR

Professional Memberships and leadership

2017 - Present Health Advocacy Committee Member, American Spinal Injury Association (ASIA)
2011 - Present American Spinal Injury Association (ASIA)
2008 - 2013 Academy of Spinal Cord Injury Professionals (ASCIP)
2003 - Present American Association of Physical Medicine and Rehabilitation (AAPMR)

Utilization of complementary and integrative healthcare by people with spinal cord injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Jennifer Coker, MPH
Craig Hospital

CV:
EMPLOYMENT
09/2017 to present: Principal Investigator, A multi-site randomized controlled trial of an intervention to improve outcomes after spinal cord injury (funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, NIDILRR), Craig Hospital, Englewood, CO
09/2016 to present: Principal Investigator, Utilization of Complementary and Integrative Healthcare to Treat Pain in Persons with Spinal Cord Injury (NIDILRR), Craig Hospital, Englewood, CO
11/2014 to 04/2018: Principal Investigator, A Bridge from Rehabilitation to Real-World: Reinventing Yourself after SCI (Craig H Neilsen Foundation), Craig Hospital, Englewood, CO
04/2012 to present: Research Associate, Rocky Mountain Regional Spinal Injury System (RMRSIS) (NIDILRR), Craig Hospital, Englewood, CO
10/2011 to 04/2012: Co-Investigator, Rehabilitation Research and Engineering Center on Wireless Technology, Crawford Research Institute, Shepherd Center, Atlanta, GA,
01/2011 to 04/2012: Senior Research Analyst, Crawford Research Institute, Shepherd Center, Atlanta, GA
05/2005 to present: Project Coordinator II, IRB Coordinator, Grant Writer, College of Health Professions, Medical University of South Carolina (MUSC), Charleston, SC
01/2003 to 05/2005: Assistant Professor, Research, College of Health Professions, MUSC, Charleston, SC
10/2002-01/2003: Research Coordinator, Crawford Research Institute, Shepherd Center, Atlanta, GA
03/2001-10/2002: Research Coordinator, Georgia Model Brain Injury System (GAMBIS) (NIDRR), Crawford Research Institute, Shepherd Center & Emory University Center for Rehabilitation Medicine, Atlanta, GA
06/1998-02/2001: Research Publications Specialist, Georgia Regional Spinal Cord Injury Care System (NIDRR), Crawford Research Institute, Shepherd Center, Atlanta, GA,
09/1997 - 05/1998: Research Specialist, Georgia Regional Spinal Cord Injury Care System (NIDRR), Crawford Research Institute, Shepherd Center, Atlanta, GA

AWARDS & HONORS
Rollins School of Public Health, Emory University: The James W. Alley Award for Outstanding Service to Disadvantaged Populations. May 14, 2001.
American Spinal Injury Association, 2nd place poster prize: The relationship of alcohol, drug, and tobacco use with personality in individuals with spinal cord injury. Poster presented at the annual conference of the American Spinal Injury Association, Chicago, Illinois; April, 2000
Shepherd Center, Virginia C. Crawford Annual Research Day Award 2000: Best paper presenting original research findings for: Employment after Spinal Cord Injury: An Analysis of Cases from the Model Spinal Injury Systems.
Shepherd Center, Virginia C. Crawford Annual Research Day Award 2000: Best poster presenting original research findings for: Health Behaviors of Women with Spinal Cord Injury.

THESIS
Coker, J. L., Thompson, N., & Krause, J. S. (2001). Social support and health outcomes after spinal cord injury: A mediation analysis. Defended March, 2001.

PROFESSIONAL MEMBERSHIPS
2016 to present: American Spinal Injury Association (ASIA) – Student Member
2017 to present: International Spinal Cord Society (ISCoS) – Student member
2017 to present: Cycle of Hope – Board of Directors

PUBLICATIONS IN PROFESSIONAL JOURNALS:
1. Krause, J. S., Coker, J. L., Charlifue, S., & Whiteneck, G. G. (1999). Selected health behaviors among American Indians with spinal cord injury: Comparison to 1996 data from the Behavioral Risk Factor

Surveillance System. Archives of Physical Medicine and Rehabilitation, 80, 1435-1440.
2. Krause, J. S., Coker, J. L., Charlifue, S., & Whiteneck, G. G. (1999). Depression and subjective well being among 97 American Indians with spinal cord injury. Rehabilitation Psychology, 44, 354-372.
3. Krause, J. S., Kewman, D., DeVivo, M. J., Maynard, F., Coker, J. L., Roach, M. J., & Ducharme, S. (1999). Employment after spinal cord injury: An analysis of cases from the model spinal injury systems. Archives of Physical Medicine and Rehabilitation, 80, 1492-1500.
4. Krause, J. S., Coker, J. L., Charlifue, S., & Whiteneck, G. G. (2000). Health outcomes among American Indians with spinal cord injury. Archives of Physical Medicine and Rehabilitation, 81, 924-931.
5. Krause, J. S., Kemp, B. J., & Coker, J. L. (2000). Depression after spinal cord injury: Relationship with gender, race/ethnicity, aging, and socioeconomic indicators. Archives of Physical Medicine and Rehabilitation, 81, 1099-1109.
6. Krause, J. S., Vines, C. L., Farley, T. L., Sniezek, J., & Coker, J. L. (2001). An exploratory study of pressure ulcers after spinal cord injury: Relationship to protective behaviors and risk factors. Archives of Physical Medicine and Rehabilitation, 82, 107-113.
7. Alderson, A., Godsall, R., Mullin, J., Coker, J., & Macciocci, S. (2001). Serial cognitive assessment in an outpatient rehabilitation setting. Archives of Clinical Neuropsychology, 16, 757-769.
8. Mullin, J., Ripley, D., Vargas, J., Godsall, R., Korrick, S., & Coker, J. (2002). Relationship between balance and cognition following traumatic brain injury. Premier Outlook, 3(4), 30-35.
9. Thompson, N., Coker, J. L., Krause, J. S., & Henry, E. (2003). Purpose in life as a mediator of adjustment after spinal cord injury. Rehabilitation Psychology, 48, 100-108.
10. Macciocchi, S. N., Bowman, B., Coker, J. L., Apple, D., & Leslie, D. P. (2004). The impact of co-morbid traumatic brain injury on functional outcome of persons with spinal cord injury. American Journal of Physical Medicine and Rehabilitation, 83, 22-26.
11. Krause, J. S., Coker, J. L. (2006). Aging after spinal cord injury: A 30-year longitudinal study. Journal of Spinal Cord Medicine, 29, 371-376.
12. Krause, J.S., Saunders, L.L., Reed, K.S., Coker, J.L., Zhai, Y, & Johnson, E. (2009). Comparison of the Patient Health Questionnaire and the Older Adult Health and Mood Questionnaire for self-reported depressive symptoms after spinal cord injury. Rehabilitation Psychology, 54, 440-448.
13. Berliner J, Collins K, Coker J. Cannabis conundrum. Spinal Cord Ser and Cases. 2018. https://doi.org/10.1038/s41394-018-0097-0.
14. Coker J, Cuthbert J, Ketchum J, Holicky R, Charlifue S. Reinventing yourself after spinal cord injury. Spinal Cord, submitted July 2018.
15. Coker J, Cuthbert J, Ketchum J, Sevigny M, Charlifue S. Reinventing yourself after SCI: A bridge from rehabilitation to real world. Spinal Cord, submitted Oct 2018.

PRESENTATIONS AT PROFESSIONAL CONFERENCES
1. Krause, J. S., Coker, J. L., & Sutton, G. Risk for secondary conditions: A model for prediction and prevention. Presented at the annual meeting of the American Spinal Cord Injury Association, Cleveland, Ohio; April, 1998.
2. Coker, J. L., Krause, J. S., Charlifue, S., & Sutton, G. Utilization of items from the BRFSS to monitor health related behaviors of persons with spinal cord injuries. Presented at the annual Centers for Disease Control & Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) conference, Atlanta, Georgia; May, 1998.
3. Krause, J. S., Sternberg, M., & Coker, J. L. Prospective predictions of mortality after spinal cord injury. Presented at the annual conference of the American Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 1998.
4. Coker, J. L., & Krause, J. S. Risk for further injury after the onset of SCI. Presented at the annual meeting of the American Congress of Rehabilitation Medicine, Seattle, Washington; November, 1998.
5. Coker, J. L., Krause, J. S., Vines, C. L., & Farley, T. L. Behavioral predictors of pressure ulcers: A population cohort. Presented at the annual meeting of the American Public Health Association, Washington, DC; November, 1998.
6. Coker, J. L., Krause, J. S., & Charlifue, S. Pressure ulcers and secondary injuries among American Indians with spinal cord injury. Presented at the annual meeting of the American Public Health Association, Washington, DC; November, 1998.
7. Coker, J. L., Krause, J. S., Whiteneck, G. G., & Charlifue, S. Health behaviors among American Indians with SCI. Presented at the annual meeting of the American Spinal Injury Association, Atlanta, Georgia; April, 1999.

8. Coker, J. L., Krause, J. S., & Hudson, L. The prevalence of secondary injuries after SCI. Presented at the annual meeting of the American Spinal Injury Association, Atlanta, Georgia; April, 1999.
9. Krause, J. S., Hudson, L., & Coker, J. L. Purpose in life after SCI. Presented at the annual meeting of the American Spinal Injury Association, Atlanta, Georgia; April, 1999.
10. Krause, J. S., Coker, J. L., Whiteneck, G. G., & Charlifue, S. Health outcomes of secondary conditions among American Indians with SCI. Presented at the annual meeting of the American Spinal Injury Association, Atlanta, Georgia; April, 1999.
11. Coker, J. L., Krause, J. S., & Henry, E. Prediction of employment after spinal cord injury: Matching research participants to individual cases. Presented at the annual meeting of the American Spinal Injury Association, Atlanta, Georgia; April, 1999.
12. Krause, J. S., & Coker, J. L. Purpose in life after spinal cord injury. Part of a symposium entitled "Dealing with chronic injury: The role of purpose and spirituality." Presented at the annual conference of the American Psychological Association, Boston, Massachusetts; August, 1999. (Presented by J. L. Coker).
13. Coker, J. L., & Krause, J. S. Purpose in life after spinal cord injury. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 1999.
14. Crewe, N. M., & Coker, J. L. Case studies of depression following SCI. Part of a panel presentation entitled "Depression among individuals in the community with spinal cord injury: Incidence, correlates, case studies, and treatment" presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 1999. (Presented by J. L. Coker).
15. Krause, J. S., Kemp, B. J., & Coker, J. L. Correlates of depression after spinal cord injury. Presented at the annual conference of the American Congress of Rehabilitation Medicine, Orlando, Florida; October, 1999.
16. Coker, J. L., Krause, J. S., & Henry, E. The relationship of alcohol, drug, and tobacco use with personality in individuals with spinal cord injury. Presented at the annual conference of the American Public Health Association, Chicago, Illinois; November, 1999.
17. Coker, J. L., & Krause, J. S. The relationship of alcohol, drug, and tobacco use with personality in individuals with spinal cord injury. Presented at the annual conference of the American Spinal Injury Association, Chicago, Illinois; April, 2000 (2nd place prize winner).
18. Coker, J. L., & Krause, J. S. Relationship of personality with risk behaviors in individuals with spinal cord injury. Presented at the annual meeting of the American Psychological Association, Division 22, Washington, DC; August, 2000.
19. Gemella, A. G., Krause, J. S., & Coker, J. L. Health behaviors among women with spinal cord injury. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2000.
20. Coker, J. L., & Krause, J. S. A comparison of psychosocial factors between five racial/ethnic groups. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2000.
21. Coker, J. L., & Krause, J. S. Reasons for unemployment among 160 individuals with spinal cord injury. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2000.
22. Coker, J. L., & Krause, J. S. Social support after traumatic spinal cord injury. Presented at the annual conference of the American Spinal Injury Association, Long Beach, California; May, 2001.
23. Krause, J. S., & Coker, J. L. Depression after spinal cord injury. Presented at the annual conference of the American Spinal Injury Association, Long Beach, California; May, 2001.
24. Coker, J. L. Factors involved in maintaining quality of life. Presentation for the American Spinal Injury Association pre-course entitled, "Aging with spinal cord injury: Clinical implications from recent research findings." Long Beach, California; May 17, 2001.
25. Ripley, D. L., Macciocchi, S., Coker, J. L., & Huang, M. Diabetes mellitus and functional outcome following cerebrovascular accident. Presented at the annual meeting of the Association of Academic Physiatrists, Las Vegas, Nevada; March, 2002. (Presented by J. L. Coker).
26. Coker, J. L. Outcomes of persons with spinal cord injuries living in rural and urban settings. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2002.
27. Coker, J. L. Social support and health outcomes after spinal cord injury. Presented at the annual conference of the American Psychological Association, Honolulu, Hawaii; July, 2004.
28. Coker, J. L. Maintenance of healthy affect and avoidance of depression after spinal cord injury.

Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2004.
29. Coker, J. L. Pre-injury alcohol use, intoxication at injury, and sensation seeking among persons with spinal cord injuries. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2004.
30. Coker, J. L. Factors associated with earnings from gainful employment after spinal cord injury. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2004.
31. Coker, J. L. Spiritual coping: Differences between Caucasians and African Americans with spinal cord injuries. Presented at the annual conference of the American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada; September, 2004.
32. Coker, J. L. & Krause, J. S. Disparities in subjective well-being, participation, & health after SCI: A 6-year longitudinal Study. Presented at the annual conference of the American Public Health Association, Washington, DC; November, 2007.
33. Coker, J. L. & Krause, J. S. Depressive symptoms during inpatient rehabilitation for spinal cord injury. Presented at the annual conference of the American Public Health Association, Washington, DC; November, 2007.
34. Krause, J., McArdle, J., Coker, J. (2008). Poster 61: Changes in somatic and nonsomatic depressive symptoms between inpatient rehabilitation and follow-up. Presented at the annual conference of the American Congress for Rehabilitation Medicine, Toronto, Ontario, October 2008.
35. Coker, J. L., Saunders, L.L., Krause, J.S., Brotherton, S., Morrisette, D. Walking distance and spinal cord injury. Poster to be presented at the annual conference of the Academy of Spinal Cord Injury Professionals, Las Vegas, NV: September, 2010.
36. Coker, J. L., Saunders, L.L., & Krause, J.S. Psychological factors affecting alcohol use after spinal cord injury. Oral presentation at the annual conference of the National Association of Rehabilitation Research Training Centers, Alexandria, VA: May, 2010.
37. Coker, J. L., Krause, J.S., & Saunders, L.L. Vocational interests after recent spinal cord injury: Comparisons related to gender and race. Poster presentation at the annual conference of the National Association of Rehabilitation Research Training Centers, Alexandria, VA: May, 2010.
38. Coker, J. L., Krause, J.S., Reed, K.S., & McArdle, J.J. Natural course of depressive symptoms after spinal cord injury. Oral presentation at the annual conference of the Academy of Spinal Cord Injury Professionals, Las Vegas, NV: September, 2010.
39. Coker, J. L., Krause, J.S., Saunders, L.L., & Newman, S. Posttraumatic stress disorder after spinal cord injury. Oral presentation at the annual conference of the Academy of Spinal Cord Injury Professionals, Las Vegas, NV: September, 2010.
40. Charlifue, S., Coker, J. L. Reinventing yourself – Enhancing self-efficacy skills in people with SCI. Oral presentation at the annual conference of the American Spinal Injury Association (ASIA) pre-course, Philadelphia, PA: April, 2016.
41. Coker J. Complementary & Integrative Healthcare (CIH) for People with SCI. Invited presentation, Knowledge in Motion Lecture Series, Spaulding-Harvard SCI Model System and the New England Regional SCI Center, Boston, Massachusetts; June, 2017.
42. Coker J, Charlifue S, Huey SK. ReInventing yourself after SCI: A bridge from rehabilitation to real world. Presented at the annual meeting of the International Spinal Cord Society (ISCoS), Dublin, Ireland; October, 2017
43. Coker JL, Morse L, Monden K. Innovations in SCI Research. Invited presentation to the Mountain Plains Regional Office of USDA/Food and Nutrition Service, Denver, Colorado; November 15, 2017.
44. Coker JL. ReInventing Yourself after Spinal Cord Injury: Results from a site-specific randomized clinical trial. Presented at the annual conference of the National Association of Rehabilitation Research and Training Centers (NARRTC), Washington, DC; March 26-27, 2018.
45. Coker JL, Morse L. Vitamin supplement use in people with spinal cord injury: Results from the FRASCI study. Presented at the annual conference of the American Spinal Injury Association (ASIA), Rochester, Minnesota; May 2-4, 2018.
46. Coker JL, Battaglino R, Morse L. Factors associated with regular dental care in people with spinal cord injury: Results from the FRASCI study. Presented at the annual conference of the American Spinal Injury Association (ASIA), Rochester, Minnesota; May 2-4, 2018.
47. Coker JL. ReInventing yourself after SCI: A bridge from rehabilitation to real world. Presented at the annual conference of the American Spinal Injury Association (ASIA), Rochester, Minnesota; May 2-4, 2018.

48. Tate D, Forchheimer M, Charlifue S, Coker J, Bennett S, Huey S, Greve J, Christofi A, Witter C, New P, Ramirezhernandez D, Post M. Cross cultural comparisons in patients self reports of physical and psychological health and quality of life. Presented at the 12th Congress of the International Society of Physical Medicine and Rehabilitation (ISPMR), Paris, France; July 2018.
49. Coker JL, Morse L, Yarar-Fisher C, Li J. Dietary and supplementation needs for people with spinal cord injury. Interdisciplinary workshop presented at the annual meeting of the Association of Spinal Cord Injury Professionals, New Orleans, Louisiana; September, 2018.
50. Yarar-Fisher C, Li J, Coker JL, Morse L. Coker JL. Nutritional and dietary supplement needs during the acute and chronic stages of spinal cord injury. Symposium presented at the annual meeting of the American Congress of Rehabilitation Professionals, Dallas, Texas; September, 2018.
51. Coker JL. Research vs Qaulity Improvement: Methodological and Ethical Considerations. Presented at the annual meeting of the International Spinal Cord Society (ISCoS), Sydney, Australia; September, 2018.
52. Coker JL, Charlifue S. ReInventing Yourself after Spinal Cord Injury: Results from two randomized controlled trials. Presented at the annual meeting of the International Spinal Cord Society (ISCoS), Sydney, Australia; September, 2018.

David Chen, MD
Shirley Ryan Abilitylab

CV:
Not applicable

Heather Taylor, PhD
Tirr

CV:
Not applicable

Susan Charlifue, PhD
Craig Hospital

CV:
Not applicable

Leslie Morse, DO
Craig Hospital

CV:
Not applicable

Trends in rates of ASIA Impairment Scale conversion in traumatic spinal cord injury

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Ralph Marino, MD
Thomas Jefferson University

CV:
Curriculum Vitae: Ralph J. Marino, MD, MS

A. Personal Statement
I have been involved in clinical care and research in neurorehabilitation with a focus on spinal cord injury since 1987. I am Board Certified in Physical Medicine and Rehabilitation and Spinal Cord Injury (SCI) Medicine. My research interests are the development of outcome assessments for use in clinical trials, determining the course of neurological and functional recovery after SCI and enhancing recovery. I have a special interest in exploring the relationship between upper extremity impairment and activities. I developed the Capabilities of Upper Extremity Questionnaire (CUE-Q), a subjective measure of upper extremity function for SCI, and an objective, standardized assessment based on the questionnaire (the CUE-T). Currently I am developing activity-based rehabilitation protocols that can be performed in the home without high cost equipment.

B. Positions and Honors.
Positions and Employment
1987 - 1990 Instructor, Dept. of Rehabilitation Medicine, Jefferson Medical College
1987 - 1998 Attending Physician, Dept. of Rehabilitation Medicine, Thomas Jefferson University Hospital
1990 - 1996 Assistant Professor, Dept. of Rehabilitation Medicine, Jefferson Medical College
1996 - 1998 Associate Professor, Dept. of Rehabilitation Medicine, Jefferson Medical College
1998 - 2002 Clinical Associate Professor, Dept. of Rehabilitation Medicine, Mount Sinai School of Medicine
2002 - 2010 Associate Professor, Dept. of Rehabilitation Medicine, Jefferson Medical College
2003 - 2017 Director of Research; Dept. of Rehabilitation Medicine; Sidney Kimmel Medical College
2002 - Attending Physician, Dept. of Rehabilitation Medicine, Thomas Jefferson University Hospital
2003 - Director, Regional Spinal Cord Injury Center of the Delaware Valley
2010 - Professor, Dept. of Rehabilitation Medicine, Sidney Kimmel Medical College
Other Experience and Professional Memberships
2001 - 2015 Associate Editor, American Journal of Physical Medicine and Rehabilitation
2011 Grant reviewer; Center for Integration of Medicine & Innovative Technology, Boston, MA
2013 - 2014 Grant reviewer, Craig H. Neilsen Foundation
2016 – 2017 Grant reviewer, Wings for Life Foundation
Honors
2008 - 2017 Top Doctors in Philadelphia. Philadelphia Magazine
2013 TJU Inter-Professional Practice Award. Thomas Jefferson University, Philadelphia, PA
2013 Apple Award for excellence in publishing in SCI rehabilitation research. American Spinal Injury Association.
2013 Estin Comarr Memorial Award for Distinguished Clinical Service. American Paraplegia Society (APS) section of the Academy of Spinal Cord Injury Professionals (ASCIP)
2015 Dean's Award for Excellence in Education. Sidney Kimmel Medical College

C. Contribution to Science

1. My early publications addressed neurologic and functional recovery after traumatic SCI. I continue to publish in this area. These publications detailed the course of neurologic recovery over the first year after SCI, and have been used for prognosis. More recent publications have used the SCI Model Systems database, which has allowed comparison with other national and international registries in SCI.

a. Marino RJ, Burns S, Graves DE, Leiby BE, Kirshblum S, Lammertse DP. Upper- and lower-extremity motor recovery after traumatic cervical spinal cord injury: an update from the national spinal cord injury database.

Arch Phys Med Rehabil. 2011 Mar;92(3):369-75. PubMed PMID: 21353821.
b. Lee BA, Leiby BE, Marino RJ. Neurological and functional recovery after thoracic spinal cord injury. J Spinal Cord Med. 2016 Jan;39(1):67-76. PubMed PMID: 25520184; PubMed Central PMCID: PMC4725794.
c. Oleson CV, Marino RJ, Leiby BE, Ditunno JF. The effect of age alone, and age combined with pinprick, on recovery of walking function in motor complete, sensory incomplete spinal cord injury. Arch Phys Med Rehabil. 2016 Feb 17;PubMed PMID: 26898390.
d. Marino RJ, Schmidt-Read M, Kirshblum SC, Dyson-Hudson TA, Tansey K, Morse LR, Graves DE. Reliability and validity of S3 pressure sensation as an alternative to deep anal pressure in neurological classification of persons with spinal cord injury. Arch Phys Med Rehabil. 2016 Feb 24;PubMed PMID: 26921681

2. I have studied the relationship between neurologic status and functional status after SCI, in order to understand the impact of neurologic recovery and interventions to improve neurological outcomes. These studies have revealed the confounding effects of rehabilitation interventions when trying to relate motor function to performance of activities of daily living (ADL). The model of disablement and enablement described by the Institute of Medicine, with components of Impairment, Functional Limitations, and Disability has proved a useful model to disentangle the effects of adaptive rehabilitation strategies, such as use of equipment or alternative techniques or settings, and neurologic improvement, on function.

a. Marino RJ, Stineman MG. Functional assessment in spinal cord injury. Top Spinal Cord Inj Rehabil 1996;1(4):32-45.
b. Marino RJ, Graves DE. Metric properties of the ASIA motor score: subscales improve correlation with functional activities. Arch Phys Med Rehabil. 2004 Nov;85(11):1804-10. PubMed PMID: 15520975.
c. Marino, RJ. Neurological and functional outcomes in spinal cord injury: Review and recommendations. Topics Spinal Cord Injury Rehabil 2005;10(4):51-64.
d. Marino RJ. Domains of outcomes in spinal cord injury for clinical trials to improve neurological function. J Rehabil Res Dev. 2007;44(1):113-22. PubMed PMID: 17551865.

3. In conducting the research noted above, I came to the conclusion that there were not sensitive enough outcome measures in SCI to determine the functional importance of improvements in neurologic function. This led to a study of and development of outcome measures. Training to undertake this area of research was obtained during a K-award from the NIH, where I received a Master of Science Degree in Clinical Epidemiology. I have been involved in the evaluation and revision of impairment and ADL measures in SCI, and have developed a subjective and objective assessment of upper extremity capabilities, the Capabilities of Upper Extremity Questionnaire and Test, respectively.

a. Marino RJ, Patrick M, Albright W, Leiby BE, Mulcahey MJ, Schmidt-Read M, Kern SB. Development of an objective test of upper-limb function in tetraplegia: the capabilities of upper extremity test. Am J Phys Med Rehabil. 2012 Jun;91(6):478-86. PubMed PMID: 22469875.
b. Oleson CV, Marino RJ. Responsiveness and concurrent validity of the revised capabilities of upper extremity-questionnaire (CUE-Q) in patients with acute tetraplegia. Spinal Cord. 2014 Aug;52(8):625-8. PubMed PMID: 24891011.
c. Marino RJ, Kern SB, Leiby B, Schmidt-Read M, Mulcahey MJ. Reliability and validity of the capabilities of upper extremity test (CUE-T) in subjects with chronic spinal cord injury. J Spinal Cord Med. 2015 Jul;38(4):498-504. PubMed PMID: 25297342; PubMed Central PMCID: PMC4612205.
d. Slavin MD, Ni P, Tulsky DS, Kisala PA, Heinemann AW, Charlifue S, Fyffe DC, Graves DE, Marino RJ, Morse LR, Rosenblum D, Tate D, Worobey LA, Dawson MB, Jette AM. Spinal Cord Injury-Functional Index/Assistive Technology Short Forms. Arch Phys Med Rehabil. 2016 Oct;97(10):1745-1752.e7. doi: 10.1016/j.apmr.2016.03.029. Epub 2016 Apr 29. PubMed PMID: 27133356.

Complete List of Peer-Reviewed Published Work:
https://www.ncbi.nlm.nih.gov/sites/myncbi/ralph.marino.1/bibliography/45164012/public/?sort=date&direction=descending

D. Research Support
Ongoing Research Support
NIDILRR, HHS Project Period: 9/30/2016– 9/29/2021
Title: Regional Spinal Cord Injury Center of the Delaware Valley

Description: Contribute to a national database on outcomes after traumatic SCI
Onsite project is to develop and pilot test an upper extremity activity-based therapy program that does not rely on robotics or high cost equipment and can be carried out in the home.
Role: Principal Investigator

US Department of Defense Project Period: 9/30/2016-9/29/2020
Site PI: James Harrop, MD
Title: Systemic Hypothermia in Acute Cervical Spinal Cord Injury – A Prospective, Multi-center Case Controlled Study
Role: Investigator

Completed Research Support
Craig H. Neilsen Foundation Project Period: 7/1/2013-6/30/2017
Title: Responsiveness of the Capabilities of Upper Extremity Test (CUE-T)
Goal: To determine the sensitivity to change in upper extremity function of persons with tetraplegia during the course of neurological recovery or after upper extremity reconstruction surgery using the CUE-T
Role: Principal Investigator

NIDILRR, HHS Project Period: 10/1/2011– 9/29/2016
Title: Regional Spinal Cord Injury Center of the Delaware Valley
Description: Contribute to a national database on outcomes after traumatic SCI
Lead Center for Collaborative module on neurorecovery. Module goal is to obtain data on neurological recovery in patients with isolated SCI, with data collected at fixed time points by trained examiners.
Role: Principal Investigator

Craig H. Neilsen Foundation Project Period: 1/1/2014-12/31/2016
PI: MJ Mulcahey, PhD, OTR/L
Title: Pediatric Multi-Center Evaluation of Notable SCI Outcomes Instruments
Goal: To evaluate at what age reliable assessments can be obtained in children with SCI using instruments designed for adults with SCI
Role: Investigator

Michael Leff, BS
Sidney Kimmel Medical College at Jefferson University

(no CV uploaded)

Diana Cardenas, MD
University of Miami

(no CV uploaded)

David Chen, MD
The Shirley Ryan Abilitylab

(no CV uploaded)

Steven Kirshblum, MD
Kessler Institute for Rehabilitation, Rutgers Njms

(no CV uploaded)

The Relationship Between Spontaneous Activity and Integrity of the Lower Motor Neuron

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Cassandra Buchanan Renfro, DO
Case Western Reserve University (Metrohealth)

CV:
Name: Cassandra Buchanan Renfro, DO

Position: Spinal Cord Injury Medicine Fellow at Case Western Reserve University/MetroHealth Medical Center

LICENSURES/CERTIFICATIONS AND ADDITIONAL TRAINING
1. 2016 UAB Medicine Mini-Quality Academy
2. 2013 COMLEX-USA Step 2 Clinical Exam – Passed February 2013
3. 2012 COMLEX-USA Step 2 Physical Exam – Passed December 2012
4. 2011 COMLEX-USA Step 1, NBOME – Passed June 2011
5. Trauma Evaluation and Management (TEAM Course), American College of Surgeons (ACS)
6. 2009 Incident Command System (ICS)-100 course, Federal Emergency Management Agency (FEMA), November 2009
7. ICS-200 course, November 2009

HONORS & HONORARY SOCIETIES
1. 2018 Dr. Chi-Tsou Huang Award
2. 2016 Outstanding PGY2 Award
3. 2013 Sigma Sigma Phi Student Candidate April 2013
4. 2009 First Year Student Osteopathic Medical Association (SOMA) Conference Scholarship
5. 2006 Beta Beta Beta national biological honor society

EMPLOYMENT/TEACHING ASSISTANTSHIP
1. SOAP Note evaluator/grader. Assisted with grading SOAP notes from standardized patient encounters for first and second year medical students at Lincoln Memorial University – DeBusk College of Osteopathic Medicine. 2015-present
2. OMM and Anatomy Teaching Fellowship. Assisted with anatomy labs and lab practical exams for first-year medical students. Performed table training and lectures for first- and second-year students. Assisted with setting up and assisting with practical exams. Tutored students on an individual basis. Used osteopathic manipulative medicine (OMM) while treating university clinic patients. Worked on a video lab manual which reviews the OPP techniques taught that week. July 2012-May 2013
3. Anatomy Tutor. Assisted students who were having difficulty in the anatomy lab with identification, quizzing and studying for exams. September – December 2010
4. Osteopathic Manual Medicine Lab Teaching Assistant – LMU-DCOM. Assisted the first-year students with OPP lab once a week by assisting them with techniques for current lab session. October 2010 – December 2010

LEADERSHIP POSITIONS
1. Chief Resident of UAB PM&R Department 2017-2018
2. Program Evaluation Committee 2015-2016
3. Pressure Ulcer Committee 2015-2016
4. Readmission Review Committee 2015-2016
5. Research Committee Member for AOCPMR Executive Council 2013-2014
6. National SOMA Board Member, Osteopathic Principles and Practice (OPP) Director 2012-2013
7. LMU-DCOM National Undergraduate Fellows Association Representative (NUFA) 2011-2012
8. Secretary – International Medicine Society 2010-2011
9. National Liaison Officer – SOMA, student chapter 2010-2011

TEACHING/PRESENTATIONS
1. Grand Rounds Presentation: Ketogenic Diet in SCI Patients
2. Case Presentation: Ulnar Neuropathy following hospitalization
3. Journal Presentation Low Back Pain
4. Journal Presentation: Does Size Matter?
5. Case Presentation: Hand Pain in Patient following Stroke
6. Anatomy US course for medical students
7. Poster Presentation at AAPM&R Annual Assembly, New Orleans, LA
8. Didactics Presentation on Osteopathic Manipulative Treatment for Neck Pain
9. Didactics Presentation on Common Osteopathic Manipulative Treatments
10. Situs Ambiguous Radiology Poster Presentation

Gregory Nemunaitis, MD
Case Western Reserve University/Metrohealth

(no CV uploaded)

Kevin Kilgore, PhD
Case Western Reserve University

(no CV uploaded)

Mary Joan Roach, PhD
Case Western Reserve University

(no CV uploaded)

Anne Bryden, OTR/L
Case Western Reserve University

(no CV uploaded)

Wearable Electronics for Electromyography Biofeedback in Incomplete Paraplegia

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

R. James Cotton, MD, PhD
Northwestern / Shirley Ryan Abilitylab

CV:
Biographical Sketch

Name: R. James Cotton, MD, PhD
Position: Resident in Physical Medicine and Rehabilitation, Northwestern / Shirley Ryan AbilityLab

Throughout my training, I have been driven by a desire to better interface our brains to the world and have sought out the tools to do this. I majored in electrical engineering and biochemistry, spend my free time working on embedded systems and robotics, completed a Ph.D. focused on techniques to record from and decode the brain, and am doing my residency in a field focused on helping people with disabilities achieve greater function. acquired a medical degree. These skills position me contribute to the development of brain machine interfaces and to bridge the gap between basic science and the clinics. I have numerous skills that are less common in medicine, including electrical engineering, hardware design, robotics, programming, machine learning, and systems neuroscience. My graduate school training gave me experience developing new technologies to record from the brain, allowing us to record from more neurons in vivo from the mouse visual system than had previously been achieved. My work with primates used Utah arrays to record from populations of neurons from the brain. These are the same type of array recently utilized in several human BMI trials. After graduate school in my free time I designed a credit-card sized 8-channel bioelectrical amplifier that runs via my phone or tablet. I have been using this to explore both EEG signal classification and myoelectrical signals. These projects also gave me opportunity to learn the statistical techniques needed to extract information from such large-scale brain activity.

I am currently working on the development of a wearable electromyographic platform for biofeedback in subjects with spinal cord injury to enhance motor recovery.

B. Positions and Honors
2004-2014 McNair MD/PhD Student scholar
2009 Distributed Representation of Working Memory in Prefrontal Cortex
F30MH088228 from the National Institute Of Mental Health
2013 First place poster competition. MSTP Symposium. Houston TX
2015 Inducted into Alpha Omega Alpha Medical Honor Society
2016 STAR resident award
2017 Harris Resident award
2017 STAR resident award
2017 Shirley Ryan AbilityLab / Craig Neilsen Foundation grant
2018 Sewell Resident award

C. Contributions to Science
My graduate work focused on techniques to record from large population of neurons in vivo from model organisms – both using electrical techniques and through the development of advanced optical techniques that allowed recording from more neurons in the visual cortex than had been done ever before. With the data recorded from neurons using these techniques, I have studied how the brain encodes information and distributes it amongst large neural populations, and how we can decode that information to best understand what the brain is doing.

2012 Philipp Berens, Alexander S Ecker, R James Cotton, Wei Ji Ma, Matthias Bethge, and Andreas S Tolias. (2012) A Fast and Simple Population Code for Orientation in Primate V1. J. Neuroscience. 32(31), 10618–10626. 10.1523/JNEUROSCI.1335-12.2012
2013 Kelli Baalman, R. James Cotton, Matthew Rasband. (2013) Blast Wave Exposure Impairs Memory and

Decreases Axonal Initial Segment Length. J. Neurotrama. 30(9):741-51. 10.1089/neu.2012.2478.
2013 R. James Cotton, Emmanouil Froudarakis, Patrick Storer,Peter Saggau, and Andreas S. Tolias,Three-dimensional mapping of microcircuit correlation structure. Frontiers in Neural Circuits. 151(7). 10.3389/fncir.2013.00151
2013 Qamar AT, Cotton RJ, George RG, Beck JM, Prezhdo E, Laudano A, Tolias AS, Ma WJ. (2013). Trial-to-trial, uncertainty-based adjustment of decision boundaries in visual categorization. PNAS. 110(50):20332-7. 10.1073/pnas.1219756110
2014 Ecker, A.S., Berens, P., Cotton, R.J., Subramaniyan, M., Denfield, G.H., Cadwell, C.R., Smirnakis, S.M., Bethge, M. & Tolias, A.S. Neuron (2014). State dependence of noise correlations in macaque primary visual cortex. Neuron. 82(1);235-248. 10.1016/j.neuron.2014.02.006
2014 Emmanouil Froudarakis, Philipp Berens, Alexander S. Ecker, R. James Cotton, Fabian H. Sinz, Dimitri Yatsenko, Peter Saggau, Matthias Bethge, Andreas S. Tolias. (2014). Population code in mouse V1 facilitates read-out of natural scenes though increased sparseness. Nature Neuroscience. 10.1038/nn.3707
2014 Reddy, G.D., Cotton, James, Tolias, A. S., Saggau, P. (2015). Random-Access Multiphoton Microscopy for Fast Three-Dimensional Imaging. Advances in Experimental Medicine and Biology 859:455-472
2015 Yatsenko, D., Josić, K., Ecker, A. S., Froudarakis, E., Cotton, R. J., & Tolias, A. S. (2015). Improved estimation and interpretation of correlations in neural circuits. PLoS Computational Biology, 11(3), e1004083. doi:10.1371/journal.pcbi.1004083
2015 Yatsenko D, Reimer J, Ecker AS, Walker EY, Sinz F, Berens P, Hoenselaar A, Cotton RJ, Siapas AG &Tolias AS (2015). DataJoint: managing big scientific data using MATLAB or Python. bioRxiv
2018 Subramaniyan M, Ecker AS, Patel S, Cotton RJ, Bethge M, Pitkox, X, Berens P & Tolias AS. Faster processing of moving compared to flashed bars in awake macaque V1 provides a neural correlate of the flash lag illusion. Journal of Neurophysiology.
2018 Walker, E*, Cotton, RJ*, Ma, W, Tolias, AS. A neural basis of probabilistic computation in visual cortex. bioRxiv
2018 Scaling of information in large sensory neuronal populations. R. James Cotton, Emmanouil Froudarakis, Alexander S Ecker, Philipp Berens, Peter Saggau, Andreas S. Tolias. (in prep)

D. Additional Information: Research Support and/or Scholastic Performance

2017 Shirley Ryan Abilitylab – Craig H Neilsen Foundation Infrastructure Center Grant

Past research support

2004-2014 McNair MD/PhD Student scholar
2009 Distributed Representation of Working Memory in Prefrontal Cortex
F30MH088228 from the National Institute Of Mental Health

KunHyuck Lee, PhD
Northwestern University

(no CV uploaded)

Ha Uk Chung, BS
Northwestern University

(no CV uploaded)

John Rogers, PhD
Northwestern University

(no CV uploaded)

Transcutaneous spinal cord stimulation enables engineered neuroplasticity both in motor complete and incomplete cervical spinal cord injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Fatma Inanici, MD, PhC
University of Washington

CV:
NAME: Inanici, Fatma
POSITION TITLE: Predoctoral Research Associate

A. Personal Statement
Trained as a physiatrist, I have gained expertise on evaluation and treatment of the individuals with musculoskeletal and neurological disorders, including spinal cord injury. I also have experience on conducting clinical electrophysiologic studies and motion analysis.
During my career as a physician and a faculty in Hacettepe University, I have worked on many projects and published journal articles in the rehabilitation field. Now as a PhD candidate, my research interest moved moved into the fields of neurorehabilitation and neuromechanics, focusing on novel therapies in spinal cord injury. The last three articles published in neurorehabilitation and biomechanics fields are listed below:
1. Inanici F, Samejima S, Gad P, Edgerton VR, Hofstetter CP, Moritz CT. Transcutaneous Electrical Spinal Stimulation Promotes Long-Term Recovery of Upper Extremity Function in Chronic Tetraplegia. IEEE Trans Neural Syst Rehabil Eng. 2018;26(6):1272-1278.
2. Gahramanov A, Inanici F, Caglar O, Aksoy C, Tokgozoglu AM, Guner S, Baki A, Atilla B. Functional results in periacetabular osteotomy: is it possible to obtain a normal gait after the surgery? Hip Int. 2017 Sep 19;27(5):449-454.
3. Guner S, Haghari S, Inanici F, Alsancak S, Aytekin G. Knee muscle strength in multiple sclerosis: relationship with gait characteristics. J Phys Ther Sci. 2015 Mar;27(3):809-13.
4. Ozdemir O, Samut G, Esen E, Inanici F, Hascelik Z. Comparison of functional recovery in patients with traumatic brain injury and brain tumor after inpatient rehabilitation. Journal of Physical Medicine and Rehabilitation Sciences, 2015; 18: 25-29.

B. Positions and Honors
Positions and Employment
1992 – 1996 Resident, Department of Physical Medicine and Rehabilitation, Hacettepe University Medical School, Ankara, Turkey
1996 – 1999 Acting Assistant Professor, Department of Physical Medicine and Rehabilitation, Hacettepe University, School of Medicine, Ankara, Turkey
1999 – 2002 Assistant Professor, Department of Physical Medicine and Rehabilitation, Hacettepe University, School of Medicine, Ankara, Turkey
2002 – 2007 Associate Professor, Department of Physical Medicine and Rehabilitation, Hacettepe University, School of Medicine, Ankara, Turkey
2007 – 2013 Professor, Department of Physical Medicine and Rehabilitation, Hacettepe University, School of Medicine, Ankara, Turkey
2016 – 2018 Predoctoral Research Associate, University of Washington, Seattle, WA
Other Experience and Professional Memberships
1992 – Member, Turkish Society of Physical Medicine and Rehabilitation
1992 – Member, Turkish Society of Rehabilitation Medicine
2000 – 2013 Editorial Board Member, Journal of Rheumatology and Medical Rehabilitation
2010 - 2013 Editorial Board Member, Journal of Physical Medicine and Rehabilitation Sciences

C. Contribution to Science
1. Early in my career, one of my research interests was pain. I have studied on treatment of chronic pain, and gender differences in fibromyalgia. We have published detailed clinical features of fibromyalgia in men, which is as few as 10% of all cases, based on a large data set. I have involved both in data collection, and analysis, along with the manuscript writing of this study. This article has been highly impactful having a

high citation rate in this field.
a. Yunus MB, Inanici F, Aldag JC, Mangold RF. Fibromyalgia in men: comparison of clinical features with women. J Rheumatol. 2000 Feb;27(2):485-90.
b. Reddy SS, Yunus MB, Inanici F, Aldag JC. Tender point injections are beneficial in fibromyalgia syndrome: A descriptive, open study. Journal of musculoskeletal pain. 2000; 8(4):7-18.
c. Inanici F, Yunus MB. History of fibromyalgia: past to present. Curr Pain Headache Rep. 2004 Oct;8(5):369-78.
d. Inanici F, Ozdemir O, Aydog T, Sendil A, Kutsal YG, Hasçelik Z. The frequency of fibromyalgia in sport professionals. Rheumatol Int. 2011 Aug;31(8):1121-2.
2. I have involved in a series of studies on exercise tolerance, pulmonary and cardiac functions in patients with ankylosing spondylitis. We have revealed the contribution of pulmonary dysfunction on exercise intolerance in this group of patients. We also documented supraventricular arrhythmias and atrial conduction system changes in ankylosing spondylitis, which are generally underdiagnosed and have less attention.
a. Aksoy H, Okutucu S, Sayin BY, Ercan EA, Kaya EB, Ozdemir O, Inanici F, Aytemir K, Oto A. Assessment of cardiac arrhythmias in patients with ankylosing spondylitis by signal-averaged P wave duration and P wave dispersion. Eur Rev Med Pharmacol Sci. 2016;20(6):1123-9.
b. Ozdemir O, Gulsun Akpinar M, Inanici F, Hascelik HZ. Pulmonary abnormalities on high-resolution computed tomography in ankylosing spondylitis: relationship to disease duration and pulmonary function testing. Rheumatol Int. 2012 Jul;32(7):2031-6.
c. Ozdemir O, Inanici F, Hascelik Z. Reduced vital capacity leads to exercise intolerance in patients with ankylosing spondylitis. Eur J Phys Rehabil Med. 2011 Sep;47(3):391-7.
d. Kaya EB, Okutucu S, Aksoy H, Karakulak UN, Tulumen E, Ozdemir O, Inanici F, Aytemir K, Kabakci G, Tokgozoglu L, Ozkutlu H, Oto A. Evaluation of cardiac autonomic functions in patients with ankylosing spondylitis via heart rate recovery and heart rate variability. Clin Res Cardiol. 2010 Dec;99(12):803-8.
3. I have contributed to determine the risk factors for developing osteoporosis among residents of urban areas in Turkey by screening 1061 individuals. Risk factors which have been associated with low bone mass are multifactorial and represent regional differences between and within countries. The findings of this study were later used to develop an algorithm to determine fracture risk for Turkish people and to decide treatment approach. I have continued to study osteoporosis risk factors and our group revealed that vascular thoracic outlet syndrome and intermittent compression of brachial plexus does not result in low bone density.
a. Inanici-Ersoz F, Gokçe-Kutsal Y, Oncel S, Eryavuz M, Peker O, Ok S. A multicenter, case control study of risk factors for low tibial speed of sound among residents of urban areas in Turkey. Rheumatology international. 2002; 22(1):20-6.
b. Kaymak B, Ozcakar L, Inanici F, Cetin A, Ariyurek M, Tan AA. Forearm bone mineral density measurements in thoracic outlet syndrome. Rheumatology international. 2008; 28(9):891-3.

Complete list of citations available at My NCBI

Soshi Samejima, DPT
University of Washington

(no CV uploaded)

Parag Gad, PhD
UCLa

(no CV uploaded)

Reggie Edgerton, PhD
UCLa

(no CV uploaded)

Nick Terrafranca, DPM
Neurorecovery Technologies, Inc.

(no CV uploaded)

Christoph Hofstetter, MD, PhD.
University of Washington

(no CV uploaded)

Chet Moritz, PhD
University of Washington

(no CV uploaded)

The Penalty of Chronic Pain in the Lower Extremities after SCI

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Sara Mulroy, PhD, PT
Rancho Los Amigos National Rehabilitation Center

CV:
A. Personal Statement
I have over 25 years of clinical and research experience in spinal cord injury (SCI) rehabilitation. My research has focused on the biomechanics of the weight-bearing shoulder and development of interventions to prevent and treat shoulder pain after SCI. I have been the principal investigator (PI) or co-investigator or on multiple NIH and NIDRR/NIDILRR-funded research grants documenting the shoulder demands of wheelchair propulsion, ambulation with assistive devices, activities of daily living, and car transfers for individuals with SCI. I was the Co-PI on a highly successful randomized clinical trial of a shoulder exercise program to treat shoulder pain in persons with SCI. We then wanted to identify risk factors for shoulder pain onset to guide development of a prevention program. To this end, I was the PI in a recently completed, NIH-funded 3-year longitudinal study of shoulder pain and physical function after SCI. We successfully enrolled 223 subjects and maintained a 90% retention rate over the 3 years. We identified significant risk factors for shoulder pain onset including weakness in critical shoulder muscles. I am currently the PI of a clinical trial as part of our SCI Model System to evaluate 2 different programs designed based on the results of our previous research to prevent shoulder pain onset. My current research also focuses on utilizing wearable activity monitoring for functional assessment and intervention in real world setting. In an NIH Shift SBIR I am a Co-PI on a project to develop a tele-health system using sensors to recording pressure relief and wheelchair propulsion activities and providing feedback to improve daily function. I am also the PI of a study funded by the Craig Neilsen Foundation that is using remote activity monitoring and an electronic smartphone app to query individuals throughout the day on their current activities and moods (ecological momentary assessment) to better understand the contexts of physical activity and pain management strategies in the daily lives of persons with SCI.
(a) Mulroy SJ, Farrokhi S, Newsam CJ, Perry J. Effects of spinal cord injury level on the activity of shoulder muscles during wheelchair propulsion: An electromyographic study. Arch Phys Med Rehabil. 2004 Jun;85(6):925-34.
(b) Requejo PS, Mulroy SJ, Haubert LL, Newsam CJ, Gronley JK, and Perry J: Evidence-based strategies to preserve shoulder function in manual wheelchair users with spinal cord injury. Topics in Spinal Cord Injury, 2008, 13:84-119.
(c) Mulroy SJ, Thompson L, Kemp B, Hatchett P, Newsam CJ, Gutierrez DD, Ge T, Lighthall Haubert L, Eberly VJ, Azen S, Winstein CJ, Gordon J, and Physical Therapy Clinical Research Network (PTClinResNet): “Strengthening and Optimal Movements for Painful Shoulders (STOMPS) in Chronic Spinal Cord Injury: A Randomized, Controlled Trial.” Phys Ther J, 2011, 91:305-324.
(d) Mulroy SJ, Hatchett P, Eberly VJ, Lighthall Haubert L, Conners S, Requejo PS. Shoulder Strength and Physical Activity Predictors of Shoulder Pain in People With Paraplegia From Spinal Injury: Prospective Cohort Study. Phys Ther. 2015 95:1027-1038.

B. Positions and Honors
Professional Experience:
1981 – 1983 Physical Therapist and Clinical Instructor, Presbyterian Hospital, Oklahoma City, OK
1983 – 1984 Adjunct Faculty, Department of Physical Therapy, University of Oklahoma,
1983 – 1984 Physical Therapist , Clinical Instructor, Veteran's Administration Hosp, Okla.City, OK
1985 – 1986 Staff Physical Therapist, Children's Specialized Hospital, Mountainside, NJ
1986 – 1989 Graduate Assistant, Human Anatomy, Dept. of Physical Therapy, USC, Los Angeles, CA
1986 – 1996 Senior Research Physical Therapist, Pathokinesiology Laboratory, Rancho Los Amigos
1994 – present Adjunct Faculty, USC, Biokinesiology and Physical Therapy Dept., Los Angeles, CA
1996 - present Director, Pathokinesiology Laboratory, Rancho Los Amigos National Rehabilitation, Center,
Honors:
1989 USC Department of Physical Therapy Golden Cane Award for outstanding academic achievement
1990 Foundation for Physical Therapy Fellowship for doctoral research

1991 Foundation for Physical Therapy Loredan Doctoral Fellowship for research
1994 USC Department of Physical Therapy, Jacquelin Perry Scholar for outstanding academic achievement
1997 California Chapter APTA Award for Outstanding Clinical Research for “Electromyographic Analysis of Shoulder Muscles During Wheelchair Propulsion by Paraplegic Persons”.
2001 Finalist, Best Paper, Gait & Clinical Movement Analysis Society, “Use of Cluster Analysis for Gait Pattern Classification of Patients in the Early and Late Recovery Phases Following Stroke”
2001 - 2005 Chartered Member NIH Study Section, Musculoskeletal and Rehabilitation Sciences Study (Formerly Geriatrics and Rehabilitation Medicine)
2009 Invited Speaker; APTA Section on Research Retreat on Impairments in Muscle Force Generation, Asilomar.CA
2009 University of Oklahoma, Department of Rehabilitation Sciences, 17th Annual Luiese Lynch Lecturer
2009 Guest Editor Physical Therapy Journal Special Series, “Stepping forward with gait rehabilitation”.
2010 Distinguished Alumnus, USC Division of Biokinesiology & Physical Therapy
2008 -present Ad hoc Reviewer for NIH, Special Emphasis Study Section
2011 Maureen Rodgers Lecturer “Visions for Physical Therapy”, Rancho Los Amigos Rehab Center,
2012 Joseph F. Dowling Distinguished Service Award, Rancho Los Amigos National Rehab Center,
2012 California Chapter APTA Award for Outstanding Faculty/Researcher publication for “Strengthening and Optimal Movements for Painful Shoulders (STOMPS) in Chronic SCI”
2013 American Physical Therapy Association Marian Williams Award for Research in Physical Therapy
2014 Dozor Visiting Scholar at the Ben Gurion University of the Negev, 3 day course “Gait Analysis: Translation of Research into Practice”, Beersheba, Israel, May 14 – 16.
2014-2017 Scientific Review Committee, Foundation for Physical Therapy
2018 Zlotowski Scholar: “Lower Extremity Muscle Activity after Stroke: A Window into CNS Injury, Recovery, and Response to Rehabilitation”, Zlotowski Center for Neuroscience, Ben Gurion University of the Negev, March 21, 2018

C. Contribution to Science
1. Biomechanics of the shoulder during wheelchair propulsion
My early publications directly measured the motion, joint forces, and muscle activity of the shoulder during wheelchair propulsion to document the demands of this activity in order to identify biomechanical factors that were contributing to the high prevalence of significant and debilitating shoulder pain after SCI. Our studies were unique in several aspects. We were the first group to record wheelchair propulsion biomechanics in large cohorts of participants with SCI. Much of the literature to that point was based on small sample sizes often with non-disabled participants who have different biomechanical patterns than persons with SCI who have propelled a wheelchair daily for several years. In addition, we were, and still are, one of the few groups that records muscle activity with fine-wire indwelling electrodes allowing us to record activity from the deep rotator cuff muscles. We identified the weight-bearing postures, and patterns of shoulder joint forces and muscle activity during wheelchair propulsion and the impact of speed, terrain, and level of SCI. The rotator cuff muscles were particularly susceptible to fatigue which would increase the risk for superior migration of the humeral head resulting in impingement of the rotator cuff tendons on the overlying acromion process.

(a) Mulroy SJ, Gronley JK, Newsam CJ, Perry J. Electromyographic activity of shoulder muscles during wheelchair propulsion by paraplegic persons. Arch Phys Med Rehabil 1996: 77:187-193.
(b) Newsam CJ, Mulroy SJ, Gronley JK, Bontrager EL, Perry J. Temporal-spatial characteristics of wheelchair propulsion: Effects of level of spinal cord injury, terrain and propulsion rate. Am J Phys Med 1996: 75:292-9.
(c) Newsam CJ, Rao SS, Mulroy SJ, Gronley JK, Bontrager EL and Perry J: Three dimensional upper extremity motion during manual wheelchair propulsion in men with different levels of SCI. Gait & Posture 1999: 10:223-232
(d) Kulig K, Newsam CJ, Mulroy SJ, Rao SS, Gronley JK, Bontrager EL and Perry J. The effect of level of spinal cord injury on shoulder joint kinetics during manual wheelchair propulsion. Clin Biomech, 2001, 16:744-751.
2. Biomechanics of activities of daily living, sitting transfers, and depression raises
In addition to the contributions described above, with a team of collaborators, we also documented the shoulder biomechanics and muscle activity during activities of daily living and other upper extremity weight bearing activities including transfers and raises. The load on the shoulder was considerably higher during

transfers and raises compared to wheelchair propulsion further increasing the risk for subacromial impingement. We identified the critical role of the thoracohumeral depressors, Pectoralis Major and Latissimus Dorsi to lift the trunk and acromion over the weight bearing humerus. The high intensity activation level of these muscles increases the risk of fatigue if body weight exceeds the strength capacity of the muscles. Recently, we have extended our research to car transfers documenting the various strategies used in the real-world environment to identify potential areas for intervention to reduce shoulder demands.

(a) Reyes ML, Gronley JK, Newsam CJ, Mulroy SJ, Perry J. EMG analysis of shoulder muscles of men with low-level paraplegia during a weight relief raise. Arch Phys Med Rehabil 1995: 76:433-439.
(b) Perry J, Gronley JK, Newsam CJ, Reyes ML, Mulroy SJ. Electromyographic analysis of the shoulder muscles during depression transfers in subjects with low-level paraplegia. Arch Phys Med Rehabil 1996: 77:350-355.
(c) Gronley JK, Newsam CJ, Mulroy SJ, Rao SS, Perry J, Helm M. Electromyographic and kinematic analysis of the shoulder during four activities of daily living in men with C6 tetraplegia. J Rehabil Res Dev, 2000, 4:423-432
(d) Lighthall Haubert L, Mulroy SJ, Hatchett P, Eberly VJ, Maneekobkunwong S, Gronley J, and Requejo PS. Car transfer and wheelchair loading techniques in independent drivers with paraplegia. Front Bioengineering Biotech, 2015 In Press.

3. Alternative wheelchair propulsion configurations/modes

After documenting the demands of wheelchair propulsion we sought to study alternative propulsion modes and wheelchair configurations in an attempt to reduce shoulder demands. We evaluated both lever propulsion and power assisted wheelchairs. Lever propulsion shifted the demands but did not reduce them overall while power assisted propulsion reduced muscle activity levels and energy consumption. We also evaluated seat position relative to the wheel axle and demonstrated that moving the seat back relative to the axle reduced the superior shoulder joint forces and intensity of muscle activity in the primary push phase muscles. Posterior shoulder forces were increased only during inclined propulsion.

(a) Mulroy SJ, Newsam CJ, Gutierrez DD, Requejo PS, Gronley JK, Haubert LL and Perry J: A preliminary report investigating the effect of fore-aft seat position on shoulder demands during wheelchair propulsion: Part 1 – A kinetic analysis. J Spinal Cord Med, 2005,28:214-221.
(b) Gutierrez DD, Mulroy SJ, Newsam CJ, Gronley JK, and Perry J: A preliminary report investigating the effect of fore-aft seat position on shoulder demands during wheelchair propulsion: Part 2 – An electromyographic analysis. J Spinal Cord Med, 2005, 28:222-229.
(c) Requejo PS, Lee SE, Mulroy SJ, Haubert LL, Bontrager EL, Gronley JK, and Perry J: Shoulder Muscular Demand During Lever-Activated Vs Pushrim Wheelchair Propulsion, J Spinal Cord Med. 2008;31:568–577.
(d) Haubert LL, Requejo PS, Mulroy SJ, Newsam CJ, Gronley JK, and Perry J:"A comparison of shoulder muscle EMG during push-rim activated power assisted wheelchair and standard manual wheelchair propulsion in individuals with complete tetraplegia" Archives of Phys Med Rehabil, 2009, 90:1904-1915.

4. Treatment and prevention of shoulder pain after SCI

We recently confirmed the efficacy of a non-surgical approach based on our prior research in the first randomized clinical trial for treating shoulder pain in persons with SCI. We demonstrated a marked reduction in shoulder pain after a 12-week home-based shoulder stretching and muscle strengthening exercise program that was combined with instruction to optimize the performance technique of tasks known to induce pain. A mediation analysis of these results identified that the intervention-induced reduction in shoulder pain was the direct cause (mediator) of the improvements in participation and overall quality of life seen in our participants. While the overall response to the intervention was strong, pain reduction in the intervention group participants was not complete for all persons. We conducted a 3-year prospective longitudinal study to identify risk factors for shoulder pain onset to guide development of a prevention program. We found that those who developed shoulder pain had reduced muscle strength that was inadequate for the daily demands of UE weight bearing after SCI, limiting community mobility and creating an increased risk for shoulder pain development. They were weaker and less physically active even prior to the onset of shoulder pain compared to those who remained pain-free. Shoulder muscle strengthening was recommended to prevent shoulder pain after SCI. We are currently testing two different prevention programs in a randomized clinical trial as part of our SCI Model System.

(a) Gutierrez DD, Thompson, L, Kemp B, Mulroy SJ, The relationship of shoulder pain intensity to quality of life, physical activity and community participation in persons with paraplegia. J Spinal Cord Med, 2007, 30:93-97.
(b) Kemp B, Bateham A, Mulroy SJ, Thompson L, Adkins R, and Kahan J: "Effects of reduction in shoulder pain on quality of life and community activities among people living long-term with SCI paraplegia: a randomized control trial." J Spinal Cord Med. 2011;34(3):278-84.
(c) Mulroy SJ, Winstein CJ, Kulig K, Beneck GJ, Fowler EG, DeMuth S, Sullivan KJ, Brown D, and Lane CJ: Mediation and Regression Analyses of the PTClinResNet Database: Determining Causal Relationships among the International Classification of Functioning Levels for Four Physical Therapy Intervention Trials. Phys Ther J, 2011, 91:1766-1779.
(d) Requejo PE, Furumasu J, Mulroy SJ, Evidence-Based Strategies for Preserving Mobility for Elderly and Aging Manual Wheelchair Users. Topics in Geriatric Rehabilitation 2015; 31:26-41.

5. Technology for assessment and intervention
In our recent research in identifying risk factors and evaluating intervention efficacy we have employed remote tele-health monitoring of activities for outcomes assessment and intervention in a real-world environment to enhance the relevance of our assessments and treatments. Our use of this technology began when we instrumented participants' wheelchairs with odometers to record daily propulsion activity. We developed and tested a virtual reality gaming platform of our shoulder exercise program to enhance motivation and exercise sustainability. We are currently developing a remote sensor-based system to record pressure-relief and wheelchair propulsion activity in the home and community and provide motivating feedback. Finally, we are utilizing smart-phone based apps to identify the effect of daily mood and pain on physical activity and as a teaching/intervention tool to assess patients' gait patterns and prescribe the most appropriate lower extremity orthosis to enhance walking function.

(a) Hatchett PE, Requejo PE, Mulroy SJ, Lighthall Haubert L, Eberly VJ, and Conners SG: "Impact of Gender on Shoulder Torque and Manual Wheelchair USAge for Individuals with Paraplegia: A Preliminary Report." Topics in Spinal Cord Injury Rehabilitation, 2009, 15:79-89.
(b) Winstein CJ, Requejo PS, Zelinsky EM, Mulroy SJ, and Crimmins E: A Transformative Subfield in Rehabilitation Science at the Nexus of New Technologies, Aging, and Disability. Frontiers in Movement Science and Sports Psychology, 2012, 3:340.
(c) Mazzone B, Haubert LL, Mulroy SJ, Requejo PS, Gotsis M, Lympouridis V, Lange B, Profitt R, Winstein CJ. Intensity of shoulder muscle activation during resistive exercises performed with and without virtual reality games, Conference Proceedings, International Conference on Virtual Rehabilitation, 2013.
(d) Kubota K, Eberly V, Requejo P, Mulroy SJ. Progress in the Development of an Interactive Smartphone / Tablet "App" to Teach / Review Rancho Normal Gait and the Problem Solving Approach: Pathologic Gait and MOPS Brace Modules. Conference Proceedings, Combined Sections Meeting of the American Physical Therapy Association, February 2015.
Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/public/1PgT7IEFIAJBtGMRDdWFmjWAO/?sort=date&direction=ascending
D. Research Support
Ongoing Research Support
C. Research Support
Ongoing Research Support
"Southern California Spinal Cord Injury Model System at Rancho Los Amigos National Rehabilitation Center."

SI16000114 Szlachcic (PI) 09/30/16 – 9/30/21
U.S. Dept. of Education/NIDRR
Center Site Specific Research —" A Randomized Comparative Effectiveness Trial to Evaluate Two Programs for Promotion of Physical Activity after Spinal Cord Injury in Manual Wheelchair Users." PI: Mulroy SJ
The purpose of this project is to evaluate the effectiveness of two programs for promoting physical activity after spinal cord injury: a whole of day activity accumulation program or planned arm crank ergometry exercise.
Role: Model System Co-Director of Research, PI of Site Specific Research

"Interactive Tele-health and Auto-Biofeedback Sensor System for Individuals who Use Wheelchair"

Agency: NIH/NIA PIs: Gwin J and Mulroy, SJ
9R44AG059275 - 03A1 Phase II SBIR grant 04/01/17 – 03/31/19 Effort – 10% -1.2 Calendar Months

The purpose of this project is to develop and evaluate the effectiveness of a remote monitoring and feedback system of pressure relief activity for persons who use a manual wheelchair for mobility.
Role: Co-PI

“Development of a Biopsychosocial Prospective Surveillance Model of Shoulder Pain in SCI
DoD SCIRP: W81XWH-16-SCIRP-IIRA PI: Margaret Finley, PT, PhD Dates: 8/1/17-7/31/2020
Role: Consultant Effort – 1.5 % - 0.18 Calendar Months

Project Goals/Aims: Investigate the progression of impairments for the first year following injury beginning with inpatient rehabilitation in the acute phase. Specifically to determine musculoskeletal and psychosocial factors associated with shoulder pain in individuals with acute SCI, establish the changes in musculoskeletal and psychosocial factors in individuals with SCI between the acute phase of rehabilitation, at 6 months and one year post–SCI. and to determine the relationship between shoulder pain, musculoskeletal factors, psychosocial factors, and quality of life, during the first year following SCI.
Completed Research Support
" Psychosocial contributors to pain management and physical activity after SCI”
Craig H. Neilsen Foundation (Mulroy) 4/01/15 – 3/31/17 1.2 Calendar Months (10% effort)
$150,000
The purpose of this project is to identify factors that facilitate physical activity and positive pain management strategies for persons with SCI to inform wellness and pain management programs for diverse populations.
Role: Principal Investigator
“Southern California Spinal Cord Injury Model System at Rancho Los Amigos National Rehabilitation Center.”

H133N110018 Aisen (PI) 10/01/11 – 9/30/17
U.S. Dept. of Education/NIDRR
Center Site Specific Research —“A Randomized Clinical Trial to Evaluate Two Prevention Programs for Maintenance of Shoulder Health and Function after Spinal Cord Injury.” PI: Mulroy SJ
The purpose of this project is to evaluate the effectiveness of two prevention programs for preserving shoulder function after spinal cord injury, a home-based shoulder exercise program combined with instructions to modify movement technique for upper extremity activities or an enhanced-interaction version with more direct contact, for exercise instruction and education.
Role: Model System Co-Director of Research, PI of Site Specific Research
"Interactive Tele-health and Auto-Biofeedback Sensor System for Individuals who Use Wheelchair”
Agency: NIH PIs: Gwin J and Mulroy, SJ
1R43HD076524-01 Phase I SHIFT grant 04/01/13 – 03/31/16
The purpose of this project is to develop and evaluate the effectiveness of two remote monitoring and feedback systems for persons who use a manual wheelchair for mobility: PRESS, Pressure Relief Exercise Support System and WAMS: Wheelchair Activity Monitoring System,

"Scapular Biomechanics and Shoulder Pain in Wheelchair Users with SCI"
Source: Craig Nielsen Foundation PI Requejo P
Major Goals: The overall objective of this project is to identify the biomechanics of the scapula and shoulder pain development caused by the loads experienced by individuals who use a manual wheelchair and have SCI.
Dates of Approved/Proposed Project: 07/01/2013 – 06/30/2015 $ 150,000
Role: Co-I
“Modular Orthosis Prescription System (MOPS)
Principal Investigator (Requejo and Mulroy)
U.S. Dept. of Education/NIDRR
H133G100268 10/01/10 – 09/31/13
The purpose of this project is to develop a modular system to assist and guide in the prescription of lower extremity orthosis for individuals with neuromuscular disorders.
Role: Co-Principal Investigator

“Shoulder Pain in SCI: A Longitudinal Study”
Principal Investigator: Mulroy, SJ
Agency: NIH
Type: R01 HD049774 08/01/06 - 7/31/11
The purpose of this project is to determine if the biomechanical parameters of wheelchair propulsion, shoulder muscle strength and wheelchair use can predict who will eventually develop shoulder pain in individuals who have paraplegia from spinal cord injury.
Role: Principal Investigator
“RERC for Successful Aging with Disability: Optimizing Participation through Technology (OPTT-RERC)”
Directors: Winstein CJ (USC), Requejo PS (RLANRC) (http://www.isi.edu/research/rerc/)
U.S. Dept. of Education/NIDRR
H133E080024 11/01/08 – 10/31/13
The goal of this project is to enhance the lives of individuals aging with and into disability through: (a) development and delivery of cutting-edge technologies for identification, evaluation, and rehabilitation of motor processes that facilitate or impede functional performance, employment, and community participation for the intended beneficiaries; (b) employment of state of the art data management, dissemination, and performance evaluation techniques to ensure that the knowledge and products emergent from the RERC are accessible for all intended beneficiaries.
Role: Co-Investigator
Rehabilitation Engineering Research Center—Keep Moving: Technologies to Enhance Mobility and Function for Individuals with Spinal Cord Injury
Project - "Engineering Solutions for a Shoulder-Preserving Wheelchair" Mulroy and Requejo (Co-Investigators)
H133E020732 Waters(PI) 11/01/02 – 10/31/07
U.S. Dept. of Education/NIDRR
The purpose of this project is to evaluate the effectiveness of alternative propulsion systems for reducing the shoulder stress associated with manual wheelchair use. Utilize a combined approach using laboratory-based experimentation and computer modeling to develop specific clinical criteria for prescription of traditional and alternative wheelchair propulsion designs.
Role: Co-Principal Investigator
“PTClinResNet: A Clinical research Network to Evaluate the Efficacy of Physical Therapist Practice”
Principal Investigator: Winstein, CJ
Agency: Foundation for Physical Therapy
Type: Research Network 01/01/03 - 12/31/07
The purpose of this project is to establish a research network for projects that examine the efficacy of resistance exercise-based Physical Therapist practice.
Role: Co-Lead Investigator for STEPS: Strength Training Effectiveness Post Stroke and Co-Lead Investigator for STOMPS: Strengthening and Optimal Movements for Persons with Spinal Cord Injury.

“Interventions for SCI Shoulder Function in Wheelchairs”
Principal Investigator: Mulroy, SJ
Agency: NIH
Type: R01 HD37098 04/01/01 - 3/31/06
The purpose of this project was to determine the effectiveness of two interventions at reducing the demands on the shoulder joint during wheelchair propulsion in individuals who have complete spinal cord injury. The two interventions include a strengthening exercise program for the shoulder joint muscles and alterations in the horizontal seat configuration of the wheelchair to improve the mechanics of the push phase.
Role: Principal Investigator
“SCI Shoulder Function in Assistive Device Gait”
Co-Principal Investigator: Mulroy, SJ
Agency: NIH
Type: R01 HD37544 09/31/00 - 9/31/03
The purpose of this project is to define the demands on the shoulder joint during walking with forearm crutches and wheeled walkers in individuals who have incomplete spinal cord injury and to determine the shoulder muscle strength required for assistive device use during gait.

Role: Co-Principal Investigator

Lisa Lighthall Haubert, MPT
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Valerie Eberly, PT, NCS
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Sandy Conners, PTA
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Philip Requejo, PhD
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Somboon Maneekobkunwong, MSME
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

RGMa inhibition promotes recovery from impaired motor function after spinal cord injury in rat and monkey

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Toshihide Yamashita, MD, PhD
Graduate School of Medicine, Osaka University

CV:
Toshihide Yamashita

Osaka University Distinguished Professor
Professor and Head, Department of Molecular Neuroscience and Department of Neuro-Medical Science, Graduate School of Medicine, Osaka University
Graduate School of Frontier Biosciences, Osaka University (adjunct)
WPI Immunology Frontier Research Center, Osaka University (adjunct)

Personal and contact information
Office Address: 2-2 Yamadaoka, Suita-shi, Osaka 565-0871, Japan
Work Phone: 81-6-68793661
Work Fax: 81-6-68793669
Work E-mail: yamashita@molneu.med.osaka-u.ac.jp

Education
1994.4 – 1996.4 Graduate Student, Graduate School of Medicine, Osaka University (withdrawn from a graduate course to become a Research Associate in Osaka University)
1990.3 Graduated from Osaka University Medical School

Degrees and Licenses
1997, Ph.D. (Osaka University)
1990, M.D. (Osaka University)
Medical License (1990~)

Professional Experience
2018.7–present Professor and Head, Department of Neuro-Medical Science, Grad. Sch. Med., Osaka University
2017–present Osaka University Distinguished Professor
2017–present PI, WPI Immunology Frontier Research Center, Osaka University
2007.12–present Professor and Head, Department of Molecular Neuroscience, Grad. Sch. Med., Osaka University
Graduate School of Frontier Biosciences, Osaka University (adjunct)
2003.11–2007.11 Professor and Head, Department of Neurobiology, Grad. Sch. Med., Chiba University
2001.2 – 2003.10 Associate Professor, Department of Anatomy and Neuroscience, Grad. Sch. Med., Osaka University
1998.7 – 2000.9 Research Fellow, Department of Neurobiochemistry, Max-Planck Institute of Neurobiology
1997.11 – 2001.1 Assistant Professor, Department of Anatomy and Neuroscience, Grad. Sch. Med., Osaka University
1996.5 – 1997.10 Research Associate, Department of Molecular Brain System, Grad. Sch. Med., Osaka University
1993.7 – 1994.3 Medical staff in Department of Neurosurgery, Minoh City Hospital
1992.7 – 1993.6 Medical staff in Department of Neurosurgery, Wakakusa Daiichi Hospital
1991.12 – 1992.6 Medical staff in Department of Psychiatry, Asakayama Hospital
1991.5 – 1991.11 Internship in Department of Neurosurgery, Osaka University Hospital
1990.6 – 1991.5 Internship in Department of Neurosurgery, Osaka Koseinenkin Hospital

Awards
2005 Ameritec Prize (USA); 2010 Japan Society for the Promotion of Science Prize (Japan); 2011 Osaka Science Prize (Japan); 2014 Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology

Statement of Achievements

Toshihide Yamashita, MD, PhD

Professor Yamashita's research has focused on restoration and regeneration of the injured central nervous system (CNS). During his stay in Germany, he tried to elucidate the function of neurotrophin receptor p75. Under the supervision of Dr. Yves-Alain Barde, he identified RhoA as an interactor of the p75 receptor and found that neurotrophins binding to the p75 receptor inactivates RhoA in 1999 (ref. 16). This finding provided the answer to the question how the complex neural network is formed during the developmental stage. He became a group leader since 2001 in Osaka, and has conducted and directed research on regeneration of the CNS. Specifically, he has explored the function of myelin-derived axon growth inhibitors, which are considered to suppress regeneration of the injured CNS. He found that the p75 receptor regulates axon outgrowth in response to several myelin-derived proteins (MAG, Nogo, and OMgp) as well as neurotrophins (NGF, BDNF, and NT3) through regulating the activity of small GTPases (ref. 25). The link of inhibitory signals to the p75 receptor grew out of the work in which he found an unexpected interaction of p75 with RhoA, a regulator of the actin cytoskeleton. In a seminal piece of lateral thinking, he explored whether this link of p75 to RhoA might be relevant to the actions of MAG, a key myelin-derived inhibitor of neurite growth. Unexpectedly, his experiments showed that p75 is actually required for MAG's inhibitory effects, and he went on to provide evidence that p75 transduces the inhibitory signal. These findings indicated that p75 is a bidirectional regulator of axon growth, as it was shown that p75 promotes formation of the neural network during the developmental stage but inhibits it after damage to the CNS in the adult. By this discovery (ref. 25), Dr. Yamashita received Ameritec Prize in 2005 for his significant contribution in the "demonstration that multiple myelin inhibitors of axonal regeneration mediate their actions by converging on a signaling pathway involving members of the p75 receptor family." The Prize is awarded annually in recognition of a specific, significant accomplishment in medical research toward functional recovery from spinal cord injury. Dr. Yamashita is the only recipient in Japan. By this discovery, he elucidated the reason why the neural network in the CNS cannot regenerate once injured at the molecular level. Furthermore, he identified that small GTPase RhoA is a key intracellular molecule that inhibits axon regeneration, and demonstrated that RhoA could be a molecular target to treat the injured CNS. In 2003, Dr. Yamashita uncovered the precise molecular mechanism of regulation of RhoA activity by 75 (ref. 35). P75 worked as a displacement factor that releases RhoA from RhoGDI, thus leading to RhoA activation and inhibition of axon growth. Indeed, the inhibitors of the myelin signal, that have been developed, are currently on the clinical trial in acute spinal cord injury patients in the USA and Canada.
In these 10 years, Dr. Yamashita identified new axon growth inhibitors and explored their signal transductions. He provided in vivo evidence to show that repulsive guidance molecule (RGM) and Wnt-5 are inhibitors of axon regeneration. Especially, he found that inhibition of repulsive guidance molecule (RGM) by a neutralizing antibody prominently promoted axon regeneration and functional recovery after spinal cord injury in rats (ref. 55). Afterwards, he explored the precise molecular mechanism of axon growth inhibition by RGM (ref. 79). His group identified a receptor complex comprising of Unc5B, a member of the netrin receptor family, and neogenin. Moreover, leukemia-associated Rho guanine nucleotide-exchange factor associates with Unc5B to transduce the RhoA signal. Focal adhesion kinase is also involved in RhoA activation. These findings uncovered the molecular basis for axon growth inhibition mediated by RGMa, and provide additional molecular targets. Dr. Yamashita is now developing humanized antibody that targets RGM in collaboration with Mitsubishi Tanabe Pharma, the Japanese major pharmaceutical company. This project has been supported by big grants for applied biomedical research from the Japanese Government, and has reached to the preclinical stage and expects to proceed to the clinical trial in 2019. His goal is to establish the therapeutic strategy to treat patients with CNS diseases, and he is moving toward this goal step by step. The Japan Society for the Promotion of Sciences (JSPS) Prize (2011), Osaka Science Prize (2012) and Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology (2014) were awarded to him for his outstanding discovery of molecular

mechanisms regulating the regeneration and plasticity of injured CNS.
Recent studies by Dr. Yamashita focuses on intrinsic capacity to form restorative neural network in the CNS. Initial behavioral deficits resulting from brain injury are frequently followed by spontaneous recovery of function, although this recovery is quite limited. It has been noted that synaptic plasticity in pre-existing pathways and the formation of new circuits through collateral sprouting of lesioned and unlesioned fibers are important aspects of the spontaneous recovery process (ref. 119). Although reorganization of the neural network is considered to contribute to this recovery, behavioral plasticity is not fully understood. Furthermore, the molecular mechanism of this phenomenon is poorly understood. He aims to elucidate the mechanisms underlying this plasticity, knowledge of which will contribute to enhancement of functional recovery after injury to the central nervous system. He has explored the mechanism of this behavioral plasticity, and more importantly, he has obtained evidence to show that immune modulation, inflammation-induced neovessels, and some types of microglia enhance or inhibit plasticity and survival of neurons by secreting trophic factors or cytokines (refs. 99, 118, 126, 139). Disorders of the central nervous system, such as cerebrovascular diseases, cerebrospinal trauma, and encephalomyelitis, often cause spatiotemporal changes in the nervous system and in various biological systems, such as the immune system and vascular system. He analyzed the mechanism by which the spatiotemporal dynamics in those biological systems control a series of processes. Additionally, he aimed to elucidate the principles involved in the operation of living organisms with neural network disorders within the central nervous system by observing such disorders and their functional recovery process with respect to the dynamics of the entire biological system and by conducting a comprehensive analysis of the association between each system. These immune cells, neovessels, and microglia may prove to be drug targets for the treatment of CNS injuries, CNS inflammation, and neurodegenerative diseases.

The use of dual energy x-ray absorptiometry to predict thigh skeletal muscle mass

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Robert Lester, BS
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Mina Ghatas, MS
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Rehan Khan, MD
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Influence of Adiponectin and Testosterone on markers of cardio-metabolic risk factors after spinal cord injury

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Ashraf Gorgey, MPT, PhD
Hunter Holmes Mcguire Va Medical Center

CV:
Accepted Publications out of 102
76. Farkas GJ, Gorgey AS, Dolnbow DR, Berg AS, Gater DR. Gender dimorphism in the distribution of adipose tissue and its influence on proinflammatory adipokines in motor complete spinal cord injury. Journal of Spinal Cord Medicine-Accepted

77. Gorgey AS, Farkas GJ, Dolnbow DR, Gater DR. Gender differences may explain metabolic dysfunction after Spinal Cord Injury. PMR Journal. Accepted.

78. Ogawa M, Lester R, Akima H, Gorgey AS. Intermuscular adipose tissue (IMAT) and intramuscular adipose tissue (IntraMAT) quantification by magnetic resonance imaging. Neural Regeneration Research. Accepted

79. Murphy DP, Bai O, Gorgey AS, Fox J, Lovegreen W, Burkhardt B, Atri R, Marquez J, LLi Q, Yu Fei D. User's Direct Control of Prosthesis using Brain-Computer Interfaces. Frontiers in Neuroscience. Accepted

80. Segal LV, Sumrell R, Gorgey AS. Anthropometric prediction of visceral adipose tissue and subcutaneous adipose tissue in persons with SCI. PMR. Accepted.

81. Gorgey AS, Khalil R, Lester R, Dudley GA, Gater DR. Paradigms of Lower Extremity Electrical Stimulation Training after Spinal Cord Injury. J Vis Exp (JoVE). Accepted

82. Abillmona S, Gorgey AS. Associations of the trunk skeletal musculature and dietary intake to biomarkers of cardiometabolic health after spinal cord injury. Journal of Clinical Physiology and Functional Imaging. Accepted.

83. Nightingale T, Gorgey AS. Predicting basal metabolic rate in men with motor complete spinal cord injury. Medicine & Science in Sports & Exercise. Accepted

84. Lester R, Gorgey AS. Robotic Exoskeleton Training in a Tetraplegic Individual with C4 Spinal Cord Injury: A Case Report. Journal of Spinal Cord Series and Cases. Accepted

85. Wade R, Lester R, Gorgey A. Cross-validation of anthropometrically predicated muscle CSA following SCI. International Journal of Sports Medicine. Accepted

86. Rankin KC, O'Brien LC, Gorgey AS. Quantification of trunk lean mass using DXA compared to MRI after SCI. Journal of Spinal Cord Medicine. Accepted

87. Gorgey A, Cirnigliaro C, Bauman W, Adler D. Precision of dual-energy x-ray absorptiometry in measuring regional and whole-body composition after spinal cord injury. Spinal Cord Journal. Accepted

88. O'Brien LC, Graham ZA, Chen Q, Cardozo C, Lesnefsky EJ, and Gorgey AS. Plasma adiponectin levels are correlated with body composition, metabolic profiles and mitochondrial markers in individuals with chronic SCI. Spinal Cord. Accepted

89. Gorgey AS and Holman M. Exoskeleton and Gait Mechanics. Journal of Spinal Cord Medicine. Accepted

90. Ghatas MP, Lester R, Khan R, Gorgey AS. Automated Segmentation of MRI Thigh Skeletal Muscle and

Fat using Threshold Technique after Spinal Cord Injury. Neural Regeneration Research. Accepted

91. Gorgey AS. Robotic Exoskeleton: Pros and Cons. World Journal of Orthopedic. Accepted

92. Sumrell R, Nightingale T, Gorgey AS. Anthropometrics cut-offs and associations with visceral adiposity and cardiometabolic risk factors after spinal cord injury. PLOS One. Accepted

Oral Presentations in the last 5 years
3. Different Training Paradigms and Mitochondrial Health after SCI
Chair: Ashraf S. Gorgey (ACRM 2018-Dallas-TX)
Presenters: Ashraf S. Gorgey, Kevin McCully

4. Visceral Adiposity and Cardio-Metabolic Risk Factors after Spinal Cord Injury
Chair: Ashraf S. Gorgey (ACRM 2018-Dallas-TX)
Presenters: Ashraf S. Gorgey

5. FES Exercise for Health, Fitness and Clinical Benefits: The State of the Art. ISCOS Australia-September 2018 (Accepted)
Professor Glen Davis, Dr Ashraf Gorgey, Dr Ines Bersch-Porada, A/Prof Nazirah Hasnan.

6. Electrical Stimulation Paradigms to Improve Bone and Muscle Health in Adults and Children with Spinal Cord Injury. ISCOS Australia-September 2018 (Accepted)
Presenters: Therese Johnston (Chair), Gail Forrest, Ashraf S. Gorgey

7. FES Exercise for Health and Fitness Benefits: The state of the art
RehabWeek Conference in London, UK-July 2017
Presenters: Glen Davis, Ashraf Gorgey, Ines Bersch-Porada, Nazirah Hasnan
Professor Glen Davis – “Alterations of aerobic fitness and cardiovascular responses after FES training”
Dr Ashraf Gorgey – “Humoral and intramuscular changes of metabolism after FES exercise”
Dr Ines Bersch-Porada – “Bone and skin quality after FES exercise”
A/Prof Nazirah Hasnan – “Clinical and functional outcomes after FES training”

8. Training Outcomes of Functional Electrical Stimulation in Persons with Spinal Cord Injury
Chair: Gail Forrest (ACRM 2017- Atlanta, GA)

9. Rehabilitation Paradigms in Restoring Lean Mass and Bone Mass after SCI. ASIA 2017 in Albuquerque, New Mexico
Chair: Ashraf S. Gorgey
Presenters: Ashraf S. Gorgey, Therese Johnston, Gail Forrest

10. Different Application Forms of Electrical Stimulation in Persons with SCI-ISCOS Austria-September 2016
Presenters: Vanesa Bochkezanian and Ashraf S. Gorgey

11. Training Outcomes of Functional Electrical Stimulation, Testosterone and Exoskeleton in Persons with Spinal Cord Injury
Chair: Ashraf S. Gorgey (ACRM 2016- Chicago Illinois)
Presenters: Ashraf S. Gorgey, Therese Johnston, Gail Forrest

12. Cellular Adaptations in Response to Different Training Paradigms after Spinal Cord Injury
Chair: Ashraf S. Gorgey (ACRM 2016-Chicago Illinois)
Presenters: Ashraf S. Gorgey, Ceren Yarar-Fisher, Kevin McCully

13. Retraining the Vasculature for Cardio-metabolic Health after Spinal Cord Injury
Chair: Kevin McCully (2016 Annual Meeting, World Congress on Exercise is Medicine®, and World Congress on The Basic Science of Energy Balance in Boston, Massachusetts, May 31-June 4.
Presenters: David R. Dolbow; Lee Stoner; Daniel P. Credeur; Ashraf S. Gorgey
Nutrition and Dietary Habits to Address Body-composition and Cardio-metabolic Health Problems after

Spinal Cord Injury
Ashraf S. Gorgey, FACSM. Hunter Holmes McGuire VA Hospital, Richmond, VA.

14. Bone Health Post Spinal Cord Injury: Current State of the Knowledge and Evidence for Change following PT Interventions
Chair: Therese Johnston (Combined Section Meeting Neurology: SCI SIG for CSM 2016, Anhiem, CA)
Presenters: Therese Johnston, Ashraf S. Gorgey, Gail Forrest, Richard Shields.

15. A Multi-Dimensional Approach To Combating Obesity Among Persons With Spinal Cord Injury
Chair: Nick Evans (ACRM 92st Annual Conference Meeting-Dallas, TX, 2015)
Presenters: Ashraf S. Gorgey, Maiya Slusser, MS, RD; Brooks Wingo, PhD

16. Optimizing Health Benefits of FES Exercise after Spinal Cord Injury.
Chair: Ashraf S. Gorgey (2015 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise Fatigue in San Diego, California, May 26-30)
Speakers: Ashraf S. Gorgey; Kevin McCully, Richard Shields, Glen Davis

17. Electrical Stimulation Training in Persons with Spinal Cord Injury: Outcomes of Clinical Trials.
Chair: Ashraf S. Gorgey (ACRM 91st Annual Conference Meeting-Toronto, CA, 2014)
Presenters: Ashraf S. Gorgey, Gail Forrest, Therese Johnston

Sally Abilmona, BS
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Ryan Sumrell, BS
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Ranjodh Gill, MD
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Robert Adler, MD
Hunter Holmes Mcguire Va Medical Center

(no CV uploaded)

Noninvasive Transspinal Stimulation to Decrease Reflex Hyperexcitability and Treat Spasticity After Spinal Cord Injury

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Maria Knikou, PT, PhD
City University of New York

CV:
A. Personal Statement

I am currently a Professor of Clinical Neurophysiology and Research Director. I have an active research laboratory (Klab4Recovery), with 3 postdoctoral research fellows (Lynda Murray, PhD, Timothy Pulverenti, PhD, and Md. Anamul Islam, PhD), 1 research coordinator (Joy Cox, PhD), 8 DPT students, 1 visiting research scientist (Ola Alsalman, PhD), 1 undergraduate student (Bharati Dev), and 1 high school student (Jeffrey Li).

I have a solid background in Clinical Neurophysiology and Biomedical Engineering, with specific training on neurophysiological methods delineating activity, modulation, and sensorimotor integration of spinal, corticospinal, and cortical neural circuits in people with and without Spinal Cord Injury. My research since 1995 has been focused on pathological reorganization of neuronal circuits after SCI, and on the mechanisms underlying functional neuroplasticity after training. I have served as Princicpal Investigator/Program Director in multiple multi-year grants/contracts awarded by the Spinal Cord Injury Research Program of the New York State Department of Health, the Craig H. Neilsen Foundation, and the NIH. For all grants/ contracts, I successfully administered the projects (e.g. staffing, research protections, budget), collaborated with researchers from different disciplines promoting inter-professional and inter-disciplinary collaboration, and produced several original works of high quality for each grant-funded research project.
The work on transspinal stimulation in the “Motor Control and NeuroRecovery Research Laboratory; Klab4Recovery”, which I direct, started in 2008. At that time we focused on conditioning reflex protocols in order to delineate the physiological characteristics of the transspinal evoked potentials (TEPs) recorded from leg muscles. These observations along with established works on repetitive electrical and magnetic stimulation evolved into research projects on the physiological mechanisms of action following repetitive transspinal stimulation over the cervical or thoracic region delivered at rest and currently working on research studies during which thoracic stimulation is delivered when paired with transcortical stimulation at rest and/or during Lokomat step training in people with motor incomplete SCI.

B. Positions and Honors
Positions and Employment
2002-2003 Assistant Professor (tenure), Faculty of Health Sciences, Department of Physical Therapy, Technological Educational Institute of Lamia, Lamia, Greece
2003-2006 Assistant Professor (tenure-track), City University of New York (CUNY), Doctor in Physical Therapy Program, Staten Island, NY
2002-2012 Adjunct Assistant Professor, Dept. of Physical Medicine and Rehabilitation, Feinberg School of Medicine, Northwestern University, Chicago IL
2006-2008 Associate Professor (tenure-track), Doctor in Physical Therapy Program, CUNY, Staten Island NY
2008-2012 Associate Professor (tenure), Graduate Center of CUNY
2008-2012 Director, Electrophysiological Analysis of Gait and Posture Laboratory, SMPP, RIC
2002- Research Scientist, Sensory Motor Performance Program, Rehabilitation Institute of Chicago, Chicago IL
2002- Director, Motor Control and NeuroRecovery Research Laboratory, CUNY, NY
2012- Research Associate Professor, Dept. of Physical Medicine and Rehabilitation, Feinberg School of Medicine, Northwestern University, Chicago IL
2012- Professor, Graduate Center of CUNY and College of Staten Island, Departments of Physical Therapy, Neuroscience, and PhD Program in Biology
2014- Deputy Chair of Research and Faculty Development, Department of Physical Therapy

Other Experience - Professional Memberships & Service to Scientific Community
Clinical Experience:
1986-1987 Clinical Internship, Asklipeion General Hospital of Athens, Greece
1987-1988 Clinical Internships, Athens Navy Hospital and National Institute of Rehabilitation, Greece
1987-1993 Physical Therapist, 25 h/week, Private Practice, Greece
1993-1995 Physical Therapist, Full time, Private Practice, Greece
Professional Membership:
2001- Member, Society for Neuroscience
2004- Mentor, Women in Neuroscience, Society for Neuroscience
2006- Member, American Physiological Society
2007- Member, New York Academy of Sciences
Editorial Work:
2015- Editorial Board Member: Journal of Neurophysiology
2015- Editorial Board Member: Clinical Neurophysiology

Journal Reviewer:
I serve as an Ad Hoc Reviewer for numerous scientific journals (Clin Neurophysiol, J Neurophysiol, Exp Brain Res, Neurosci Letters, Brain, Eur J Neurol, Exp Neurol, J Clin Neurophysiol, J Neurosci Methods, J Physiol, Neuroscience, etc).
An example of my recognition as a reviewer is indicated below:
2017, Recognized Reviewer, Clinical Neurophysiology and Journal of Electromyography and Kinesiology
2016, Certificate of Outstanding Contribution in Reviewing, Journal of Electromyography and Kinesiology, Clinical Neurophysiology
2016, Recognized Reviewer, Neuroscience Letters
2016, Star Reviewer, Journal of Neurophysiology

Scientific Grant Reviewer:
• US Department of Defense, Spinal Cord Injury Research Program
• Rehabilitation Research and Development, Office of Research and Development, Department of Veterans Affairs
• Wings for Life, Spinal Cord Research Foundation, Salzburg, Austria
• Royal Society of Edinburgh, Scotland
• Research Foundation Flanders, Belgium
• The Craig H. Neilsen Foundation, USA
• National Science Foundation of Austria, Austria
• Research Foundation, State University of New York, NY USA
• Icelandic Research Foundation, Iceland

Honors/Awards
1995 Pre and Doctoral Fellowship, Hellenic Government Scholarship Foundation.
2000, 2001 Sarah Baskin Award for Excellence in Research, Department of Physical Medicine and Rehabilitation, Northwestern University Medical School, Chicago IL
2002 Sarah Baskin Award for Excellence in Research, Feinberg Medical School, Northwestern University, Rehab Inst of Chicago; In: Basic Science and Engineering, Chicago IL
2009 Salute to Scholars Award, The Graduate Center, City University of New York
2010 Salute to Scholars Award, The Graduate Center, City University of New York
2010 Human Frontier Science Program (HFSP) Research Fellow
2012 Salute to Scholars Award, The Graduate Center, City University of New York
2014 American Physiological Society Star Reviewer
2014 Outstanding Contribution in Reviewing, Clinical Neurophysiology
2014 Outstanding Contribution in Reviewing, Brain Research
2015 Dr. George C. Cotzias Medal for contributions to the understanding of human movement in health and disease by the Hellenic Society of Physiology, Athens, Greece.

C. Contributions to Science (papers indicated below are from a total of 54)

Sensory control of spinal circuits in human SCI. It is long known that sensory feedback from receptors registering muscle stretch and muscle load plays an important role in execution and quality of human movement. However, to what extent sensory feedback affects the function of spinal neural circuits in people with SCI was poorly understood. My work on this area of research demonstrated that foot sole afferents modulate spinal reflexes in a similar pattern to that observed in healthy subjects, and normalize the pathological behavior of spinal reflexes during walking in people with SCI. We also demonstrated for the first time that sensory feedback from the hip region interact with spinal locomotor interneuronal circuits, similar to that described for decerebrated or spinalized animals. My studies in human SCI brought awareness to the scientific community of the importance of neuromodulation in neurorecovery after SCI in humans, while in the United Kingdom, pressure soles have been developed to assist walking of persons living with motor incomplete SCI. I served as the primary investigator in all of these studies.
1. Knikou M, Conway BA (2001) Modulation of soleus H-reflex following ipsilateral mechanical loading of the sole of the foot in normal and complete spinal cord injured human subjects. Neuroscience Letters May; 303 (2): 107-110.
2. Knikou M, Conway BA (2005) Effects of electrically induced muscle contraction on flexion reflex in human spinal cord injury. Spinal Cord Nov; 43 (11): 640-648.
3. Knikou M, Kay E, Rymer WZ (2006) Modulation of flexion reflex induced by hip angle changes in human spinal cord injury. Experimental Brain Research Jan; 168 (4): 577-586. PMID: 16177832
4. Knikou M (2010) Plantar cutaneous afferents normalize the reflex modulation patterns during stepping in chronic human spinal cord injury. Journal of Neurophysiology 103 (3): 1304-1314.

Cortical control of locomotion in humans. During human walking, spinal neural networks interact continuously with supraspinal centers to produce efferent activity appropriate to the phase of the step cycle or motor task. With a team of collaborators at the Rehabilitation Institute of Chicago and UPMC Univ Paris 06 in France, I directly documented that corticospinal control of reciprocal Ia inhibition is stronger during standing than during walking, and that the phase-dependent modulation of motor evoked potentials is not altered during conditions of reduced body weight support (BWS) during walking. These publications support that BWS provided during gait training do not affect negatively corticospinal excitability, and that upright posture can be improved by strengthening corticospinal connections with Ia inhibitory interneurons through targeted neuromodulation protocols in neurological disorders. I served as the primary investigator in all of these studies.
1. Knikou M, Hajela N, Mummidisetty CK (2013) Corticospinal excitability during walking in humans with absent and partial body weight support. Clinical Neurophysiology Dec; 124 (12): 2431-2438, DOI: 10.1016/j.clinph.2013.06.004.
2. Hanna-Boutros B, Sangari S, Giboin L-S, El Mendili MM, Lackmy-Vallee A, Marchand-Pauvert V, Knikou M (2015) Corticospinal and reciprocal inhibition actions on human soleus motoneuron activity during standing and walking. Physiological Reports 3 (1), 2015, e12276, DOI: 10.14814/phy2.12276.

Locomotor Training and Neurorecovery in people with SCI. Locomotor training on a motorized treadmill with BWS has been utilized for more than 30 years for recovery of walking ability in people with SCI. However, the physiological mechanisms underlying locomotor recovery were largely unexplored, limiting rehabilitation outcomes. With a team of collaborators at the Rehabilitation Institute of Chicago, we documented for the first time the reorganization of complex spinal interneuronal circuits during assisted stepping after 45 sessions of locomotor training, and that the spinal circuits do not reorganize in a similar manner in the left and right legs. These studies emphasized that SCI is not symmetrical, and that one of the most important circuits for recovery of walking is that of reciprocal inhibition. Also, based on the reorganization of the soleus H-reflex targeted neuromodulation strategies can be developed for these patients. I served as the primary investigator in all of these studies.
1. Knikou M (2013) Functional reorganization of soleus H-reflex modulation during stepping after robotic-assisted step training in people with complete and incomplete spinal cord injury. Experimental Brain Research, July; 228 (3): 279-296. DOI: 10.1007/s00221-013-3560-y.
2. Knikou M, Mummidisetty CK (2014) Locomotor training improves premotoneuronal control after spinal cord injury. Journal of Neurophysiology, June; 111 (1): 2264-2275. DOI: 10.1152/jn.00871.2013.
3. Smith AC, Mummidisetty CK, Rymer WZ, Knikou M (2014) Locomotor training alters the behavior of flexor reflexes during walking in human spinal cord injury. Journal of Neurophysiology Nov; 112(9): 2164-2175, DOI: 10.1152/jn.00308.2014.
4. Smith AC, Rymer WZ, Knikou M (2015) Locomotor training modifies soleus monosynaptic motoneuron

responses in human spinal cord injury. Experimental Brain Research Jan; 233: 89-103. DOI: 10.1007/s00221-014-4094-7.

Transspinal Stimulation. The benefits of stimulation are known since 2750 BC based on Greek literature reporting the use of torpedo ray. Electric stimulation was established as treatment in 36 AD by the Roman Emperor Tiberius. However, even today we do not fully understand how stimulation works. Further, most rehabilitation interventions rely on integration of sensory feedback by pathological neuronal circuits. With my research team members, we documented the neurophysiological characteristics of the TEPs in response to cervical or thoracic transcutaneous stimulation of the spine (termed transspinal), how they interact with motor descending volleys, and how they respond when other afferents are stimulated. Further, we have shown the underlying neuroplasticity following single and repetitive sessions of transspinal stimulation in people with and without SCI at rest. We currently work to provide neurophysiological evidence on how thoracic transspinal stimulation works during Lokomat assisted step training in order to develop effective rehabilitation strategies for recovery of leg sensorimotor function after SCI. I served as the primary investigator in all of these studies.

1. Murray LM, Tahayori B, Knikou M (2018) Transspinal direct current stimulation produces persistent plasticity in human motor pathways. Scientific Reports 8(1):717. doi: 10.1038/s41598-017-18872-z.
2. Murray LM, Knikou M (2017) Remodeling brain activity by repetitive cervicothoracic transspinal stimulation after human spinal cord injury. Frontiers in Neurology Feb; 8: 50. doi: 10.3389/fneur.2017.00050
3. Knikou M, Dixon L, Santora D, Ibrahim MM (2015) Transspinal constant-current long-lasting stimulation: a new method to induce cortical and corticospinal plasticity. Journal of Neurophysiology Sep; 114: 1486-1499, doi:10.1152/jn.00449.2015.
4. Knikou M (2014) Transpinal and transcortical stimulation alter corticospinal excitability and increase spinal output. PLoS ONE July; 9(7): e102313. doi: 10.1371/journal.pone.0102313.
5. Knikou M (2013) Neurophysiological characterization of transpinal evoked potentials in human leg muscles. Bioelectromagnetics Dec; 34 (8): 630-640. doi: 10.1002/bem.21808.
6. Knikou M (2013) Neurophysiological characteristics of human leg muscle action potentials evoked by transcutaneous magnetic stimulation of the spine. Bioelectromagnetics April; 34(3):200-210, DOI:10.1002/bem.21768.
7. Einhorn J, Li A, Hazan R, Knikou M (2013) Cervicothoracic multisegmental transpinal evoked potentials in humans. PLOS ONE Oct; 8 (10) e76940, DOI: 10.1371/journal.pone.0076940.
8. Dixon L, Ibrahim MM, Santora D, Knikou M (2016) Paired associative transspinal and transcortical stimulation produces plasticity in human cortical and spinal neuronal circuits. Journal of Neurophysiology Aug; 116: 904-916, doi: 10.1152/jn.00259.2016.

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/1t5bUQlh6ba/bibliography/47376828/public/?sort=date&direction=ascending

D. Additional Information: Research Support and/or Scholastic Performance

Active Research Support
Contract C33276GG Knikou (PI) 06/01/2018 - 05/31/2021
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Program
Title: Activity-Dependent Transspinal Stimulation for Recovery of Walking Ability after SCI
The goal of this project is to establish the effects of transspinal stimulation delivered at different stimulation frequencies along with Lokomat® assisted step training on cortical and spinal excitability in people with motor incomplete SCI.
Collaborator Co-PI: Noam Harel, MD, PhD (VA Bronx Medical Center & Mt. Sinai Medical School)

Contract C32095GG Knikou (PI) 01/01/2017-01/01/2020
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Program
Title: Transspinal-Transcortical Paired Stimulation for Neuroplasticity and Recovery after Spinal Cord Injury
The goal of this project is to establish the effects of repetitive paired associative thoracolumbar transspinal

and transcortical stimulation on cortical and spinal excitability when paired stimulation is delivered at rest and during Lokomat® assisted step training in people with motor incomplete SCI.

Contract C322248GG Knikou (PI) 01/01/2017-01/01/2022
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Board
Title: Institutional Support for Spinal Cord Injury Research (Round 6)
Institutional Support to support research in SCI is provided to New York State PI's with an active research program on SCI research, based on extramural funding. Though this institutional support and other active grants the PI was able to purchase and install the Lokomat 6 pro at the Klab4Recovery.

Grant 339705 Knikou (PI) 09/30/2015-08/30/2018
The Craig H. Neilsen Foundation
Title: Transpinal stimulation to increase neuroplasticity and recovery after SCI
The goal of this project is to establish the effects of transcutaneous stimulation of the thoracolumbar region with constant and direct current on cortical and spinal neural circuits responsible for leg movement in healthy people and people with SCI.

Completed Research Support (last 4 years)
Contract C30836GG Knikou (PI) 02/01/2016 - 10/31/2016
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Program
Title: Effects of Spinal Cord Stimulation on neuroplasticity, functional recovery and spinal cell regeneration after Spinal Cord Injury.
This was an Institutional Support for Spinal Cord Injury Research, supporting the PI's research works on spinal cord injury, and contributing to purchase of laboratory equipment, research supplies, subject stipends, and publication costs.

S13I-011 Knikou (PI) 10/01/2013-09/01/2014
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Program
Title: Functional neuroplasticity at sub-acute and chronic phases of SCI
This was Institutional Support by the NYSDOH to develop the infrastructure of labs conducting research in NYS with the proposed project goals to investigate neuroplasticity changes following electromagnetic stimulation of the head and spine in humans after SCI.

Contract C023690 Knikou (PI) 07/01/2009 - 08/30/2014
New York State Department of Health (NYSDOH), Wadsworth Center, Spinal Cord Injury Research Program
Title: Mechanisms Underlying Locomotor Recovery after Step Training in Spinal Cord Injury.
The goal of this project was to establish the mechanisms and the changes of specific spinal neuronal pathways underlying recovery of walking and sensorimotor function following intensive treadmill training in people with Spinal Cord Injury. We proposed that locomotor training induces physiological reflex modulation patterns and reorganization of spinal inhibitory circuits.

Lynda Murray, PhD
City University of New York

(no CV uploaded)

Determining priorities in functional rehabilitation related to quality of life one-year following a traumatic spinal cord injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Andreane Richard-Denis, M.D., M.Sc.
Hôpital Sacré-Coeur De Montreal

CV:
Biographical Sketch

NAME: Andréane Richard-Denis
POSITION TITLE: Associate professor

EDUCATION AND TRAINING:
INSTITUTION DEGREE YEAR FIELD OF STUDY
University of Sherbrooke M.D. 2008 Medicine
University of Montreal Residency 2013 Physical Medicine &Rehab
University of Montreal M.S. 2016 Biomedical Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE
Positions and Employment
2013-... Physical Medicine and Rehabilitation specialist, Sacré-Coeur Hospital, Canada
2013-... Physical Medicine and Rehabilitation specialist, CDN clinic, Canada
2016-... Associate professor, Department of Medicine, University of Montreal
2016-... Head of department of PM&R, Sacré-Coeur Hospital, Canada
2017-... Clinical-scientist, Sacré-Coeur Hospital Research Center, Canada
2017-... Emergent researcher, Quebec provincial network of research (REPAR), Canada
2018-22 Clinical Research Scholar- J1, Fonds de recherche Québec Santé (FRQS), Canada

Other Experience and Professional Memberships
2016-... Member, American Spinal Injury Association
2017-... Member, PM&R Research Committee program, University of Montreal
2018-... Reviewer for Journals: J Spinal Cord Medicine, Spinal Cord J, Am J Phys Medicine & Rehab

Honors
2013 Mentor Program Training Scholarship, Canadian Institute of health Research
2017 Nomination for Raymond-Fortin Research Price (Best article), Quebec Physiatry Association
2017 Nomination for Best Poster, American Spinal Injury Association (2 posters nominated)
2018-22 Salary award for clinician-scientist, Fonds de Recherche Quebec-Santé

PUBLICATIONS AND PRESENTATIONS
Peer-reviewed publications on spinal cord injury
* Students under the applicant supervision
1. Greciet N*, Mac-Thiong JM, Nguyen BN, Richard-Denis A. Spinal shock: the functional impact of the absence of a bulbocarveous reflex in the post-operative period following a complete traumatic spinal cord injury. Spinal Cord (Submitted in September 2018)
2. Richard-Denis A, Chatta R, Thompson C, Mac-Thiong JM. Patterns of recovery from the acute to chronic phase following traumatic spinal cord injury : a prospective cohort study. Clinical rehabilitation (Submitted Sept 2018)
3. Richard-Denis A, Benazet D*, Thompson C, Mac-Thiong JM. Determining priorities in functional rehabilitation related to quality of life one-year following a traumatic spinal cord injury. Accepté pour publication dans J Spinal Cord Med (August 25th)
4. Richard-Denis A, Nguyen BH, Mac-Thiong JM. The impact of early spasticity on intensive functional rehabilitation and community reintegration following traumatic spinal cord injury. (Accepted for publication with minor revisions in the J Spinal Cord Med (July 10th)

5. Richard-Denis A, Thompson C, Mac-Thiong JM. Quality of life in the subacute period following a surgical cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective cohort study. (Accepted for publication in Spinal Cord J (June 15th)
6. Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong JM. Early predictors of global functional outcome after a traumatic spinal cord injuty : a systematic review. (Accepted for publication in J Neurotrauma) (Feb 2018).
7. Goulet J, Richard-Denis A (20%), Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. (Accepted for publication in Am J Phys Med Rehab) (Feb 23th).
8. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2018;41(3) :309-317.
9. Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong JM. The use of classification tree algorithms to assess the influence of surgical timing on the neurological recovery following traumatic spinal cord injury. (Accepted in Spinal Cord J) (29 janvier 2018)_ featured paper of the month.
10. Richard-Denis A, Thompson C, Mac-Thiong JM. Reply : to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury: comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14(5) :885.
11. Facchinello Y, Beausejour M, Richard-Denis A, Thompson C, Mac-Thiong JM. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 [Epub ahead of print].
12. Richard-Denis A, Feldman E D, Thompson C, Albert, M. Mac-Thiong JM. The impact of acute management in a SCI-specialized center on tracheostomy and duration of mechanical ventilation support in patients with a complete cervical traumatic spinal cord injury. Spinal Cord J [Epub ahead of print].
13. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a two-level scale based on the Spinal Cord Independence. Intern Phys Med and Rehabil J 2017;5 :4.
14. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med. 2017; 19 :1-18 [Epub ahead of print].
15. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury : comparison with the use of a gel mattress. Int Wound J 2017;14(5) :874-881.
16. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: The impact of early transfer to specialized acute SCI-center (CME ARTICLE). Am J Phys Med Rehabil. 2016;96(7) :449-56.
17. Richard-Denis A, Thompson C, Bourrassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehab 2016. Apr;95(4):300-8.

Presentations
1. Richard-Denis A, Gagnon D, Barthelemy D, Boyer L, Sweet S. What's up, What's new in the Spinal Cord Injury Field?: Expert's panel. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation) Guest Speaker
2. Richard-Denis A. The changing demographics of traumatic spinal cord injury : impact on the continuum of care. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation)_ Guest Speaker
3. Richard-Denis A, Mac-Thiong JM, Albert M. The acute management of traumatic spinal cord injuries : the impact of the continuum of care. (Provincial Interdisciplinary Traumatology Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation) _ Guest Speaker

4. Richard-Denis A. Predictors of quality of life following spinal cord injury. Interdisciplinary Traumatology Provincial Meeting (Provincial Interdisciplinary Traumatologu Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation)
5. Richard-Denis A, Rami Chatta, Mac-Thiong JM. Does the functional outcome 6 months after a traumatic spinal cord injury predict the chronic functional outcome 12 months after the injury? Annual ASIA meeting, Rochester, MN, USA (May 5th 2018) (Oral Presentation)

6. Goulet J, Richard-Denis A, Thompson C, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. 18th Annual Scientific Conference of the Canadian Spine Society. Banff, Al, Can (Feb28th-March3rd 2018).
7. Richard-Denis A. Early opportunities to improve chronic functional outcome following traumatic spinal cord injury. Annual ASIA Meeting. Rochester, MN, USA (Poster) (May 5th 2018) (Oral Presentation)
8. Richard-Denis A. Acute predictors of functional outcome following spinal cord injury. Quebec Physiatry Association Annual Meeting, Lac Beauport, Quebec, Can (Sept 2017) (Oral presentation) (Oral Presentation)

9. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Research seminar Sacré-cœur Hospital research center. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (Oral presentation) (May 2017)
1. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Trauma research day. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (June 2017)(Oral presentation)
2. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
3. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with traumatic cervical spinal cord injury : proposal of a new 2-level scale based on the Spinal Cord Independence Measure version III. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
4. Mac-Thiong JM, Richard-Denis A, Thompson C. Expectations in chronic QOL following cervical traumatic spinal cord injury based on the initial severity of the neurological injury. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) (Oral presentation)
5. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Requirement for tracheostomy and duration of mechanical ventilation support in patients with complete cervical traumatic spinal cord injury. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
1. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. The impact of acute management in a specialized SCI-center on the occurrence of medical complications following motor-complete cervical SCI. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
2. Richard-Denis A, Feldman D, Bourassa-Moreau E, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with a motor-complete spinal cord injury following cervical trauma : impact of early peri-operative management in a specialized acute SCI center. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
3. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Predictive factors of functional recovery six months following traumatic tetraplegia and paraplegia : the impact of acute hospitalization care. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
4. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Joint American Spinal Cord Injury Association (ASIA) and International Spinal Cord Society (ISCoS) annual conference (Montreal, QC, Canada) (April 2015) (Poster).
5. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Neurotrauma Research day, Sacre-Cœur Hospital, Montréal, Qc. (Oral presentation)
6. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Student Research Symposium Sacré-Cœur Hospital, Montréal, Qc. (May 2015) (Oral presentation)
7. Richard-Denis A. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Student Research Symposium CRIR, Montréal, Qc. (May 2014) (Oral presentation)
8. Richard-Denis A, Thompson C, Bourassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? American Spinal Cord Injury Association (ASIA) (Denver, CO, USA) (May 2013) (Oral presentation).

Quality of life in the subacute period following a cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective cohort study

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Andreane Richard-Denis, M.D., M.Sc.
Hôpital Sacré-Coeur De Montreal

CV:
Biographical Sketch

NAME: Andréane Richard-Denis
POSITION TITLE: Associate professor

EDUCATION AND TRAINING:
INSTITUTION DEGREE YEAR FIELD OF STUDY
University of Sherbrooke M.D. 2008 Medicine
University of Montreal Residency 2013 Physical Medicine &Rehabilitation
University of Montreal M.Sc. 2016 Biomedical Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE
Positions and Employment
2013-... Physical Medicine and Rehabilitation specialist, Sacré-Coeur Hospital, Canada
2013-... Physical Medicine and Rehabilitation specialist, CDN clinic, Canada
2016-... Associate professor, Department of Medicine, University of Montreal
2016-... Head of department of PM&R, Sacré-Coeur Hospital, Canada
2017-... Clinical-scientist, Sacré-Coeur Hospital Research Center, Canada
2017-... Emergent researcher, Quebec provincial network of research (REPAR), Canada
2018-22 Clinical Research Scholar- J1, Fonds de recherche Québec Santé (FRQS), Canada

Other Experience and Professional Memberships
2016-... Member, American Spinal Injury Association
2017-... Member, PM&R Research Committee program, University of Montreal
2018-... Reviewer for Journals: J Spinal Cord Medicine, Spinal Cord J, Am J Phys Medicine & Rehab

Honors
2013 Mentor Program Training Scholarship, Canadian Institute of health Research
2017 Nomination for Raymond-Fortin Research Price (Best article), Quebec Physiatry Association
2017 Nomination for Best Poster, American Spinal Injury Association (2 posters nominated)
2018-22 Salary award for clinician-scientist, Fonds de Recherche Quebec-Santé

PUBLICATIONS AND PRESENTATIONS
Peer-reviewed publications on spinal cord injury
* Students under the applicant supervision
1. Greciet N, Mac-Thiong JM, Nguyen BN, Richard-Denis A. Spinal shock: the functional impact of the absence of a bulbocarveous reflex in the post-operative period following a complete traumatic spinal cord injury. Spinal Cord (Submitted in September 2018)
2. Richard-Denis A, Chatta R, Thompson C, Mac-Thiong JM. Patterns of recovery from the acute to chronic phase following traumatic spinal cord injury : a prospective cohort study. Clinical rehabilitation (Submitted Sept 2018)
3. Richard-Denis A, Benazet D, Thompson C, Mac-Thiong JM. Determining priorities in functional rehabilitation related to quality of life one-year following a traumatic spinal cord injury. Accepted for publication in J Spinal Cord Med (August 25th)
4. Richard-Denis A, Nguyen BH, Mac-Thiong JM. The impact of early spasticity on intensive functional rehabilitation and community reintegration following traumatic spinal cord injury. (Accepted for publication with minor revisions in the J Spinal Cord Med (July 10th)

5. Richard-Denis A, Thompson C, Mac-Thiong JM. Quality of life in the subacute period following a surgical cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective cohort study. (Accepted for publication in Spinal Cord J (June 15th)
6. Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong JM. Early predictors of global functional outcome after a traumatic spinal cord injuty : a systematic review. (Accepted for publication in J Neurotrauma) (Feb 2018).
7. Goulet J, Richard-Denis A, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. (Accepted for publication in Am J Phys Med Rehab) (Feb 23th).
8. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2018;41(3) :309-317.
9. Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong JM. The use of classification tree algorithms to assess the influence of surgical timing on the neurological recovery following traumatic spinal cord injury. (Accepted in Spinal Cord J) (29 janvier 2018)_ featured paper of the month.
10. Richard-Denis A, Thompson C, Mac-Thiong JM. Reply : to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury: comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14(5) :885.
11. Facchinello Y, Beausejour M, Richard-Denis A, Thompson C, Mac-Thiong JM. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 [Epub ahead of print].
12. Richard-Denis A, Feldman E D, Thompson C, Albert, M. Mac-Thiong JM. The impact of acute management in a SCI-specialized center on tracheostomy and duration of mechanical ventilation support in patients with a complete cervical traumatic spinal cord injury. Spinal Cord J [Epub ahead of print].
13. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a two-level scale based on the Spinal Cord Independence. Intern Phys Med and Rehabil J 2017;5 :4.
14. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med. 2017; 19 :1-18 [Epub ahead of print].
15. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury : comparison with the use of a gel mattress. Int Wound J 2017;14(5) :874-881.
16. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: The impact of early transfer to specialized acute SCI-center (CME ARTICLE). Am J Phys Med Rehabil. 2016;96(7) :449-56.
17. Richard-Denis A, Thompson C, Bourrassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehab 2016. Apr;95(4):300-8.

Presentations
1. Richard-Denis A, Gagnon D, Barthelemy D, Boyer L, Sweet S. What's up, What's new in the Spinal Cord Injury Field?: Expert's panel. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation) Guest Speaker
2. Richard-Denis A. The changing demographics of traumatic spinal cord injury : impact on the continuum of care. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation)_ Guest Speaker
3. Richard-Denis A, Mac-Thiong JM, Albert M. The acute management of traumatic spinal cord injuries : the impact of the continuum of care. (Provincial Interdisciplinary Traumatology Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation) _ Guest Speaker

4. Richard-Denis A. Predictors of quality of life following spinal cord injury. Interdisciplinary Traumatology Provincial Meeting (Provincial Interdisciplinary Traumatologu Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation)
5. Richard-Denis A, Rami Chatta, Mac-Thiong JM. Does the functional outcome 6 months after a traumatic spinal cord injury predict the chronic functional outcome 12 months after the injury? Annual ASIA meeting, Rochester, MN, USA (May 5th 2018) (Oral Presentation)

6. Goulet J, Richard-Denis A, Thompson C, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. 18th Annual Scientific Conference of the Canadian Spine Society. Banff, Al, Can (Feb28th-March3rd 2018).
7. Richard-Denis A. Early opportunities to improve chronic functional outcome following traumatic spinal cord injury. Annual ASIA Meeting. Rochester, MN, USA (Poster) (May 5th 2018) (Oral Presentation)
8. Richard-Denis A. Acute predictors of functional outcome following spinal cord injury. Quebec Physiatry Association Annual Meeting, Lac Beauport, Quebec, Can (Sept 2017) (Oral presentation) (Oral Presentation)

9. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Research seminar Sacré-cœur Hospital research center. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (Oral presentation) (May 2017)
1. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Trauma research day. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (June 2017)(Oral presentation)
2. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
3. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with traumatic cervical spinal cord injury : proposal of a new 2-level scale based on the Spinal Cord Independence Measure version III. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
4. Mac-Thiong JM, Richard-Denis A, Thompson C. Expectations in chronic QOL following cervical traumatic spinal cord injury based on the initial severity of the neurological injury. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) (Oral presentation)
5. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Requirement for tracheostomy and duration of mechanical ventilation support in patients with complete cervical traumatic spinal cord injury. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
1. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. The impact of acute management in a specialized SCI-center on the occurrence of medical complications following motor-complete cervical SCI. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
2. Richard-Denis A, Feldman D, Bourassa-Moreau E, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with a motor-complete spinal cord injury following cervical trauma : impact of early peri-operative management in a specialized acute SCI center. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
3. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Predictive factors of functional recovery six months following traumatic tetraplegia and paraplegia : the impact of acute hospitalization care. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
4. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Joint American Spinal Cord Injury Association (ASIA) and International Spinal Cord Society (ISCoS) annual conference (Montreal, QC, Canada) (April 2015) (Poster).
5. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Neurotrauma Research day, Sacre-Cœur Hospital, Montréal, Qc. (Oral presentation)
6. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Student Research Symposium Sacré-Cœur Hospital, Montréal, Qc. (May 2015) (Oral presentation)
7. Richard-Denis A. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Student Research Symposium CRIR, Montréal, Qc. (May 2014) (Oral presentation)
8. Richard-Denis A, Thompson C, Bourassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? American Spinal Cord Injury Association (ASIA) (Denver, CO, USA) (May 2013) (Oral presentation).

The impact of early spasticity on the intensive functional rehabilitation phase and community reintegration following traumatic spinal cord injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Andreane Richard-Denis, M.D., M.Sc.
Hôpital Sacré-Coeur De Montreal

CV:
NAME: Andréane Richard-Denis
POSITION TITLE: Associate professor

EDUCATION AND TRAINING:
INSTITUTION DEGREE YEAR FIELD OF STUDY
University of Sherbrooke M.D. 2008 Medicine
University of Montreal Residence 2013 Physical Medicine &Rehabilitation
University of Montreal M.Sc. 2016 Biomedical Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE
Positions and Employment
2013-... Physical Medicine and Rehabilitation specialist, Sacré-Coeur Hospital, Canada
2013-... Physical Medicine and Rehabilitation specialist, CDN clinic, Canada
2016-... Associate professor, Department of Medicine, University of Montreal
2016-... Head of department of PM&R, Sacré-Coeur Hospital, Canada
2017-... Clinical-scientist, Sacré-Coeur Hospital Research Center, Canada
2017-... Emergent researcher, Quebec provincial network of research (REPAR), Canada
2018-22 Clinical Research Scholar- J1, Fonds de recherche Québec Santé (FRQS), Canada

Other Experience and Professional Memberships
2016-... Member, American Spinal Injury Association
2017-... Member, PM&R Research Committee program, University of Montreal
2018-... Reviewer for Journals: J Spinal Cord Medicine, Spinal Cord J, Am J Phys Medicine & Rehab

Honors
2013 Mentor Program Training Scholarship, Canadian Institute of health Research
2017 Nomination for Raymond-Fortin Research Price (Best article), Quebec Physiatry Association
2017 Nomination for Best Poster, American Spinal Injury Association (2 posters nominated)
2018-22 Salary award for clinician-scientist, Fonds de Recherche Quebec-Santé

PUBLICATIONS AND PRESENTATIONS
Peer-reviewed publications on spinal cord injury
* Students under the applicant supervision
1. Greciet N, Mac-Thiong JM, Nguyen BN, Richard-Denis A. Spinal shock: the functional impact of the absence of a bulbocarveous reflex in the post-operative period following a complete traumatic spinal cord injury. Spinal Cord (Submitted in September 2018)
2. Richard-Denis A, Chatta R, Thompson C, Mac-Thiong JM. Patterns of recovery from the acute to chronic phase following traumatic spinal cord injury : a prospective cohort study. Clinical rehabilitation (Submitted Sept 2018)
3. Richard-Denis A, Benazet D, Thompson C, Mac-Thiong JM. Determining priorities in functional rehabilitation related to quality of life one-year following a traumatic spinal cord injury. Accepted for publication in J Spinal Cord Med (August 25th)
4. Richard-Denis A, Nguyen BH, Mac-Thiong JM. The impact of early spasticity on intensive functional rehabilitation and community reintegration following traumatic spinal cord injury. (Accepted for publication with minor revisions in the J Spinal Cord Med (July 10th)
5. Richard-Denis A, Thompson C, Mac-Thiong JM. Quality of life in the subacute period following a surgical cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective cohort study.

(Accepted for publication in Spinal Cord J (June 15th)
6. Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong JM. Early predictors of global functional outcome after a traumatic spinal cord injuty : a systematic review. (Accepted for publication in J Neurotrauma) (Feb 2018).
7. Goulet J, Richard-Denis A, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. (Accepted for publication in Am J Phys Med Rehab) (Feb 23th).
8. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2018;41(3) :309-317.
9. Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong JM. The use of classification tree algorithms to assess the influence of surgical timing on the neurological recovery following traumatic spinal cord injury. (Accepted in Spinal Cord J) (29 janvier 2018)_ featured paper of the month.
10. Richard-Denis A, Thompson C, Mac-Thiong JM. Reply : to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury: comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14(5) :885.
11. Facchinello Y, Beausejour M, Richard-Denis A, Thompson C, Mac-Thiong JM. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 [Epub ahead of print].
12. Richard-Denis A, Feldman E D, Thompson C, Albert, M. Mac-Thiong JM. The impact of acute management in a SCI-specialized center on tracheostomy and duration of mechanical ventilation support in patients with a complete cervical traumatic spinal cord injury. Spinal Cord J [Epub ahead of print].
13. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a two-level scale based on the Spinal Cord Independence. Intern Phys Med and Rehabil J 2017;5 :4.
14. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med. 2017; 19 :1-18 [Epub ahead of print].
15. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury : comparison with the use of a gel mattress. Int Wound J 2017;14(5) :874-881.
16. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: The impact of early transfer to specialized acute SCI-center (CME ARTICLE). Am J Phys Med Rehabil. 2016;96(7) :449-56.
17. Richard-Denis A, Thompson C, Bourrassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehab 2016. Apr;95(4):300-8.

Presentations
1. Richard-Denis A, Gagnon D, Barthelemy D, Boyer L, Sweet S. What's up, What's new in the Spinal Cord Injury Field?: Expert's panel. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation) Guest Speaker
2. Richard-Denis A. The changing demographics of traumatic spinal cord injury : impact on the continuum of care. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation)_ Guest Speaker
3. Richard-Denis A, Mac-Thiong JM, Albert M. The acute management of traumatic spinal cord injuries : the impact of the continuum of care. (Provincial Interdisciplinary Traumatology Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation) _ Guest Speaker

4. Richard-Denis A. Predictors of quality of life following spinal cord injury. Interdisciplinary Traumatology Provincial Meeting (Provincial Interdisciplinary Traumatologu Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation)
5. Richard-Denis A, Rami Chatta, Mac-Thiong JM. Does the functional outcome 6 months after a traumatic spinal cord injury predict the chronic functional outcome 12 months after the injury? Annual ASIA meeting, Rochester, MN, USA (May 5th 2018) (Oral Presentation)
6. Goulet J, Richard-Denis A, Thompson C, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. 18th Annual Scientific Conference

of the Canadian Spine Society. Banff, Al, Can (Feb28th-March3rd 2018).
7. Richard-Denis A. Early opportunities to improve chronic functional outcome following traumatic spinal cord injury. Annual ASIA Meeting. Rochester, MN, USA (Poster) (May 5th 2018) (Oral Presentation)
8. Richard-Denis A. Acute predictors of functional outcome following spinal cord injury. Quebec Physiatry Association Annual Meeting, Lac Beauport, Quebec, Can (Sept 2017) (Oral presentation) (Oral Presentation)

9. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Research seminar Sacré-cœur Hospital research center. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (Oral presentation) (May 2017)
1. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Trauma research day. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (June 2017)(Oral presentation)
2. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
3. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with traumatic cervical spinal cord injury : proposal of a new 2-level scale based on the Spinal Cord Independence Measure version III. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
4. Mac-Thiong JM, Richard-Denis A, Thompson C. Expectations in chronic QOL following cervical traumatic spinal cord injury based on the initial severity of the neurological injury. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) (Oral presentation)
5. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Requirement for tracheostomy and duration of mechanical ventilation support in patients with complete cervical traumatic spinal cord injury. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
1. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. The impact of acute management in a specialized SCI-center on the occurrence of medical complications following motor-complete cervical SCI. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
2. Richard-Denis A, Feldman D, Bourassa-Moreau E, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with a motor-complete spinal cord injury following cervical trauma : impact of early peri-operative management in a specialized acute SCI center. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
3. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Predictive factors of functional recovery six months following traumatic tetraplegia and paraplegia : the impact of acute hospitalization care. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
4. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Joint American Spinal Cord Injury Association (ASIA) and International Spinal Cord Society (ISCoS) annual conference (Montreal, QC, Canada) (April 2015) (Poster).
5. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Neurotrauma Research day, Sacre-Cœur Hospital, Montréal, Qc. (Oral presentation)
6. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Student Research Symposium Sacré-Cœur Hospital, Montréal, Qc. (May 2015) (Oral presentation)
7. Richard-Denis A. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Student Research Symposium CRIR, Montréal, Qc. (May 2014) (Oral presentation)
8. Richard-Denis A, Thompson C, Bourassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? American Spinal Cord Injury Association (ASIA) (Denver, CO, USA) (May 2013) (Oral presentation).

Spinal shock: the functional impact of the absence of a bulbocarveous reflex in the post-operative period following a motor-complete traumatic spinal cord injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Andreane Richard-Denis, M.D., M.Sc.
Hôpital Sacré-Coeur De Montreal

CV:
NAME: Andréane Richard-Denis
POSITION TITLE: Associate professor

EDUCATION AND TRAINING:
INSTITUTION DEGREE YEAR FIELD OF STUDY
University of Sherbrooke M.D. 2008 Medicine
University of Montreal Residency. 2013 Physical Medicine &Rehabilitation
University of Montreal M.Sc. 2016 Biomedical Sciences

RESEARCH AND PROFESSIONAL EXPERIENCE
Positions and Employment
2013-... Physical Medicine and Rehabilitation specialist, Sacré-Coeur Hospital, Canada
2013-... Physical Medicine and Rehabilitation specialist, CDN clinic, Canada
2016-... Associate professor, Department of Medicine, University of Montreal
2016-... Head of department of PM&R, Sacré-Coeur Hospital, Canada
2017-... Clinical-scientist, Sacré-Coeur Hospital Research Center, Canada
2017-... Emergent researcher, Quebec provincial network of research (REPAR), Canada
2018-22 Clinical Research Scholar- J1, Fonds de recherche Québec Santé (FRQS), Canada

Other Experience and Professional Memberships
2016-... Member, American Spinal Injury Association
2017-... Member, PM&R Research Committee program, University of Montreal
2018-... Reviewer for Journals: J Spinal Cord Medicine, Spinal Cord J, Am J Phys Medicine & Rehab

Honors
2013 Mentor Program Training Scholarship, Canadian Institute of health Research
2017 Nomination for Raymond-Fortin Research Price (Best article), Quebec Physiatry Association
2017 Nomination for Best Poster, American Spinal Injury Association (2 posters nominated)
2018-22 Salary award for clinician-scientist, Fonds de Recherche Quebec-Santé

PUBLICATIONS AND PRESENTATIONS
Peer-reviewed publications on spinal cord injury
* Students under the applicant supervision
1. Greciet N, Mac-Thiong JM, Nguyen BN, Richard-Denis A. Spinal shock: the functional impact of the absence of a bulbocarveous reflex in the post-operative period following a complete traumatic spinal cord injury. Spinal Cord (Submitted in September 2018)
2. Richard-Denis A, Chatta R, Thompson C, Mac-Thiong JM. Patterns of recovery from the acute to chronic phase following traumatic spinal cord injury : a prospective cohort study. Clinical rehabilitation (Submitted Sept 2018)
3. Richard-Denis A, Benazet D, Thompson C, Mac-Thiong JM. Determining priorities in functional rehabilitation related to quality of life one-year following a traumatic spinal cord injury. Accepted for publication in J Spinal Cord Med (August 25th)
4. Richard-Denis A, Nguyen BH, Mac-Thiong JM. The impact of early spasticity on intensive functional rehabilitation and community reintegration following traumatic spinal cord injury. (Accepted for publication with minor revisions in the J Spinal Cord Med (July 10th)
5. Richard-Denis A, Thompson C, Mac-Thiong JM. Quality of life in the subacute period following a surgical cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective cohort study.

(Accepted for publication in Spinal Cord J (June 15th)
6. Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong JM. Early predictors of global functional outcome after a traumatic spinal cord injuty : a systematic review. (Accepted for publication in J Neurotrauma) (Feb 2018).
7. Goulet J, Richard-Denis A, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. (Accepted for publication in Am J Phys Med Rehab) (Feb 23th).
8. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2018;41(3) :309-317.
9. Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong JM. The use of classification tree algorithms to assess the influence of surgical timing on the neurological recovery following traumatic spinal cord injury. (Accepted in Spinal Cord J) (29 janvier 2018)_ featured paper of the month.
10. Richard-Denis A, Thompson C, Mac-Thiong JM. Reply : to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury: comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14(5) :885.
11. Facchinello Y, Beausejour M, Richard-Denis A, Thompson C, Mac-Thiong JM. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 [Epub ahead of print].
12. Richard-Denis A, Feldman E D, Thompson C, Albert, M. Mac-Thiong JM. The impact of acute management in a SCI-specialized center on tracheostomy and duration of mechanical ventilation support in patients with a complete cervical traumatic spinal cord injury. Spinal Cord J [Epub ahead of print].
13. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a two-level scale based on the Spinal Cord Independence. Intern Phys Med and Rehabil J 2017;5 :4.
14. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med. 2017; 19 :1-18 [Epub ahead of print].
15. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with traumatic spinal cord injury : comparison with the use of a gel mattress. Int Wound J 2017;14(5) :874-881.
16. Richard-Denis A, Feldman E D, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: The impact of early transfer to specialized acute SCI-center (CME ARTICLE). Am J Phys Med Rehabil. 2016;96(7) :449-56.
17. Richard-Denis A, Thompson C, Bourrassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehab 2016. Apr;95(4):300-8.

Presentations
1. Richard-Denis A, Gagnon D, Barthelemy D, Boyer L, Sweet S. What's up, What's new in the Spinal Cord Injury Field?: Expert's panel. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation) Guest Speaker
2. Richard-Denis A. The changing demographics of traumatic spinal cord injury : impact on the continuum of care. Quebec specialized SCI centers symposium- Colloque des centres d'expertise CEBMOQ. Montreal, Qc. (Oct 2018) (Oral presentation)_ Guest Speaker
3. Richard-Denis A, Mac-Thiong JM, Albert M. The acute management of traumatic spinal cord injuries : the impact of the continuum of care. (Provincial Interdisciplinary Traumatology Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation) _ Guest Speaker

4. Richard-Denis A. Predictors of quality of life following spinal cord injury. Interdisciplinary Traumatology Provincial Meeting (Provincial Interdisciplinary Traumatologu Meeting -Colloque interdisciplinaire en traumatologie), Montreal, Canada (Sept 29th 2018) (Oral Presentation)
5. Richard-Denis A, Rami Chatta, Mac-Thiong JM. Does the functional outcome 6 months after a traumatic spinal cord injury predict the chronic functional outcome 12 months after the injury? Annual ASIA meeting, Rochester, MN, USA (May 5th 2018) (Oral Presentation)
6. Goulet J, Richard-Denis A, Thompson C, Mac-Thiong JM. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. 18th Annual Scientific Conference

of the Canadian Spine Society. Banff, Al, Can (Feb28th-March3rd 2018).
7. Richard-Denis A. Early opportunities to improve chronic functional outcome following traumatic spinal cord injury. Annual ASIA Meeting. Rochester, MN, USA (Poster) (May 5th 2018) (Oral Presentation)
8. Richard-Denis A. Acute predictors of functional outcome following spinal cord injury. Quebec Physiatry Association Annual Meeting, Lac Beauport, Quebec, Can (Sept 2017) (Oral presentation) (Oral Presentation)

9. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Research seminar Sacré-cœur Hospital research center. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (Oral presentation) (May 2017)
1. Richard-Denis A. The importance of acute rehabilitation on the chronic functional outcome following a traumatic spinal cord injury. Trauma research day. CIUSSS du Nord de l'Île de Montréal- Hôpital du Sacré-Coeur de Montréal (June 2017)(Oral presentation)
2. Richard-Denis A, Thompson C, Mac-Thiong JM. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
3. Richard-Denis A, Thompson C, Mac-Thiong JM. Determining complete functional independence in patients with traumatic cervical spinal cord injury : proposal of a new 2-level scale based on the Spinal Cord Independence Measure version III. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) Nominated for best poster.
4. Mac-Thiong JM, Richard-Denis A, Thompson C. Expectations in chronic QOL following cervical traumatic spinal cord injury based on the initial severity of the neurological injury. American Spinal Cord Injury Association (ASIA), Albuquerque, New Mexico, USA. (May 2017) (Oral presentation)
5. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Requirement for tracheostomy and duration of mechanical ventilation support in patients with complete cervical traumatic spinal cord injury. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
1. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. The impact of acute management in a specialized SCI-center on the occurrence of medical complications following motor-complete cervical SCI. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Oral presentation)
2. Richard-Denis A, Feldman D, Bourassa-Moreau E, Thompson C, Mac-Thiong JM. Costs and length of stay for the acute care of patients with a motor-complete spinal cord injury following cervical trauma : impact of early peri-operative management in a specialized acute SCI center. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
3. Richard-Denis A, Feldman D, Thompson C, Mac-Thiong JM. Predictive factors of functional recovery six months following traumatic tetraplegia and paraplegia : the impact of acute hospitalization care. American Spinal Cord Injury Association (ASIA), Philadelphia, USA (April 2016) (Poster)
4. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Joint American Spinal Cord Injury Association (ASIA) and International Spinal Cord Society (ISCoS) annual conference (Montreal, QC, Canada) (April 2015) (Poster).
5. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Neurotrauma Research day, Sacre-Cœur Hospital, Montréal, Qc. (Oral presentation)
6. Richard-Denis A, Thompson C, Feldman D, Mac-Thiong JM. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury . Student Research Symposium Sacré-Cœur Hospital, Montréal, Qc. (May 2015) (Oral presentation)
7. Richard-Denis A. Early development of spasticity following spinal cord injury and functional impact 12 months post-injury. Student Research Symposium CRIR, Montréal, Qc. (May 2014) (Oral presentation)
8. Richard-Denis A, Thompson C, Bourassa-Moreau E, Parent S, Mac-Thiong JM. Does the acute care spinal cord injury setting predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? American Spinal Cord Injury Association (ASIA) (Denver, CO, USA) (May 2013) (Oral presentation).

The effects of exoskeletal-assisted walking during acute inpatient rehabilitation for people with spinal cord injury: a pilot study

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Chung-Ying Tsai, PT, PhD
Icahn School of Medicine at Mount Sinai

CV:
A. Personal Statement
I am a licensed physical therapist in New York State and Taiwan with three years of clinical experience and nine years of experience in conducting human subject research. My research interest focuses on investigating the effects of applying proper assistive technology, such as wheelchairs and exoskeleton systems, and the biomechanics in injury prevention and movement skills for people with disabilities. In my previous projects, I designed a successful protocol and applied proper outcome measurements to validate a new clinical assessment tool and evaluate the effects of using a new assistive device and training program. Besides, my background in physical therapy, biomedical engineering, and rehabilitation science also prepares me in conducting translational research for technology into clinical application. I successfully worked with a multidisciplinary team, including different kinds of engineers and clinicians, to build up a biomechanical analysis station, including 10 motion capture cameras, three force plates, two load cells, and some customized tools and programs for simulation and data analysis. My research results have been published in nine peer-reviewed journal papers and have received six awards from different conferences. I am also certified on using ReWalk, Ekso, and Indego powered exoskeletons. The current application builds logically on my prior work.

B. Positions and Honors
Positions and Employment
09/06-10/07 Part-Time Physical Therapist, Shin-Wang-Ai Clinic, Tainan, Taiwan
10/07-11/08 Physical Therapist, National Sports Training Center, Kaohsiung, Taiwan
11/08-07/10 Graduate Research Assistant, Institute of Biomedical Engineering, National Cheng Kung University, Tainan, Taiwan
08/10-12/14 Research Associate, Human Engineering Research Laboratories, VA Pittsburgh Healthcare System, University of Pittsburgh, Pittsburgh, PA
03/15-09/16 Physical Therapist, Evergreen Medical PLLC, New York, NY
04/16-09/16 Part-time Research Physical Therapist, Bronx Veterans Medical Research Foundation, Bronx, NY
1/17-present Rehabilitation Scientist, Department of Rehabilitation Medicine, Icahn School of Medicine at Mount Sinai, New York, NY

Honors
2006, 2007 Honorable mention in thesis competition held by the Taiwanese Society of Biomechanics
2007 Honorary member of the Phi Tau Phi Scholastic Honor Society
2012 Honorable Mention of the student scientific paper competition in RESNA 2012 Annual Conference
2013 One winner and one Honorable Mention of the student scientific paper competition in RESNA 2013 Annual Conference
2014 Winner of the student scientific paper competition in RESNA 2014 Annual Conference

C. Contributions to Science
1. The Effects of Exoskeleton-assisted Walking: Paralysis from traumatic SCI results in an abrupt reduction in the level of daily physical activity. Powered exoskeletal systems to assist with overground walking provide a mobility option and may have potential therapeutic value for persons with SCI. Mastering use of a powered exoskeleton for walking requires training of static and dynamic balance skills using the trunk musculature, particularly in controlling forward and lateral posture excursions while in an upright and dynamic position. Our initial findings suggest that EAW training resulted in significant improvement in proficiency of performing controlled seated balance in most directions. This gain in seated posture control may have important implications for improving activities of daily living (ADLs) in the seated position. Our

preliminary results also suggest that the exoskeleton-assisted walking may provide a safe and feasible adjunctive locomotor training modality for use during inpatient rehabilitation for newly injured individuals with SCI. These results may provide foundational support for the development of larger studies to examine the efficacy of exoskeleton use in inpatient rehabilitation units.

a. Tsai, C.Y., Asselin, P. K., Knezevic, S., Harel, N. Y., Spungen, Ann M. (2017) The effect of exoskeletal-assisted walking training on seated balance – a pilot study. International Symposiium on Wearable & Rehabilitation Robot (WeRob 2017), Houston, TX

b. Delgado, A., Escalon, M., Weinrauch, Willium, Suarez, S., Kozlowski, A., Bryce, T., Wecht, J., Tsai, C.Y. (2017). Safety of exoskeleton-assisted walking in SCI in patient rehabilitation. International Symposiium on Wearable & Rehabilitation Robot (WeRob 2017), Houston, TX

2. Wheelchair Optimization: Numerous studies have concluded that reintegration into society for individuals with SCI depends upon access to appropriate and adequate assistive technology for mobility, such as wheelchairs. The wheelchair is the most common medical device in the world. The proper design of wheelchairs could help persons with disabilities avoid musculoskeletal problems in their upper extremities. Moreover, optimum fitting of a wheelchair can increase its propulsion efficiency and maneuver performance. Results of these study show that the camber plays an important role in wheelchair setup and design. Increasing the camber of wheels adds stability and provides easier handling. Conversely, a camber can be disadvantageous because a greater amount of energy might be required to maneuver the wheelchair and the camber may also cause more energy loss. These studies provide important references for wheelchair designers and users about how to setup a camber angle for their wheelchairs.

a. Tsai, C. Y., Lin, C. J., Huang, Y. C., Lin, P. C. and Su, F. C., "The effects of rear-wheel camber on the kinematics of upper extremity during wheelchair propulsion." Biomed Eng Online, 2012. 11: 87.

b. Huang, Y. C., Guo, L. Y., Tsai, C. Y. and Su, F. C., "Mechanical energy and power flow analysis of wheelchair use with different camber settings." Comput Methods Biomech Biomed Engin, 2013. 16(4): 403-412.

3. Transfer Assessment Instrument: Transfers have been ranked as one of the most essen¬tial wheelchair skills for daily living, and indepen¬dence with transfers is one of the most important determinants for community participation and quality of life. Transfers, along with wheelchair propulsion and weight-relief raises, predispose wheel¬chair users to developing upper-limb pain and overuse-related injuries. In order to standardize the way clinicians evaluate and measure transfer skill, we developed the Transfer Assessment Instrument (TAI) and an educational program that teaches clinicians how to administer it. The TAI identifies harmful aspects of transfers in wheelchair users. The TAI is an objective and quantifiable measure of transfer technique. The TAI is the only clinical measure for evaluating the safety and quality of transfers in wheelchair users in detail. The TAI results were proved to be unbiased by certain physical characteristics that may influence transfers and have high intra- and inter-rater reliability. Our study is also the first study to assess and report transfer component skill deficit rates among a large national sam¬ple of Veteran wheelchair users.

a. Tsai, C. Y., Rice, L. A., Hoelmer, C., Boninger, M. L. and Koontz, A. M., "Basic psychometric properties of the transfer assessment instrument (version 3.0)." Arch Phys Med Rehabil, 2013. 94(12): 2456-2464.

b. Koontz, A. M., Tsai, C. Y., Hogaboom, N., and Boninger, M. L., "Transfer Component Skill Deficit Rates Among Veterans Who Use Wheelchairs." Journal of Rehabilitation Research & Development, 2016. 53(2): p. 279-294

4. Wheelchair Transfer Biomechanics: Knowledge on the relationship between transfer skills and joint biomechanics will lead to more effective transfer skill assessment and training that protect wheelchair users' upper limbs for long term use. One of my study is the first study to examine the association between transfer skills and upper limb biomechanical analysis during the transfer process. The study shows that the transfer skills that can be assessed through the TAI are closely associated with the magnitude and timing of joint moments during level-height transfers. Regardless of the toilet setup, higher quality of transfer skills overall was associated with better kinetic results on both upper limbs. Our study also found that learning to transfer in a manner that is consistent with the TAI can improve upper extremity biomechanics. After the transfer training, our participants' TAI scores notably improved (close to the best score, 10), and they had better arm postures during transfers as well as lower joint forces and moments on every joint on the trailing side and the shoulder joint on the leading side. If wheelchair users can retain these transfer skills over the long-term and learn how to adapt them to different transfer conditions, their risk of developing upper limb injuries may be greatly reduced.

a. Tsai, C. Y., Hogaboom, N., Boninger, M. L. and Koontz, A. M., "The relationship between independent transfer skills and upper limb kinetics in wheelchair users." BioMed Research International, 2014: p.12.

b. Tsai, C. Y., Boninger, M. L., Hastings, J., Cooper, R. A., Rice, L., Koontz, A. M., "The immediate biomechanical implications of transfer component skills training on independent wheelchair transfers." Arch Phys Med Rehabil, 2016. 97(10): p. 1785-1792
c. Tsai, C. Y., Boninge, M. L., Bass, S. R., Koontz, A. M., “Upper-limb biomechanical analysis of wheelchair transfer techniques in two toilet configurations.” Clinical Biomechanics, 2018. 55: p. 79-85

Complete List of Published Work in MyBibliography:
https://www.ncbi.nlm.nih.gov/sites/myncbi/1dYHzvS8EiL58/bibliography/53485398/public/?sort=date&direction=ascending

D. Additional Information: Research Support and/or Scholastic Performance
Ongoing Research Support
Funding agency: Craig H. Neilsen Foundation
PI: Dr. Thomas Bryce Period: Jan 31, 2017- Jan 20, 2020
Title: A mobile application for home evaluation and DME appropriateness for space
Goal: The major goal of this project is to further develop, test, and disseminate a method for performing home evaluations, including the virtual assessment of durable medical equipment (DME) for fit within the available space, using a mobile application (app)
Role: Co-investigator

Andrew Delgado, MS
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

William Weinrauch, PT, DPT
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Nicholas Manente, PT, DPT
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Isaiah Levy, MD
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Miguel Escalon, MD
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Thomas Bryce, MD
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Ann Spungen, EdD
Icahn School of Medicine at Mount Sinai

(no CV uploaded)

Collaborative and Early Intervention for Tetraplegia Home Accessibility

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Abby Baker, MOT, OTL
Shepherd Center

CV:
Presentations:

Role of the Physical Therapist in Bowel and Bladder Management After SCI - Georgia Physical Therapy Student Learning Day 2014, 2015, Wingate University 2015

Common Contractures and Adaptive Shortening/Lengthening After SCI - Wingate University 2015, Emory University 2018

Getting Hands On: Interventions for Early Mobility and Functional Outcomes in SCI - Bowel and Bladder: Treatment Techniques and Equipment - Shepherd Center 2016

A propensity score-matched cohort study comparing traumatic spinal cord injury in military personnel versus civilians

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC
Lyndhurst Centre, Toronto Rehabilitation Institute, University Health Network and University of Toronto

CV:
Curriculum Vitae

Julio Cesar Furlan

A. Date Curriculum Vitae is Prepared: 2018 September 1
Only includes Activities from August 2013 to August 2018
B. Biographical Information
Primary Office Lyndhurst Centre, Toronto Rehabilitation Institute
520 Sutherland Drive, Room 205
Toronto, Ontario, Canada
M4G 3V9

1. EDUCATION
Degrees
2004 - 2006 MSc, Clinical Epidemiology, Department of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. David Urbach
1994 - 1999 MBA, Healthcare System and Hospital Administration, São Paulo Business School, Getúlio Vargas Foundation, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana Maria Malik
1994 - 1999 PhD, Surgery, Department of Surgery, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Anoi Castro Cordeiro
1984 - 1999 BA, LL.B. Mackenzie University, São Paulo, São Paulo, Brazil
1983 - 1988 MD, University of São Paulo, São Paulo, São Paulo, Brazil
Postgraduate, Research and Specialty Training
2014 Sep 1 - 2016 Jun 30 Clinical Fellowship, Neurorehabilitation and Neural Repair, Department of Medicine, Division of Physical Medicine and Rehabilitation and Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. B. Catharine Craven, Dr. David Tang-Wai
2009 Jul 1 - 2014 Jun 30 Residency, Neurology, Department of Medicine, Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. Marika Hohol, Dr. David Tang-Wai
2003 - 2007 Clinical Research Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Michael G. Fehlings
2001 - 2003 Post-Doctoral Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Andrei V. Krassioukov
2000 - 2001 Clinical Research Fellowship, Head and Neck Surgery, Head and Neck Surgery, Department of Surgery, Mount Sinai Hospital, Toronto, Ontario, Canada, Supervisor(s): Dr. Irving B. Rosen
1994 - 1996 Clinical Fellowship, Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 Feb 1 - 1994 Jan 31 Complementary Specialization (similar to residency training), Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 - 1993 Post-Graduate Diploma, Occupational Medicine, Department of Preventive Medicine, Faculty of Medicine, São Francisco University, São Paulo, São Paulo, Brazil
1992 - 1993 Post-Graduate Diploma, Hospital Administration and Health Systems, São Paulo Business

Administration School, Getúlio Vargas Foundation and University Hospital, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil
1991 Feb 1 - 1992 Jan 31 Residency, Hospital Administration and Healthcare Systems, Department of Preventive Medicine, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana M. Malik
1989 Feb 1 - 1991 Jan 31 Residency, General Surgery, Department of Surgery, Division of General Surgery and Trauma Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Dario Birolini
Qualifications, Certifications and Licenses
2015 May - present Fellow, Neurology, Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada, License / Membership #: 999157
2009 Jul - present Canadian Medical Protective association (CMPA), Toronto, Ontario, Canada, License / Membership #: 20082118
2009 Jul - present College of Physicians and Surgeons of Ontario (CPSO), Toronto, Ontario, Canada, License / Membership #: 090628
2007 - present Licentiate, Medical Council of Canada (LMCC), Ottawa, Ontario, Canada, License / Membership #: 108367
1999 May - present Organization of the Lawyers of Brazil, São Paulo, São Paulo, Brazil, License / Membership #: 167674
1993 Aug - 1999 Nov Member, Head and Neck Surgery, Head and Neck Surgery, Society of Head and Neck Surgery, São Paulo, São Paulo, Brazil
1988 Feb - 1999 Nov Regional Council of Medicine, São Paulo, São Paulo, Brazil, License / Membership #: 62585
2. EMPLOYMENT
Current Appointments
2016 Sep 1 - present Assistant Professor, Division of Physical Medicine and Rehabilitation, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2016 - present Clinician Investigator (Neurologist), Division of Physical Medicine and Rehabilitation, Toronto Rehabilitation Institute, Lyndhurst Centre, Toronto, Ontario, Canada
3. HONOURS AND CAREER AWARDS
Distinctions and Research Awards
INTERNATIONAL
Received

2016 Apr Fellow Research Travel Scholarship, American Academy of Neurology, Vancouver, British Columbia, Canada. (Distinction)
2014 Oct CNS Resident Award for the best research paper, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
2014 Oct Depuy-Synthes Award, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
for resident research on spinal cord and spinal column injury for the best research paper.

NATIONAL
Received

2017 Nov First Place Award for Best Abstract, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best abstract on policy change.
2017 Nov First Place Award for Poster Presentation, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best poster presentation on policy change.
2016 May 2nd Place Case Report Presentation, 64th Annual Meeting of the Canadian Association of Physical Medicine and Rehabilitation, London, Ontario, Canada. (Distinction)
2015 Jun Andre Barbeau Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada. (Distinction)
for the best paper in Basic Science Research.
2015 Jun Francis McNaughton Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada.

(Distinction)
for the best paper in Clinical Research.

LOCAL
Received

2016 Apr OTR Conference Travel Award, University Health Network, Toronto, Ontario, Canada. (Distinction)

4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES
Professional Associations
2016 Dec - present Member, Cervical Spine Research Society (CSRS), 32619-1
2010 - present Member, American Academy of Neurology (AAN), 172625
2010 - present Member, Canadian Neurological Science Federation/Canadian Neurological Society (CNSF/CNS), 4751
2009 Jun - present Member, Canadian Medical Association (CMA), 152353
2009 Jun - present Member, Ontario Medical Association (OMA), 1065762
2004 - present Member, American Spinal Injury Association (ASIA), 109
2004 - present Member, National Neurotrauma Society (NNS)

Administrative Activities
NATIONAL
7th National Spinal Cord Injury Conference
2016 Apr 14 - 2017 Nov 11 Member, Planning Advisory Committee, Toronto, Ontario, Canada.

Other Research and Professional Activities
RESEARCH PROJECT
2017 Oct - present Collaborator. RHSCIR cauda equina syndrome study. British Columbia, Canada. Supervisor(s): Carly Rivers (chair). Collaborator(s): Furlan JC, Flett H, Ethans E, Christie S, Bailey C, Tsai E.
This national collaborative research group aims to study the epidemiology, treatment and outcomes of patients with cauda equina syndrome using data from the Rick Hansen Spinal Cord Injury Register (RHSCIR).
2017 Jul - present Collaborator. Spinal Trials Understanding Design and Implementation (STUDI) - Electrophysiology & Reflex Testing Group. Zürich (de), Switzerland. Supervisor(s): Michele Hubli (Chair). Collaborator(s): Furlan JC, Schubert M, Tansey K, Kramer J, Jutzeker C, Rosner J.
The STUDI group is an international initiative of clinicians and scientists that aims to review and critically appraise the current literature on electrophysiology and reflex testing in the area of spinal cord injury. The ultimate goal of this collaboration work is to determine evidence-based neurophysiology protocols for use in clinical trials and clinical practice.
2009 - present Topic leader. Epidemiology of Traumatic SCI. The SCIRE Project, Vancouver, British Columbia, Canada. Supervisor(s): Furlan, Julio Cesar. Collaborator(s): Krassioukov, Andrei V.; Miller, William C.; Trenaman, Logan M.
“Epidemiology of Traumatic SCI” is 1 of 17 topics relevant to SCI rehabilitation and community reintegration. The members of the Spinal Cord Injury Research Evidence (SCIRE) Project have been reviewing, evaluating and translating research knowledge into concise and clear reports on the best SCI rehabilitation practices for health professionals and other stakeholders. The most recent version of the reports is publically available at www.scireproject.com.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Acute Spinal Cord Injury. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings, and James Harrop. Collaborators: Drs. Jefferson R. Wilson, Anthony Burns, Brian Kwon, Lindsay Tetreault, Bizhan Aarabi, Paul Anderson, Paul M. Arnold, Darrel Brodke, Kazuhiro Chiba, Gregory Hawryluk, Langston Holly, Susan Howley, Tara Jeji, Sukhvinder Kalsi-Ryan, Mark Kotter, Shekar Kurpad, Ralph Marino, Allan R. Martin, Eric Massicotte, Geno Merli, Hiroaki Nakashima, Narihito Nagoshi, Katherine Palmieri, Mohammed Shamji, Anoushka Singh, Eve Tsai, Alexander.
This guideline is divided into five sections. The following sections describe the key knowledge gaps, previous published guidelines and rationale for each topic: (a)Timing of Surgical Decompression; (b) The Use of Methylprednisolone Sodium Succinate; (c) The Type and Timing of Anticoagulation Prophylaxis; (d)

The Role of Baseline Magnetic Resonance Imaging in Clinical Decision-Making and Prognostication; and (e) The Type and Timing of Rehabilitation.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Patients with Degenerative Cervical Myelopathy. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings and Jeffrey C. Wang. Collaborators: Drs. Lindsay A. Tetreault, Mohammed Shamji, Daniel Riew, James Middleton, Bizhan Aarabi, Paul M. Arnold, Darrel Brodke, Anthony Burns, Simon Carette, Robert Chen, Kazuhiro Chiba, James Harrop, Langston Holly, Sukhvinder Kalsi-Ryan, Mark Kotter, Brian Kwon, Allan R. Martin, James Milligan, Hiroaki Nakashima, Narihito Nagoshi, John Rhee, Anoushka Singh, Sumeet Sodhi, Jefferson Wilson, Albert Yee.
The main objective of this guideline is to outline how to best manage patients with myelopathy and nonmyelopathic patients with evidence of cervical cord compression. Five systematic reviews were conducted to summarize the current body of evidence. Recommendations are provided for: (a) Patients with Severe DCM; (b) Patients with Moderate DCM; (c) Patients with Mild DCM; (d) Nonmyelopathic patients with evidence of cord compression without signs and symptoms of radiculopathy; and (e) Nonmyelopathic patients with image evidence of cord compression and clinical and/or electrophysiological evidence of radiculopathy.

C. Publications
1. PEER-REVIEWED PUBLICATIONS
Journal Articles
1. Chan BCF, Craven BC, Furlan JC. A scoping review on health economics in neurosurgery for acute spine trauma. NEUROSURGICAL FOCUS. 2017 Dec 23. In Press. Senior Responsible Author.
2. Furlan JC, Gulasingam S, Craven BC. The Health Economics of the spinal cord injury or disease among veterans of war: A systematic review. JOURNAL OF SPINAL CORD MEDICINE. 2017 Nov 6;40(6):649-664. Principal Author.
3. Fehlings MG, Tetreault LA, Riew KD, Middleton JW, Aarabi B, Arnold PM, Brodke DS, Burns AS, Carette S, Chen R, Chiba K, Dettori JR, Furlan JC, Harrop JS, Holly LT, Kalsi-Ryan S, Kotter M, Kwon BK, Martin AR, Milligan J, Nakashima H, Nagoshi N, Rhee J, Singh A, Skelly AC, Sodhi S, Wilson JR, Yee A, Wang JC. A Clinical Practice Guideline for the Management of Patients With Degenerative Cervical Myelopathy: Recommendations for Patients With Mild, Moderate, and Severe Disease and Nonmyelopathic Patients With Evidence of Cord Compression. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:70S-83S. Coauthor or Collaborator.
4. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Chiba K, Dettori JR, Furlan JC, Harrop JS, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Burns AS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Rehabilitation. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):231S-238S. Coauthor or Collaborator.
5. Fehlings MG, Martin AR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke D, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Role of Baseline Magnetic Resonance Imaging in Clinical Decision Making and Outcome Prediction. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):221S-230S. Coauthor or Collaborator.
6. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Anticoagulant Thromboprophylaxis. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:212S-220S. Coauthor or Collaborator.
7. Fehlings MG, Wilson JR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Skelly AC, Singh A, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Use of Methylprednisolone Sodium Succinate. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):203S-211S. Coauthor or Collaborator.
8. Fehlings MG, Tetreault LA, Wilson JR, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K,

Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury and Central Cord Syndrome: Recommendations on the Timing (≤24 Hours Versus >24 Hours) of Decompressive Surgery. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):195S-202S. Coauthor or Collaborator.
9. Furlan JC, Craven BC. Psychometric analysis and critical appraisal of the original, revised, and modified versions of the Japanese Orthopaedic Association score in the assessment of patients with cervical spondylotic myelopathy. NEUROSURGICAL FOCUS. 2016 Jun;40(6):E6, 1-15. Principal Author.
10. Furlan JC, Barth D, Barnett C, Bril V. Cost-minimization analysis comparing intravenous immunoglobulin with plasma exchange in the management of patients with myasthenia gravis: Different perspectives for different payers. MUSCLE AND NERVE. 2016 Jun;53(6):872-6. Principal Author.
11. Furlan JC, Craven BC, Massicotte EM, Fehlings MG. Early versus delayed surgical decompression of spinal cord after traumatic cervical spinal cord injury: A cost-utility analysis. WORLD NEUROSURGERY. 2016 Apr;88:166-74. Principal Author.
12. Furlan JC, Fang J, Silver FL. Outcomes after Acute Ischemic Stroke in Patients with Thrombocytopenia or Thrombocytosis. JOURNAL OF THE NEUROLOGICAL SCIENCES. 2016 Mar;15(362):198-203. Principal Author.
13. Furlan JC, Verocai F, Palmares X, Fehlings MG. Electrocardiographic abnormalities in the early stage following traumatic spinal cord injury. SPINAL CORD. 2016 Feb 16. Epub ahead of print. Principal Author.
14. Furlan JC, Fang J, Silver FL. Acute Ischemic Stroke and Abnormal Blood Hemoglobin Concentration. ACTA NEUROLOGICA SCANDINAVICA. 2015 Oct 20. Epub ahead of print. Principal Author.
15. Furlan JC, Chui MH, Croul SE, Kongkham P. Mystery Case: Tanycytic ependymoma of the conus medullaris - a rare cause of low back pain. NEUROLOGY. 2014 Jun 17;82(24):e212-3. Principal Author.
16. Hawryluk GWJ, Furlan JC, Austin J, Fehlings MG. Individual Characteristics and Management Decisions Affect Outcome of Anticoagulated Patients with Intracranial Hemorrhage. WORLD JOURNAL OF NEUROSURGERY. 2014 May;81(5-6):742-51. May-Jun. Coauthor or Collaborator.
17. Furlan JC, Henri-Bhargava AR, Freedman M. Clomipramine in the treatment of compulsive behavior in frontotemporal dementia: A case series. ALZHEIMER DISEASE & ASSOCIATED DISEASES. 2014;28(1):95-8. Principal Author.
18. Furlan JC. Autonomic dysreflexia: A Clinical emergency. JOURNAL OF TRAUMA AND ACUTE CARE SURGERY. 2013 Sep;75(3):496-500. Principal Author.
19. Furlan JC, Sander L., Hitzig, B., Catharine Craven. The influence of age on functional recovery of adults with spinal cord injury or disease after inpatient rehabilitative care. AGING CLINICAL AND EXPERIMENTAL RESEARCH. 2013 Aug;25(4):463-71. Principal Author.
Case Reports
1. Furlan JC, Robinson L, Murray B. Stepwise paralysis in a patient with adenocarcinoma of lung. (United States): NEUROLOGY; 2016 Mar 22. 5 p. 86(12):e122-7. Principal Author.
2. Furlan JC, Sundaram ANE. What is your call? Sudden onset anisocoria in a patient with upper respiratory tract infection. CMAJ; 2014 Jan 7. 4 p. 186(1):57-61. Principal Author.
3. Furlan JC, Valiante T, Dickson B, Kiehl T-R. Paraspinal desmoid-type fibromatosis as a cause of low back pain. SPINE JOURNAL; 2013 Dec 1. 1 p. 13(12):1958-9. Principal Author.
Book Chapters
1. Furlan JC. World Perspective of Epidemiology of Cerebrovascular Disease. In: The influence of Sleep in the Primary and Secondary Prevention of Cerebrovascular Disease. Coelho FMS; 2014. In Press. Principal Author.
Magazine Entries
1. Evans J. Post-Stroke mortality elevated by high and low blood platelet counts. The Chronicle in Neurology + Psychiatry. 2016 Jun. Acknowledged in Publication (Not Author).
2. SUBMITTED PUBLICATIONS
Journal Articles
1. Furlan JC, Gulasingam S, Craven BC. Epidemiology of war-related spinal cord injury among combatants: A systematic review. GLOBAL SPINE JOURNAL. 2017 Dec 25. Principal Author.
2. Furlan JC, Fehlings MG, Craven BC. Economic impact of aging on the initial spine care of patients with acute spine trauma: From bedside to teller. NEUROSURGERY. 2017 Dec 24. Principal Author.
D. Creative Professional Activities
1. CONTRIBUTIONS TO THE DEVELOPMENT OF PROFESSIONAL PRACTICES

2017 Mar - present SCI-HIGH Project on Cardiovascular Integrity.
The SCI-HIGH Project is an international initiative with the objective of developing indicators for clinical practice in the area of rehabilitation of patients with spinal cord injury or disease. I am a member collaborator in the SCI-HIGH Cardiovascular Integrity group where we are selecting the optimal indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.
The SCI-HIGH Cardiovascular Integrity group aims to select the most reliable and relevant indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.

Dilnur Kurban, MSc
Rick Hansen Institute

(no CV uploaded)

B. Catharine Craven, BA, MD, MSc, FRCPC
Lyndhurst Centre, Toronto Rehabilitation Institute, University Health Network and University of Toronto

(no CV uploaded)

How generalizable are the current clinical trials on therapies for individuals with acute traumatic spinal cord injury?

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC
Lyndhurst Centre, Toronto Rehabilitation Institute, University Health Network and University of Toronto

CV:
Curriculum Vitae

Julio Cesar Furlan

A. Date Curriculum Vitae is Prepared: 2018 September 1
Only includes Activities from August 2013 to August 2018
B. Biographical Information
Primary Office Lyndhurst Centre, Toronto Rehabilitation Institute
520 Sutherland Drive, Room 205
Toronto, Ontario, Canada
M4G 3V9

1. EDUCATION
Degrees
2004 - 2006 MSc, Clinical Epidemiology, Department of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. David Urbach
1994 - 1999 MBA, Healthcare System and Hospital Administration, São Paulo Business School, Getúlio Vargas Foundation, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana Maria Malik
1994 - 1999 PhD, Surgery, Department of Surgery, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Anoi Castro Cordeiro
1984 - 1999 BA, LL.B. Mackenzie University, São Paulo, São Paulo, Brazil
1983 - 1988 MD, University of São Paulo, São Paulo, São Paulo, Brazil
Postgraduate, Research and Specialty Training
2014 Sep 1 - 2016 Jun 30 Clinical Fellowship, Neurorehabilitation and Neural Repair, Department of Medicine, Division of Physical Medicine and Rehabilitation and Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. B. Catharine Craven, Dr. David Tang-Wai
2009 Jul 1 - 2014 Jun 30 Residency, Neurology, Department of Medicine, Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. Marika Hohol, Dr. David Tang-Wai
2003 - 2007 Clinical Research Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Michael G. Fehlings
2001 - 2003 Post-Doctoral Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Andrei V. Krassioukov
2000 - 2001 Clinical Research Fellowship, Head and Neck Surgery, Head and Neck Surgery, Department of Surgery, Mount Sinai Hospital, Toronto, Ontario, Canada, Supervisor(s): Dr. Irving B. Rosen
1994 - 1996 Clinical Fellowship, Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 Feb 1 - 1994 Jan 31 Complementary Specialization (similar to residency training), Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 - 1993 Post-Graduate Diploma, Occupational Medicine, Department of Preventive Medicine, Faculty of Medicine, São Francisco University, São Paulo, São Paulo, Brazil
1992 - 1993 Post-Graduate Diploma, Hospital Administration and Health Systems, São Paulo Business

Administration School, Getúlio Vargas Foundation and University Hospital, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil
1991 Feb 1 - 1992 Jan 31 Residency, Hospital Administration and Healthcare Systems, Department of Preventive Medicine, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana M. Malik
1989 Feb 1 - 1991 Jan 31 Residency, General Surgery, Department of Surgery, Division of General Surgery and Trauma Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Dario Birolini
Qualifications, Certifications and Licenses
2015 May - present Fellow, Neurology, Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada, License / Membership #: 999157
2009 Jul - present Canadian Medical Protective association (CMPA), Toronto, Ontario, Canada, License / Membership #: 20082118
2009 Jul - present College of Physicians and Surgeons of Ontario (CPSO), Toronto, Ontario, Canada, License / Membership #: 090628
2007 - present Licentiate, Medical Council of Canada (LMCC), Ottawa, Ontario, Canada, License / Membership #: 108367
1999 May - present Organization of the Lawyers of Brazil, São Paulo, São Paulo, Brazil, License / Membership #: 167674
1993 Aug - 1999 Nov Member, Head and Neck Surgery, Head and Neck Surgery, Society of Head and Neck Surgery, São Paulo, São Paulo, Brazil
1988 Feb - 1999 Nov Regional Council of Medicine, São Paulo, São Paulo, Brazil, License / Membership #: 62585
2. EMPLOYMENT
Current Appointments
2016 Sep 1 - present Assistant Professor, Division of Physical Medicine and Rehabilitation, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2016 - present Clinician Investigator (Neurologist), Division of Physical Medicine and Rehabilitation, Toronto Rehabilitation Institute, Lyndhurst Centre, Toronto, Ontario, Canada
3. HONOURS AND CAREER AWARDS
Distinctions and Research Awards
INTERNATIONAL
Received

2016 Apr Fellow Research Travel Scholarship, American Academy of Neurology, Vancouver, British Columbia, Canada. (Distinction)
2014 Oct CNS Resident Award for the best research paper, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
2014 Oct Depuy-Synthes Award, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
for resident research on spinal cord and spinal column injury for the best research paper.

NATIONAL
Received

2017 Nov First Place Award for Best Abstract, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best abstract on policy change.
2017 Nov First Place Award for Poster Presentation, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best poster presentation on policy change.
2016 May 2nd Place Case Report Presentation, 64th Annual Meeting of the Canadian Association of Physical Medicine and Rehabilitation, London, Ontario, Canada. (Distinction)
2015 Jun Andre Barbeau Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada. (Distinction)
for the best paper in Basic Science Research.
2015 Jun Francis McNaughton Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada.

(Distinction)
for the best paper in Clinical Research.

LOCAL
Received

2016 Apr OTR Conference Travel Award, University Health Network, Toronto, Ontario, Canada. (Distinction)

4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES
Professional Associations
2016 Dec - present Member, Cervical Spine Research Society (CSRS), 32619-1
2010 - present Member, American Academy of Neurology (AAN), 172625
2010 - present Member, Canadian Neurological Science Federation/Canadian Neurological Society (CNSF/CNS), 4751
2009 Jun - present Member, Canadian Medical Association (CMA), 152353
2009 Jun - present Member, Ontario Medical Association (OMA), 1065762
2004 - present Member, American Spinal Injury Association (ASIA), 109
2004 - present Member, National Neurotrauma Society (NNS)

Administrative Activities
NATIONAL
7th National Spinal Cord Injury Conference
2016 Apr 14 - 2017 Nov 11 Member, Planning Advisory Committee, Toronto, Ontario, Canada.

Other Research and Professional Activities
RESEARCH PROJECT
2017 Oct - present Collaborator. RHSCIR cauda equina syndrome study. British Columbia, Canada. Supervisor(s): Carly Rivers (chair). Collaborator(s): Furlan JC, Flett H, Ethans E, Christie S, Bailey C, Tsai E.
This national collaborative research group aims to study the epidemiology, treatment and outcomes of patients with cauda equina syndrome using data from the Rick Hansen Spinal Cord Injury Register (RHSCIR).
2017 Jul - present Collaborator. Spinal Trials Understanding Design and Implementation (STUDI) - Electrophysiology & Reflex Testing Group. Zürich (de), Switzerland. Supervisor(s): Michele Hubli (Chair). Collaborator(s): Furlan JC, Schubert M, Tansey K, Kramer J, Jutzeker C, Rosner J.
The STUDI group is an international initiative of clinicians and scientists that aims to review and critically appraise the current literature on electrophysiology and reflex testing in the area of spinal cord injury. The ultimate goal of this collaboration work is to determine evidence-based neurophysiology protocols for use in clinical trials and clinical practice.
2009 - present Topic leader. Epidemiology of Traumatic SCI. The SCIRE Project, Vancouver, British Columbia, Canada. Supervisor(s): Furlan, Julio Cesar. Collaborator(s): Krassioukov, Andrei V.; Miller, William C.; Trenaman, Logan M.
“Epidemiology of Traumatic SCI” is 1 of 17 topics relevant to SCI rehabilitation and community reintegration. The members of the Spinal Cord Injury Research Evidence (SCIRE) Project have been reviewing, evaluating and translating research knowledge into concise and clear reports on the best SCI rehabilitation practices for health professionals and other stakeholders. The most recent version of the reports is publically available at www.scireproject.com.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Acute Spinal Cord Injury. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings, and James Harrop. Collaborators: Drs. Jefferson R. Wilson, Anthony Burns, Brian Kwon, Lindsay Tetreault, Bizhan Aarabi, Paul Anderson, Paul M. Arnold, Darrel Brodke, Kazuhiro Chiba, Gregory Hawryluk, Langston Holly, Susan Howley, Tara Jeji, Sukhvinder Kalsi-Ryan, Mark Kotter, Shekar Kurpad, Ralph Marino, Allan R. Martin, Eric Massicotte, Geno Merli, Hiroaki Nakashima, Narihito Nagoshi, Katherine Palmieri, Mohammed Shamji, Anoushka Singh, Eve Tsai, Alexander.
This guideline is divided into five sections. The following sections describe the key knowledge gaps, previous published guidelines and rationale for each topic: (a)Timing of Surgical Decompression; (b) The Use of Methylprednisolone Sodium Succinate; (c) The Type and Timing of Anticoagulation Prophylaxis; (d)

The Role of Baseline Magnetic Resonance Imaging in Clinical Decision-Making and Prognostication; and (e) The Type and Timing of Rehabilitation.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Patients with Degenerative Cervical Myelopathy. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings and Jeffrey C. Wang. Collaborators: Drs. Lindsay A. Tetreault, Mohammed Shamji, Daniel Riew, James Middleton, Bizhan Aarabi, Paul M. Arnold, Darrel Brodke, Anthony Burns, Simon Carette, Robert Chen, Kazuhiro Chiba, James Harrop, Langston Holly, Sukhvinder Kalsi-Ryan, Mark Kotter, Brian Kwon, Allan R. Martin, James Milligan, Hiroaki Nakashima, Narihito Nagoshi, John Rhee, Anoushka Singh, Sumeet Sodhi, Jefferson Wilson, Albert Yee.
The main objective of this guideline is to outline how to best manage patients with myelopathy and nonmyelopathic patients with evidence of cervical cord compression. Five systematic reviews were conducted to summarize the current body of evidence. Recommendations are provided for: (a) Patients with Severe DCM; (b) Patients with Moderate DCM; (c) Patients with Mild DCM; (d) Nonmyelopathic patients with evidence of cord compression without signs and symptoms of radiculopathy; and (e) Nonmyelopathic patients with image evidence of cord compression and clinical and/or electrophysiological evidence of radiculopathy.

C. Publications
1. PEER-REVIEWED PUBLICATIONS
Journal Articles
1. Chan BCF, Craven BC, Furlan JC. A scoping review on health economics in neurosurgery for acute spine trauma. NEUROSURGICAL FOCUS. 2017 Dec 23. In Press. Senior Responsible Author.
2. Furlan JC, Gulasingam S, Craven BC. The Health Economics of the spinal cord injury or disease among veterans of war: A systematic review. JOURNAL OF SPINAL CORD MEDICINE. 2017 Nov 6;40(6):649-664. Principal Author.
3. Fehlings MG, Tetreault LA, Riew KD, Middleton JW, Aarabi B, Arnold PM, Brodke DS, Burns AS, Carette S, Chen R, Chiba K, Dettori JR, Furlan JC, Harrop JS, Holly LT, Kalsi-Ryan S, Kotter M, Kwon BK, Martin AR, Milligan J, Nakashima H, Nagoshi N, Rhee J, Singh A, Skelly AC, Sodhi S, Wilson JR, Yee A, Wang JC. A Clinical Practice Guideline for the Management of Patients With Degenerative Cervical Myelopathy: Recommendations for Patients With Mild, Moderate, and Severe Disease and Nonmyelopathic Patients With Evidence of Cord Compression. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:70S-83S. Coauthor or Collaborator.
4. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Chiba K, Dettori JR, Furlan JC, Harrop JS, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Burns AS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Rehabilitation. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):231S-238S. Coauthor or Collaborator.
5. Fehlings MG, Martin AR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke D, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Role of Baseline Magnetic Resonance Imaging in Clinical Decision Making and Outcome Prediction. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):221S-230S. Coauthor or Collaborator.
6. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Anticoagulant Thromboprophylaxis. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:212S-220S. Coauthor or Collaborator.
7. Fehlings MG, Wilson JR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Skelly AC, Singh A, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Use of Methylprednisolone Sodium Succinate. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):203S-211S. Coauthor or Collaborator.
8. Fehlings MG, Tetreault LA, Wilson JR, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K,

Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury and Central Cord Syndrome: Recommendations on the Timing (≤24 Hours Versus >24 Hours) of Decompressive Surgery. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):195S-202S. Coauthor or Collaborator.
9. Furlan JC, Craven BC. Psychometric analysis and critical appraisal of the original, revised, and modified versions of the Japanese Orthopaedic Association score in the assessment of patients with cervical spondylotic myelopathy. NEUROSURGICAL FOCUS. 2016 Jun;40(6):E6, 1-15. Principal Author.
10. Furlan JC, Barth D, Barnett C, Bril V. Cost-minimization analysis comparing intravenous immunoglobulin with plasma exchange in the management of patients with myasthenia gravis: Different perspectives for different payers. MUSCLE AND NERVE. 2016 Jun;53(6):872-6. Principal Author.
11. Furlan JC, Craven BC, Massicotte EM, Fehlings MG. Early versus delayed surgical decompression of spinal cord after traumatic cervical spinal cord injury: A cost-utility analysis. WORLD NEUROSURGERY. 2016 Apr;88:166-74. Principal Author.
12. Furlan JC, Fang J, Silver FL. Outcomes after Acute Ischemic Stroke in Patients with Thrombocytopenia or Thrombocytosis. JOURNAL OF THE NEUROLOGICAL SCIENCES. 2016 Mar;15(362):198-203. Principal Author.
13. Furlan JC, Verocai F, Palmares X, Fehlings MG. Electrocardiographic abnormalities in the early stage following traumatic spinal cord injury. SPINAL CORD. 2016 Feb 16. Epub ahead of print. Principal Author.
14. Furlan JC, Fang J, Silver FL. Acute Ischemic Stroke and Abnormal Blood Hemoglobin Concentration. ACTA NEUROLOGICA SCANDINAVICA. 2015 Oct 20. Epub ahead of print. Principal Author.
15. Furlan JC, Chui MH, Croul SE, Kongkham P. Mystery Case: Tanycytic ependymoma of the conus medullaris - a rare cause of low back pain. NEUROLOGY. 2014 Jun 17;82(24):e212-3. Principal Author.
16. Hawryluk GWJ, Furlan JC, Austin J, Fehlings MG. Individual Characteristics and Management Decisions Affect Outcome of Anticoagulated Patients with Intracranial Hemorrhage. WORLD JOURNAL OF NEUROSURGERY. 2014 May;81(5-6):742-51. May-Jun. Coauthor or Collaborator.
17. Furlan JC, Henri-Bhargava AR, Freedman M. Clomipramine in the treatment of compulsive behavior in frontotemporal dementia: A case series. ALZHEIMER DISEASE & ASSOCIATED DISEASES. 2014;28(1):95-8. Principal Author.
18. Furlan JC. Autonomic dysreflexia: A Clinical emergency. JOURNAL OF TRAUMA AND ACUTE CARE SURGERY. 2013 Sep;75(3):496-500. Principal Author.
19. Furlan JC, Sander L., Hitzig, B., Catharine Craven. The influence of age on functional recovery of adults with spinal cord injury or disease after inpatient rehabilitative care. AGING CLINICAL AND EXPERIMENTAL RESEARCH. 2013 Aug;25(4):463-71. Principal Author.
Case Reports
1. Furlan JC, Robinson L, Murray B. Stepwise paralysis in a patient with adenocarcinoma of lung. (United States): NEUROLOGY; 2016 Mar 22. 5 p. 86(12):e122-7. Principal Author.
2. Furlan JC, Sundaram ANE. What is your call? Sudden onset anisocoria in a patient with upper respiratory tract infection. CMAJ; 2014 Jan 7. 4 p. 186(1):57-61. Principal Author.
3. Furlan JC, Valiante T, Dickson B, Kiehl T-R. Paraspinal desmoid-type fibromatosis as a cause of low back pain. SPINE JOURNAL; 2013 Dec 1. 1 p. 13(12):1958-9. Principal Author.
Book Chapters
1. Furlan JC. World Perspective of Epidemiology of Cerebrovascular Disease. In: The influence of Sleep in the Primary and Secondary Prevention of Cerebrovascular Disease. Coelho FMS; 2014. In Press. Principal Author.
Magazine Entries
1. Evans J. Post-Stroke mortality elevated by high and low blood platelet counts. The Chronicle in Neurology + Psychiatry. 2016 Jun. Acknowledged in Publication (Not Author).
2. SUBMITTED PUBLICATIONS
Journal Articles
1. Furlan JC, Gulasingam S, Craven BC. Epidemiology of war-related spinal cord injury among combatants: A systematic review. GLOBAL SPINE JOURNAL. 2017 Dec 25. Principal Author.
2. Furlan JC, Fehlings MG, Craven BC. Economic impact of aging on the initial spine care of patients with acute spine trauma: From bedside to teller. NEUROSURGERY. 2017 Dec 24. Principal Author.
D. Creative Professional Activities
1. CONTRIBUTIONS TO THE DEVELOPMENT OF PROFESSIONAL PRACTICES

2017 Mar - present SCI-HIGH Project on Cardiovascular Integrity.
The SCI-HIGH Project is an international initiative with the objective of developing indicators for clinical practice in the area of rehabilitation of patients with spinal cord injury or disease. I am a member collaborator in the SCI-HIGH Cardiovascular Integrity group where we are selecting the optimal indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.
The SCI-HIGH Cardiovascular Integrity group aims to select the most reliable and relevant indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.

B. Catharine Craven, BA, MD, MSc, FRCPC
Lyndhurst Centre, Toronto Rehabilitation Institute, University Health Network and University of Toronto

(no CV uploaded)

Glycemia as a key determinant of survival and neurological recovery after traumatic spinal cord injury

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC
Lyndhurst Centre, Toronto Rehabilitation Institute, University Health Network and University of Toronto

CV:
Curriculum Vitae

Julio Cesar Furlan

A. Date Curriculum Vitae is Prepared: 2018 September 1
Only includes Activities from August 2013 to August 2018
B. Biographical Information
Primary Office Lyndhurst Centre, Toronto Rehabilitation Institute
520 Sutherland Drive, Room 205
Toronto, Ontario, Canada
M4G 3V9

1. EDUCATION
Degrees
2004 - 2006 MSc, Clinical Epidemiology, Department of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. David Urbach
1994 - 1999 MBA, Healthcare System and Hospital Administration, São Paulo Business School, Getúlio Vargas Foundation, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana Maria Malik
1994 - 1999 PhD, Surgery, Department of Surgery, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Anoi Castro Cordeiro
1984 - 1999 BA, LL.B. Mackenzie University, São Paulo, São Paulo, Brazil
1983 - 1988 MD, University of São Paulo, São Paulo, São Paulo, Brazil
Postgraduate, Research and Specialty Training
2014 Sep 1 - 2016 Jun 30 Clinical Fellowship, Neurorehabilitation and Neural Repair, Department of Medicine, Division of Physical Medicine and Rehabilitation and Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. B. Catharine Craven, Dr. David Tang-Wai
2009 Jul 1 - 2014 Jun 30 Residency, Neurology, Department of Medicine, Division of Neurology, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. Marika Hohol, Dr. David Tang-Wai
2003 - 2007 Clinical Research Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Michael G. Fehlings
2001 - 2003 Post-Doctoral Fellowship, Spinal Cord Injury, Department of Surgery, Division of Neurosurgery, Toronto Western Hospital, University Health Network, Toronto, Ontario, Canada, Supervisor(s): Dr. Andrei V. Krassioukov
2000 - 2001 Clinical Research Fellowship, Head and Neck Surgery, Head and Neck Surgery, Department of Surgery, Mount Sinai Hospital, Toronto, Ontario, Canada, Supervisor(s): Dr. Irving B. Rosen
1994 - 1996 Clinical Fellowship, Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 Feb 1 - 1994 Jan 31 Complementary Specialization (similar to residency training), Head and Neck Surgery, Department of Surgery, Division of Head and Neck Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Alberto R. Ferraz
1992 - 1993 Post-Graduate Diploma, Occupational Medicine, Department of Preventive Medicine, Faculty of Medicine, São Francisco University, São Paulo, São Paulo, Brazil
1992 - 1993 Post-Graduate Diploma, Hospital Administration and Health Systems, São Paulo Business

Administration School, Getúlio Vargas Foundation and University Hospital, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil
1991 Feb 1 - 1992 Jan 31 Residency, Hospital Administration and Healthcare Systems, Department of Preventive Medicine, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Ana M. Malik
1989 Feb 1 - 1991 Jan 31 Residency, General Surgery, Department of Surgery, Division of General Surgery and Trauma Surgery, Faculty of Medicine, University of São Paulo, São Paulo, São Paulo, Brazil, Supervisor(s): Dr. Dario Birolini
Qualifications, Certifications and Licenses
2015 May - present Fellow, Neurology, Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, Canada, License / Membership #: 999157
2009 Jul - present Canadian Medical Protective association (CMPA), Toronto, Ontario, Canada, License / Membership #: 20082118
2009 Jul - present College of Physicians and Surgeons of Ontario (CPSO), Toronto, Ontario, Canada, License / Membership #: 090628
2007 - present Licentiate, Medical Council of Canada (LMCC), Ottawa, Ontario, Canada, License / Membership #: 108367
1999 May - present Organization of the Lawyers of Brazil, São Paulo, São Paulo, Brazil, License / Membership #: 167674
1993 Aug - 1999 Nov Member, Head and Neck Surgery, Head and Neck Surgery, Society of Head and Neck Surgery, São Paulo, São Paulo, Brazil
1988 Feb - 1999 Nov Regional Council of Medicine, São Paulo, São Paulo, Brazil, License / Membership #: 62585
2. EMPLOYMENT
Current Appointments
2016 Sep 1 - present Assistant Professor, Division of Physical Medicine and Rehabilitation, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
2016 - present Clinician Investigator (Neurologist), Division of Physical Medicine and Rehabilitation, Toronto Rehabilitation Institute, Lyndhurst Centre, Toronto, Ontario, Canada
3. HONOURS AND CAREER AWARDS
Distinctions and Research Awards
INTERNATIONAL
Received

2016 Apr Fellow Research Travel Scholarship, American Academy of Neurology, Vancouver, British Columbia, Canada. (Distinction)
2014 Oct CNS Resident Award for the best research paper, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
2014 Oct Depuy-Synthes Award, Congress of Neurological Surgeons, Boston, Massachusetts, United States. (Distinction)
for resident research on spinal cord and spinal column injury for the best research paper.

NATIONAL
Received

2017 Nov First Place Award for Best Abstract, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best abstract on policy change.
2017 Nov First Place Award for Poster Presentation, First author, 7th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada. (Distinction)
Best poster presentation on policy change.
2016 May 2nd Place Case Report Presentation, 64th Annual Meeting of the Canadian Association of Physical Medicine and Rehabilitation, London, Ontario, Canada. (Distinction)
2015 Jun Andre Barbeau Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada. (Distinction)
for the best paper in Basic Science Research.
2015 Jun Francis McNaughton Memorial Prize, Canadian Neurology Society, Toronto, Ontario, Canada.

(Distinction)
for the best paper in Clinical Research.

LOCAL
Received

2016 Apr OTR Conference Travel Award, University Health Network, Toronto, Ontario, Canada. (Distinction)

4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES
Professional Associations
2016 Dec - present Member, Cervical Spine Research Society (CSRS), 32619-1
2010 - present Member, American Academy of Neurology (AAN), 172625
2010 - present Member, Canadian Neurological Science Federation/Canadian Neurological Society (CNSF/CNS), 4751
2009 Jun - present Member, Canadian Medical Association (CMA), 152353
2009 Jun - present Member, Ontario Medical Association (OMA), 1065762
2004 - present Member, American Spinal Injury Association (ASIA), 109
2004 - present Member, National Neurotrauma Society (NNS)

Administrative Activities
NATIONAL
7th National Spinal Cord Injury Conference
2016 Apr 14 - 2017 Nov 11 Member, Planning Advisory Committee, Toronto, Ontario, Canada.

Other Research and Professional Activities
RESEARCH PROJECT
2017 Oct - present Collaborator. RHSCIR cauda equina syndrome study. British Columbia, Canada. Supervisor(s): Carly Rivers (chair). Collaborator(s): Furlan JC, Flett H, Ethans E, Christie S, Bailey C, Tsai E.
This national collaborative research group aims to study the epidemiology, treatment and outcomes of patients with cauda equina syndrome using data from the Rick Hansen Spinal Cord Injury Register (RHSCIR).
2017 Jul - present Collaborator. Spinal Trials Understanding Design and Implementation (STUDI) - Electrophysiology & Reflex Testing Group. Zürich (de), Switzerland. Supervisor(s): Michele Hubli (Chair). Collaborator(s): Furlan JC, Schubert M, Tansey K, Kramer J, Jutzeker C, Rosner J.
The STUDI group is an international initiative of clinicians and scientists that aims to review and critically appraise the current literature on electrophysiology and reflex testing in the area of spinal cord injury. The ultimate goal of this collaboration work is to determine evidence-based neurophysiology protocols for use in clinical trials and clinical practice.
2009 - present Topic leader. Epidemiology of Traumatic SCI. The SCIRE Project, Vancouver, British Columbia, Canada. Supervisor(s): Furlan, Julio Cesar. Collaborator(s): Krassioukov, Andrei V.; Miller, William C.; Trenaman, Logan M.
“Epidemiology of Traumatic SCI” is 1 of 17 topics relevant to SCI rehabilitation and community reintegration. The members of the Spinal Cord Injury Research Evidence (SCIRE) Project have been reviewing, evaluating and translating research knowledge into concise and clear reports on the best SCI rehabilitation practices for health professionals and other stakeholders. The most recent version of the reports is publically available at www.scireproject.com.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Acute Spinal Cord Injury. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings, and James Harrop. Collaborators: Drs. Jefferson R. Wilson, Anthony Burns, Brian Kwon, Lindsay Tetreault, Bizhan Aarabi, Paul Anderson, Paul M. Arnold, Darrel Brodke, Kazuhiro Chiba, Gregory Hawryluk, Langston Holly, Susan Howley, Tara Jeji, Sukhvinder Kalsi-Ryan, Mark Kotter, Shekar Kurpad, Ralph Marino, Allan R. Martin, Eric Massicotte, Geno Merli, Hiroaki Nakashima, Narihito Nagoshi, Katherine Palmieri, Mohammed Shamji, Anoushka Singh, Eve Tsai, Alexander.
This guideline is divided into five sections. The following sections describe the key knowledge gaps, previous published guidelines and rationale for each topic: (a)Timing of Surgical Decompression; (b) The Use of Methylprednisolone Sodium Succinate; (c) The Type and Timing of Anticoagulation Prophylaxis; (d)

The Role of Baseline Magnetic Resonance Imaging in Clinical Decision-Making and Prognostication; and (e) The Type and Timing of Rehabilitation.
2015 - 2017 Member of the Guideline Development Group. A Clinical Practice Guideline for the Management of Patients with Degenerative Cervical Myelopathy. Toronto Western Hospital, Toronto, Ontario, Canada. Collaborator(s): Co-chairs: Drs. Michael G. Fehlings and Jeffrey C. Wang. Collaborators: Drs. Lindsay A. Tetreault, Mohammed Shamji, Daniel Riew, James Middleton, Bizhan Aarabi, Paul M. Arnold, Darrel Brodke, Anthony Burns, Simon Carette, Robert Chen, Kazuhiro Chiba, James Harrop, Langston Holly, Sukhvinder Kalsi-Ryan, Mark Kotter, Brian Kwon, Allan R. Martin, James Milligan, Hiroaki Nakashima, Narihito Nagoshi, John Rhee, Anoushka Singh, Sumeet Sodhi, Jefferson Wilson, Albert Yee.
The main objective of this guideline is to outline how to best manage patients with myelopathy and nonmyelopathic patients with evidence of cervical cord compression. Five systematic reviews were conducted to summarize the current body of evidence. Recommendations are provided for: (a) Patients with Severe DCM; (b) Patients with Moderate DCM; (c) Patients with Mild DCM; (d) Nonmyelopathic patients with evidence of cord compression without signs and symptoms of radiculopathy; and (e) Nonmyelopathic patients with image evidence of cord compression and clinical and/or electrophysiological evidence of radiculopathy.

C. Publications
1. PEER-REVIEWED PUBLICATIONS
Journal Articles
1. Chan BCF, Craven BC, Furlan JC. A scoping review on health economics in neurosurgery for acute spine trauma. NEUROSURGICAL FOCUS. 2017 Dec 23. In Press. Senior Responsible Author.
2. Furlan JC, Gulasingam S, Craven BC. The Health Economics of the spinal cord injury or disease among veterans of war: A systematic review. JOURNAL OF SPINAL CORD MEDICINE. 2017 Nov 6;40(6):649-664. Principal Author.
3. Fehlings MG, Tetreault LA, Riew KD, Middleton JW, Aarabi B, Arnold PM, Brodke DS, Burns AS, Carette S, Chen R, Chiba K, Dettori JR, Furlan JC, Harrop JS, Holly LT, Kalsi-Ryan S, Kotter M, Kwon BK, Martin AR, Milligan J, Nakashima H, Nagoshi N, Rhee J, Singh A, Skelly AC, Sodhi S, Wilson JR, Yee A, Wang JC. A Clinical Practice Guideline for the Management of Patients With Degenerative Cervical Myelopathy: Recommendations for Patients With Mild, Moderate, and Severe Disease and Nonmyelopathic Patients With Evidence of Cord Compression. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:70S-83S. Coauthor or Collaborator.
4. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Chiba K, Dettori JR, Furlan JC, Harrop JS, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Burns AS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Rehabilitation. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):231S-238S. Coauthor or Collaborator.
5. Fehlings MG, Martin AR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke D, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Role of Baseline Magnetic Resonance Imaging in Clinical Decision Making and Outcome Prediction. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):221S-230S. Coauthor or Collaborator.
6. Fehlings MG, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Wilson JR, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Type and Timing of Anticoagulant Thromboprophylaxis. GLOBAL SPINE JOURNAL. 2017 Sep 7;3:212S-220S. Coauthor or Collaborator.
7. Fehlings MG, Wilson JR, Tetreault LA, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K, Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Kwon BK, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Skelly AC, Singh A, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury: Recommendations on the Use of Methylprednisolone Sodium Succinate. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):203S-211S. Coauthor or Collaborator.
8. Fehlings MG, Tetreault LA, Wilson JR, Aarabi B, Anderson P, Arnold PM, Brodke DS, Burns AS, Chiba K,

Dettori JR, Furlan JC, Hawryluk G, Holly LT, Howley S, Jeji T, Kalsi-Ryan S, Kotter M, Kurpad S, Marino RJ, Martin AR, Massicotte E, Merli G, Middleton JW, Nakashima H, Nagoshi N, Palmieri K, Singh A, Skelly AC, Tsai EC, Vaccaro A, Yee A, Harrop JS. A Clinical Practice Guideline for the Management of Patients With Acute Spinal Cord Injury and Central Cord Syndrome: Recommendations on the Timing (≤24 Hours Versus >24 Hours) of Decompressive Surgery. GLOBAL SPINE JOURNAL. 2017 Sep 7(Suppl 3):195S-202S. Coauthor or Collaborator.
9. Furlan JC, Craven BC. Psychometric analysis and critical appraisal of the original, revised, and modified versions of the Japanese Orthopaedic Association score in the assessment of patients with cervical spondylotic myelopathy. NEUROSURGICAL FOCUS. 2016 Jun;40(6):E6, 1-15. Principal Author.
10. Furlan JC, Barth D, Barnett C, Bril V. Cost-minimization analysis comparing intravenous immunoglobulin with plasma exchange in the management of patients with myasthenia gravis: Different perspectives for different payers. MUSCLE AND NERVE. 2016 Jun;53(6):872-6. Principal Author.
11. Furlan JC, Craven BC, Massicotte EM, Fehlings MG. Early versus delayed surgical decompression of spinal cord after traumatic cervical spinal cord injury: A cost-utility analysis. WORLD NEUROSURGERY. 2016 Apr;88:166-74. Principal Author.
12. Furlan JC, Fang J, Silver FL. Outcomes after Acute Ischemic Stroke in Patients with Thrombocytopenia or Thrombocytosis. JOURNAL OF THE NEUROLOGICAL SCIENCES. 2016 Mar;15(362):198-203. Principal Author.
13. Furlan JC, Verocai F, Palmares X, Fehlings MG. Electrocardiographic abnormalities in the early stage following traumatic spinal cord injury. SPINAL CORD. 2016 Feb 16. Epub ahead of print. Principal Author.
14. Furlan JC, Fang J, Silver FL. Acute Ischemic Stroke and Abnormal Blood Hemoglobin Concentration. ACTA NEUROLOGICA SCANDINAVICA. 2015 Oct 20. Epub ahead of print. Principal Author.
15. Furlan JC, Chui MH, Croul SE, Kongkham P. Mystery Case: Tanycytic ependymoma of the conus medullaris - a rare cause of low back pain. NEUROLOGY. 2014 Jun 17;82(24):e212-3. Principal Author.
16. Hawryluk GWJ, Furlan JC, Austin J, Fehlings MG. Individual Characteristics and Management Decisions Affect Outcome of Anticoagulated Patients with Intracranial Hemorrhage. WORLD JOURNAL OF NEUROSURGERY. 2014 May;81(5-6):742-51. May-Jun. Coauthor or Collaborator.
17. Furlan JC, Henri-Bhargava AR, Freedman M. Clomipramine in the treatment of compulsive behavior in frontotemporal dementia: A case series. ALZHEIMER DISEASE & ASSOCIATED DISEASES. 2014;28(1):95-8. Principal Author.
18. Furlan JC. Autonomic dysreflexia: A Clinical emergency. JOURNAL OF TRAUMA AND ACUTE CARE SURGERY. 2013 Sep;75(3):496-500. Principal Author.
19. Furlan JC, Sander L., Hitzig, B., Catharine Craven. The influence of age on functional recovery of adults with spinal cord injury or disease after inpatient rehabilitative care. AGING CLINICAL AND EXPERIMENTAL RESEARCH. 2013 Aug;25(4):463-71. Principal Author.
Case Reports
1. Furlan JC, Robinson L, Murray B. Stepwise paralysis in a patient with adenocarcinoma of lung. (United States): NEUROLOGY; 2016 Mar 22. 5 p. 86(12):e122-7. Principal Author.
2. Furlan JC, Sundaram ANE. What is your call? Sudden onset anisocoria in a patient with upper respiratory tract infection. CMAJ; 2014 Jan 7. 4 p. 186(1):57-61. Principal Author.
3. Furlan JC, Valiante T, Dickson B, Kiehl T-R. Paraspinal desmoid-type fibromatosis as a cause of low back pain. SPINE JOURNAL; 2013 Dec 1. 1 p. 13(12):1958-9. Principal Author.
Book Chapters
1. Furlan JC. World Perspective of Epidemiology of Cerebrovascular Disease. In: The influence of Sleep in the Primary and Secondary Prevention of Cerebrovascular Disease. Coelho FMS; 2014. In Press. Principal Author.
Magazine Entries
1. Evans J. Post-Stroke mortality elevated by high and low blood platelet counts. The Chronicle in Neurology + Psychiatry. 2016 Jun. Acknowledged in Publication (Not Author).
2. SUBMITTED PUBLICATIONS
Journal Articles
1. Furlan JC, Gulasingam S, Craven BC. Epidemiology of war-related spinal cord injury among combatants: A systematic review. GLOBAL SPINE JOURNAL. 2017 Dec 25. Principal Author.
2. Furlan JC, Fehlings MG, Craven BC. Economic impact of aging on the initial spine care of patients with acute spine trauma: From bedside to teller. NEUROSURGERY. 2017 Dec 24. Principal Author.
D. Creative Professional Activities
1. CONTRIBUTIONS TO THE DEVELOPMENT OF PROFESSIONAL PRACTICES

2017 Mar - present SCI-HIGH Project on Cardiovascular Integrity.
The SCI-HIGH Project is an international initiative with the objective of developing indicators for clinical practice in the area of rehabilitation of patients with spinal cord injury or disease. I am a member collaborator in the SCI-HIGH Cardiovascular Integrity group where we are selecting the optimal indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.
The SCI-HIGH Cardiovascular Integrity group aims to select the most reliable and relevant indicators of cardiovascular function for routine clinical use with the potential to improve patients' survival and quality of life.

Michael Bracken, PhD, MPH, FACE
Yale School of Public Health, Yale University

(no CV uploaded)

Spinal Cord Injury following Computed Tomography Guided Biopsy of the Thoracic Spine: A Case Report

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Alan Shamrock, MD
University of Iowa

CV:
Alan Shamrock, MD
Orthopaedic Surgery Resident, Post-Graduate Year 2

Professional Affiliations:
Alpha Omega Alpha (AOA)
Phi Beta Kappa
American Medical Association (AMA)
American Medical Student Association (AMSA)
American Academy of Family Physicians (AAFP)
Phi Delta Epsilon Medical Fraternity
American Academy of Orthopaedic Surgeons (AAOS)

Licenses and Certifications:
Basic Life Support (BLS)
Emergency Medical Technician (EMT
Advanced Cardiac Life Support (ACLS)

Publications:
Ng ZY, Shamrock AG, Chen DL, Dodds SD, Chim H. Patterns of Complex Carpal Injuries in the Hand from Fireworks. J Hand Microsurg. 2018;10(2):93-100

Hancock KJ, Westermann RR, Shamrock AG, Duchman KR, Wolf BR, Amendola A. Trends in Articular Cartilage Treatments: An American Board of Orthopaedic Surgery Database Study. J Knee Surg. 2018.

Berger MH, Cohen ER, Shamrock AG, Chan B, Camp M, Lo K, and Sargi ZB. Assessment of human papillomavirus awareness in association with head and neck cancer at a screening event. Laryngoscope. 2018;128(2):386-392.

Presentations:
Ojo RB, Shamrock A, Ong E, Snapp H, Angeli S. Utricular Dysfunction. American Academy of Otolaryngologyâ €“Head and Neck Surgery 2015.

Ojo RB, Gonclaves S, Snapp H, Shamrock AG, Ong E, Angeli S. Diagnostic Value of ECoG and Vestibular Testing in Meniere's Disease. American Academy of Otolaryngologyâ€“Head and Neck Surgery 2016

Shamrock AG, Patel A, Al Maaieh M. The Complication Profile of Percutaneous Minimally Invasive Sacroiliac Joint Fusion: A Systematic Review and Meta-Analysis. International Society for the Advancement of Spine Surgery 2017

Shamrock AG, Sankary S, Yang D, Jackson J. Hip Fractures at Sea. International Symposium on Maritime Health 2017

Shamrock A, Hussein S. If Surgical Outcomes Are Successful, Does Intention Matter? International Academy of Law and Mental Health 2017

Kalakoti P, Shamrock AG,. Bowers C, Schmidt M, Scuibba D, Pugely A. Derivation and validation of a predictive app for 30-day readmission risk following lumbar spine surgery. Lumbar Spine Research Society 2018

Kalakoti P, Shamrock A, Hendrickson N, Gajaseni P, Labianca L, Bowers C, Schmidt M, Pugely A. Proposing a validated web-based tool predicting outcomes following initial hospitalization in patients undergoing lumbar arthrodesis for degenerative disc disease. Lumbar Spine Research Society 2018

Shamrock A, Glass N, Shamrock K, Cychosz C, Duchman K. Does Patient Positioning and Portal Placement for Arthroscopic Subtalar Arthrodesis Matter? American Orthopaedic Foot & Ankle Society 2018.

Shamrock A, Colette J, Glass N, Hendrickson N. Sarcopenia is Associated with Increased Mortality Following Elective Hip Arthroplasty. American Association of Hip and Knee Surgeons 2018.

Hendrickson N, Mayo Z, Shamrock A, Glass N, Nau P, Miller B. Sarcopenia is Associated with Increased Mortality and Complications following Limb-sparing Reconstruction for Sarcoma of the Extremities. Musculoskeletal Tumor Society 2018.

Carender C, Shamrock A, Duchman K, Lynch TS, Westermann R. Are Orthopaedic Residents Prepared for Hip Arthroscopy? International Society for Hip Arthroscopy 2018.

Shamrock A, Scott E, Willey M, Westermann R. Pain and Opioid Use following Combined Hip Arthroscopy and Periacetabular Osteotomy 2018.

Kyle Kesler, MD
University of Iowa

(no CV uploaded)

Nathan Hendrickson, MD
University of Iowa

(no CV uploaded)

Cassim Igram, MD
University of Iowa

(no CV uploaded)

Time Wounds All Heels; A Case Report and Literature Review

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Mariam Washington, DO
Ut Health San Antonio

CV:
Mariam Washington, DO
UT Health San Antonio | (909)215-5559 | mwashington320@startmail.com
Post-graduate Training
Residency 2015-present
Physical Medicine and Rehabilitation, UT Health San Antonio, San Antonio, TX
Anticipated graduation June 30, 2019
Board Eligible 2019

Special Competencies
Extensive training in NCS/EMG with inpatient/outpatient services
Musculoskeletal procedures: ultrasound guided peripheral joint injections, trigger point injections, epidural steroid injections, fluoroscopy guided sacroiliac joint injections
Headache procedures: Migraine prophylaxis Botox protocol, Greater Occipital Nerve blocks
Comprehensive inpatient rehabilitation primary and consulting services

Education
Doctor of Osteopathic Medicine | DO | June 2015
Western University of Health Sciences College of Osteopathic Medicine of the Pacific
Pomona, CA

Bachelor of Sciences | BS | December 2008 | University of California, Irvine
Irvine, CA
Major: Biological Sciences

Emergency Medical Technician | EMT | March 2009 | University of California, Los Angeles
Los Angeles, CA
Accelerated program certification

Research & Publications
Undergraduate research experience 2006-2008
Aquaporin-4-Dependent Edema Clearance Following Status Epilepticus (2011)
• Lee, D. J., Amini, M., Hamamura, M. J., Hsu, M. S., Seldin, M. M., Nalcioglu, O., & Binder, D. K. (2012). Aquaporin-4-dependent edema clearance following status epilepticus. Epilepsy Research,98(2-3), 264-268. doi:10.1016/j.eplepsyres.2011.09.016
• We investigated the role of aquaporin-4 in the development of cerebral edema following kainic acid-induced status epilepticus (SE) using specific gravimetry and T2 MRI techniques at 6 h, 1 day, 4 days and 7 days after SE.

Professional Memberships
American Academy of Physical Medicine and Rehabilitation 2015-present
Association of Academic Physiatrists
2015-present

Presentations
Resident directed lectures, San Antonio, TX
“Bacteriorphage Therapy” Feb 2018
“Acute Management of Spinal Cord Injuries” Jan 2018
“Wrist and Hand dissection Oct 2017

“Inflammatory Myopathies, CIM, and CIP” Apr 2017
“Adult Burn Rehab” Feb 2017
“Night Float Presentation – Most Difficult Case of the Month” Dec 2016
“Autonomic Dysreflexia" Oct 2016
“Pediatric Spinal Cord Injuries” Sept 2016

Work Experience
Sports physicals | physician 05/2017-06/2019
San Antonio, TX

QTC Medical Services | Medical Quality Assurance Specialist 10/2009-08/2010
Diamond Bar, CA
Awarded highest regional producer and third highest nationally

Volunteer Experience
Special Olympics Sept 2016, Sept 2017, Sept 2018
San Antonio, TX

Leadership Roles
PM&R Resident Quality Improvement committee
July 2016-present
UT Health San Antonio, San Antonio, TX
Resident peer mentor
July 2018-present
UT Health San Antonio, San Antonio, TX

Keith Burau, MD
South Texas Veterans Health Care System

(no CV uploaded)

Challenges of ISNCSCI's pin prick examination in clinical routine – Does the type of examination tool matter?

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Steffen Franz, MD
Spinal Cord Injury Center, Heidelberg University Hospital

CV:
2018 3rd Place Poster Presentation, ASIA Annual Scientific Meeting

2015 Friedrich-Wilhelm Meinecke – memorial award – by the German Speaking Society for Spinal Cord Injury (DMGP)

Since 2014 Attending physician, neurologist, Spinal Cord Injury Center, Heidelberg University Hospital

Since 2013 Group leader clinical SCI research, Spinal Cord Injury Center, Heidelberg University Hospital

2013 – 2014 Neurologist, Spinal Cord Injury Center, Heidelberg University Hospital

2013 Board Certification, Neurology, Landesärztekammer Baden-Württemberg

2007 Medical Doctor, Ludwig Maximilian University of Munich (LMU), Germany

ORIGINAL WORK, REVIEWS and CASE REPORTS:

Franz S and Weidner N (2018) Neuropathic pain in spinal cord injury – classification, diagnosis and therapy. Neurol. Rehabil., 24(1): 43-50

Franz S, Schuld C, Wilder-Smith EP, Heutehaus L, Lang S, Gantz S, Schuh-Hofer S, Treede RD, Bryce TN, Wang H, Weidner N. (2017) Spinal Cord Injury Pain Instrument and painDETECT questionnaire: Convergent construct validity in individuals with Spinal Cord Injury. Eur J Pain 2017.

Schuld C, Franz S, Bruggemann K, Heutehaus L, Weidner N, Kirshblum SC, Rupp R, EMSCI study group. (2016) International standards for neurological classification of spinal cord injury: impact of the revised worksheet (revision 02/13) on classification performance. The journal of spinal cord medicine 2016:1-9.

Franz S, Kirshblum SC, Weidner N, Rupp R, Schuld C & on behalf of the EMSCI study group (2016) Motor levels in high cervical spinal cord injuries: Implications for the International Standards for Neurological Classification of Spinal Cord Injury, J Spinal Cord Med. 2016 Feb 25.

Schuld C, Franz S, van Hedel HJ, Moosburger J, Maier D, Abel R, van de Meent, H., Curt, A., Weidner, N., Emsci study group, Rupp, R. et al. (2014) International standards for neurological classification of spinal cord injury: classification skills of clinicians versus computational algorithms. Spinal cord. 2014 Dec 9. PubMed PMID: 25487243.

Franz S, Ciatipis M, Pfeifer K, Kierdorf B, Sandner B, Bogdahn U, Blesch A, Winner B, Weidner N (2014). Thoracic Rat Spinal Cord Contusion Injury Induces Remote Spinal Gliogenesis but Not Neurogenesis or Gliogenesis in the Brain. PloS one 9: e102896

Schuld, C., Wiese, J., Franz, S., Putz, C., Stierle, I., Smoor, I., Weidner, N., and Rupp, R. (2013). Effect of formal training in scaling, scoring and classification of the International Standards for Neurological Classification of Spinal Cord Injury. Spinal cord 51, 282-288.

Franz, S., Weidner, N., and Blesch, A. (2012). Gene therapy approaches to enhancing plasticity and

regeneration after spinal cord injury. Experimental neurology 235, 62-69.

Grum, F., Hufendiek, K., Franz, S., Bogdahn, U., Gamulescu, M.A., Rummele, P., and Schlachetzki, F. (2010). High-resolution color-coded sonography in angiolymphoid hyperplasia with eosinophilia presenting as temporal arteritis. Circulation 121, 1045-1046.

Anneser, J.M.H., Chahli, C., Franz, S., Borasio, G.D., Lorenzl S. (2007) Die Regulation entzündlicher Prozesse bei der Amyotrophen Lateralsklerose: Suppressor of cytokine signalling, aktiviertes STAT und CCAAT/enhancer-binding protein ß (c/EBP ß) Aktuelle Neurologie 01/2007; 34.

BOOKCHAPTERS:

Franz S., Finnerup N.B. (2017) Diagnostics and therapy of pain in spinal cord injury. In: Neurological Aspects of Spinal Cord Injury, ed. K. Tansey, R. Rupp, N. Weidner. Heidelberg: Springer.
DOI: 10.1007/978-3-319-46293-6_12

Franz S., Hug A., Weidner N. (2015) Functional Recovery in CNS disease: Impact of animal models. In: Oxford Textbook of Neurorehabilitation, ed. V. Dietz, N. Ward.
DOI:10.1093/med/9780199673711.003.0011

POSTER PRESENTATIONS

Franz S, Eck U, Wolf M, Wilder-Smith E, Weber M.-A., Rupp R, Weidner N (2018) Extent and pattern of lower motor neuron damage following cervical spinal cord injury. ASIA Annual Scientific Meeting, Rochester, MN, USA.

Wang H, Schuld C, Wilder-Smith E, Heutehaus L, Weidner N, Franz S (2016) Spinal Cord Injury Pain Instrument (SCIPI) in German – convergent construct validity and linguistic validation.ASIA Annual Scientific Meeting, Philadelphia, PA, USA.

Franz S, Schuld C, Weidner N, EMSCI study group, Rupp R, Schubert M (2015) Neurological and functional recovery profiles of lesion specific level and severi-ty in the first year after traumatic and ischemic spinal cord injury (SCI). 4th ISCoS and ASIA Joint Scientific Meeting, Montréal, Quebec, Canada.

Daniela Solinas, MD
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Laura Heutehaus, PT
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Till Kämmerer, MD
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Cornelia Hensel, MD
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Norbert Weidner, MD
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Rüdiger Rupp, PhD
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Christian Schuld, MSc
Spinal Cord Injury Center, Heidelberg University Hospital

(no CV uploaded)

Intrathecal baclofen pump refill monitoring: a quality improvement project for patient safety

Thursday, April 04, 2019 03:45 PM - 04:45 PM

George Marzloff, MD
Case Western Reserve University/Metrohealth Rehabilitation Institute of Ohio, Dept of Physical Medicine and Rehabilitation

CV:
AWARDS AND HONORS

2017 Association of Academic Physiatrists Innovation Award, for innovative use of technology to promote the ideals of academic physiatry.

2016 SinaiMedMaker hackathon 3rd place team winner, Icahn School of Medicine at Mount Sinai. Project: bioLumen, a biofeedback system for chronic low back pain using surface electromyography to control the lighting, sound, and data interactions within a patient's environment. $1500 awarded to team.

PUBLICATIONS

Cansev M, Marzloff G, Sakamoto T, Ulus IH, Wurtman RJ (2009). Giving Uridine Plus Docosahexaenoic Acid Orally To Rat Dams During Gestation and Nursing Increases Synaptic Elements in Brains of Weanling Pups. Dev Neurosci, 2009 Jan 15.

Wurtman RJ, Ulus IH, Cansev C, Watkins CJ, Wang L, Marzloff G (2006). Synaptic Proteins and Phospholipids are Increased in Gerbil Brain by Administering Uridine Plus Docosahexaenoic Acid Orally. Brain Research 1088(1):83-92.

I am a named study investigator for the following publications

Landau SM, Horng A, Fero A, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2016). Amyloid negativity in patients with clinically diagnosed Alzheimer disease and MCI. (collaborator). Neurology. Apr 12;86(15):1377-85.

Palmqvist S, Zetterberg H, Mattsson N, Johansson P; Alzheimer's Disease Neuroimaging Initiative, Minthon L, Blennow K, Olsson M; Swedish BioFINDER study group, Hansson O (2015). Detailed comparison of amyloid PET and CSF biomarkers for identifying early Alzheimer disease. (collaborator). Neurology. Oct 6;85(14):1240-9.

Schreiber S, Landau SM, Fero A, Schreiber F, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2015). Comparison of Visual and Quantitative Florbetapir F 18 Positron Emission Tomography Analysis in Predicting Mild Cognitive Impairment Outcomes. (collaborator). JAMA Neurol. Oct;72(10):1183-90.

Apostolova LG, Hwang KS, Avila D, Elashoff D, Kohannim O, Teng E, Sokolow S, Jack CR, Jagust WJ, Shaw L, Trojanowski JQ, Weiner MW, Thompson PM, Alzheimer's Disease Neuroimaging Initiative (2015). Brain amyloidosis ascertainment from cognitive, imaging, and peripheral blood protein measures. (collaborator). Neurology. 84(7):729-37.

Caroli A, Prestia A, Galluzzi S, Ferrari C, van der Flier WM, Ossenkoppele R, Van Berckel B, Barkhof F, Teunissen C, Wall AE, Carter SF, Schöll M, Choo IH, Grimmer T, Redolfi A, Nordberg A, Scheltens P, Drzezga A, Frisoni GB; Alzheimer's Disease Neuroimaging Initiative. Mild cognitive impairment with suspected nonamyloid pathology (SNAP): Prediction of progression. (collaborator). Neurology 2015 Feb 3;84(5):508-15

Salloway S, Sperling R, Fox N, Blennow K, Klink W, Raskind M, Sabbagh M, honig L, Porsteinsson AP, Ferris S, Reichert M, Ketter N, Nejadnik B, Guenzler V, Miloslavsky M, Wang D, Lu Y, Lull J, Tudor JC, Liu E, Grundman M, Yuen E, Black R, Brashear HR, Bapineuzumab 301 and 302 Clinical Trial Investigators (2014). Two phase 3 trials of bapineuzumab in mild-to-moderate Alzheimer's disease. (collaborator). New England Journal of Medicine 370(4):322-333.

Lo RY, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2012). Predicting missing biomarker data in a longitudinal study of Alzheimer disease. (collaborator). Neurology 78(18):1376-82.

Heister D, Brewer JB, Magda S, Biennow K, McEvoy LK, Alzheimer's Disease Neuroimaging Initiative (2011). Predicting MCI outcome with clinically available MRI and CSF biomarkers. (collaborator). Neurology 77(17):1619-28.

Kim S, Swaminathan S, Shen L, Risacher SL, Nho K, Foroud T, Shaw LM, Trojanowski JQ, Potkin SG, Huentelman MJ, Craig DW, DeChairo BM, Aisen PS, Petersen RC, Weiner MW, Saykin AJ; Alzheimer's Disease Neuroimaging Initiative (2011). Genome-wide association study of CSF biomarkers Abeta1-42, t-tau, and p-tau181p in the ADNI cohort. (collaborator). Neurology 76(1):69-79.

Lo RY, Hubbard AE, Shaw LM, Trojanowski JQ, Petersen RC, Aisen PS, Weiner MW, Jagust WJ; Alzheimer's Disease Neuroimaging Initiative (2011). Longitudinal change of biomarkers in cognitive decline. (collaborator). Arch Neurol. 68(10):1257-66.

Shen L, Kim S, Risacher SL, Nho K, Swaminathan S, West JD, Foroud T, Pankratz N, Moore JH, Sloan CD, Huentelman MJ, Craig DW, Dechairo BM, Potkin SG, Jack CR Jr, Weiner MW, Saykin AJ; Alzheimer's Disease Neuroimaging Initiative (2010). Whole genome association study of brain-wide imaging phenotypes for identifying quantitative trait loci in MCI and AD: A study of the ADNI cohort. (collaborator). Neuroimage 53(3):1051-63.

Stein JL, Hua X, Lee S, Ho AJ, Leow AD, Toga AW, Saykin AJ, Shen L, Foroud T, Pankratz N, Huentelman MJ, Craig DW, Gerber JD, Allen AN, Corneveaux JJ, Dechairo BM, Potkin SG, Weiner MW, Thompson P; Alzheimer's Disease Neuroimaging Initiative (2010). Voxelwise genome-wide association study (vGWAS). (collaborator). Neuroimage 53(3):1160-74.

Keihaninejad S, Heckemann RA, Fagiolo G, Symms MR, Hajnal JV, Hammers A; Alzheimer's Disease Neuroimaging Initiative (2010). A robust method to estimate the intracranial volume across MRI field strengths (1.5T and 3T). (collaborator). Neuroimage 50(4):1427-37.

Schott JM, Bartlett JW, Barnes J, Leung KK, Ourselin S, Fox NC; Alzheimer's Disease Neuroimaging Initiative investigators (2010). Reduced sample sizes for atrophy outcomes in Alzheimer's disease trials: baseline adjustment. (collaborator). Neurobiol Aging 31(8):1452-62, 1462.e1-2.

Vounou M, Nichols TE, Montana G; Alzheimer's Disease Neuroimaging Initiative (2010). Discovering genetic associations with high-dimensional neuroimaging phenotypes: A sparse reduced-rank regression approach. (collaborator). Neuroimage 53(3):1147-59.

Walhovd KB, Fjell AM, Dale AM, McEvoy LK, Brewer J, Karow DS, Salmon DP, Fennema-Notestine C, Alzheimer's Disease Neuroimaging Initiative (2010). Multi-modal imaging predicts memory performance in normal aging and cognitive decline. (collaborator). Neurobiol Aging 31(7):1107-21.

Xu C, Wang Z, Fan M, Liu B, Song M, Zhen X, Jiang T; Alzheimer's Disease Neuroimaging Initiative (2010). Effects of BDNF Val66Met polymorphism on brain metabolism in Alzheimer's disease. (collaborator). Neuroreport 21(12):802-7.

Holland D, Brewer JB, Hagler DJ, Fennema-Notestine C, Dale AM; Alzheimer's Disease Neuroimaging Initiative. Subregional neuroanatomical change as a biomarker for Alzheimer's disease. (collaborator). Proc Natl Acad Sci U S A. 2009 Dec 8;106(49):20954-9.

Aisen P, Schneider L, Sano M, Diaz-Arrastia R, van Dyck C, Weiner M, Bottiglieri T, Jin S, Stokes K, Thomas R, Thal L, Alzheimer Disease Cooperative Study (2008). High-dose B vitamin supplementation and cognitive decline in Alzheimer disease: a randomized controlled trial. (collaborator). JAMA 300(15):1774-83.

POSTER PRESENTATIONS

Marzloff G, Abdou A, Mehta A, Escalon MX, Bryce TN. Open-source rehabilitation reference mobile web application: A novel approach to creating collaborative resources for physiatrists in training. Poster session presented at the Icahn School of Medicine at Mount Sinai Consortium Research Day. New York, NY, June 2017.

Marzloff G, Zakhary M, Adamov E, Nori S. Sensory ataxia, weakness and hyperreflexia in a patient with neurofibromatosis type 1: a case report. Poster session presented at AAP Annual Meeting. Las Vegas, NV, February 2017.

Patel PB, Marzloff G, Shetreat-Klein A. Zika Virus associated Guillain-Barré Syndrome: a case report. Poster session presented at AAP Annual Meeting. Las Vegas, NV, February 2017.

Marzloff G, Yang A, Ambrose AF. Nonsystemic vasculitic neuropathy misdiagnosed as acute motor and sensory axonal neuropathy: a case report. Poster session presented at AAP Annual Meeting. Sacramento, CA, February 2016.

Patel A, Marzloff G, Weiss L. Laser treatment of trismus after gunshot wound to face: a case report. Poster session presented at AAPM&R Annual Assembly. San Diego, CA, November 2014.

Grossman H, Marzloff G, Luo X, LeRoith D, Sano M, Pasinetti G. NIC5-15 as a treatment for Alzheimer's: Safety, pharmacokinetics, and clinical variables. Poster session presented at International Conference for Alzheimer's Disease. Vienna, Austria, July 2009

Marzloff G, Cansev M, Wurtman RJ. Uridine plus docosahexaenoic acid increase phospholipids and synaptic proteins in brains of developing rat pups. Poster session presented at Neuroscience 2006. Atlanta, GA, October 2006.

Cansev M, Wurtman RJ, Ulus IH, Watkins CJ, Wang L, Marzloff G, Sakamoto T. Characterization of polyunsaturated fatty acids that affect synaptic proteins and phospholipids in gerbil brain. Poster session presented at Neuroscience 2006. Atlanta, GA, October 2006.

Wurtman R, Ulus IH, Cansev M, Watkins CJ, Wang L, Marzloff G. Synaptic phospholipids and proteins are increased in gerbil brain by administering uridine plus docosahexaenoic acid orally. Poster session presented at Experimental Biology 2006. San Francisco, CA, April 2006.

Cansev M, Wurtman RJ, Ulus IH, Watkins CJ, Wang L, and Marzloff G. Oral uridine (UMP) plus docosahexaenoic acid increases phospholipids and synaptic proteins in gerbil brain. Poster session presented at International Society for Neurochemistry. Portland, OR, March 2006.

Marzloff G, Chin AB, Tenenbaum J. The role of theory of mind in making inferences about novel objects. Poster session presented at MIT Brain & Cognitive Sciences Undergraduate Research. Cambridge, MA, April 2004.

OTHER ACADEMIC WRITINGS

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 3 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. May 2, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-3

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 2 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. May 2, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-2

George Marzloff. Build a web app to test fine motor coordination with Leap Motion: Part 1 (Programming Tutorial). Association of Academic Physiatrists News: Rehab Tech. April 26, 2017. Available online at http://bit.ly/rehab-leap-motion-tutorial-1

George Marzloff. Using MyoWare: a low-cost surface electromyography sensor for developing rehabilitation devices (Tutorial). Association of Academic Physiatrists News: Rehab Tech. Nov 8, 2016. Available online at http://bit.ly/myoware-for-rehab-tutorial

Ajax Yang and George Marzloff. Getting started with prospective research studies during residency training: Q&A with resident and researcher Ajax Yang. Association of Academic Physiatrists: Physiatry in Motion. Oct 25, 2016. Available online at http://bit.ly/getting-started-with-research

George Marzloff. Using Consumer Biometric Sensors for Physiatric Research: An Introduction. Association of Academic Physiatrists: Physiatry in Motion. Sep 8, 2016. Available online at http://bit.ly/using-consumer-biometric-sensors

INVITED TALKS

George Marzloff. Enhancing adaptive sports with functional electrical stimulation. Grand Rounds, Icahn School of Medicine at Mount Sinai, New York, NY, May 22, 2018.

George Marzloff. bioLumen: An EMG-controlled biofeedback system for chronic low back pain. Presented at Sinai Innovations, Icahn School of Medicine at Mount Sinai, New York, NY. October 25, 2016.

RESEARCH EXPERIENCE

2015-2018 Icahn School of Medicine at Mount Sinai Dept. of Rehabilitation Medicine New York, NY
Projects:
- Vibrational feedback system for exoskeleton training in patients with spinal cord injury
- Open-source rehabilitation reference mobile web applications: a novel approach to creating collaborative resources for physiatrists in training
- The effects of an exercise training program on truncal balance in patients with spinal cord injury
- A mobile application for home evaluation and durable medical equipment appropriateness for space: a pilot study

2007-2010 Icahn School of Medicine at Mount Sinai Alzheimer's Disease Research Ctr, New York, NY
Clinical Research Coordinator: Recruited patients for national clinical trials, administered cognitive testing and collected data, prepared IRB/NIH submissions, and maintained regulatory documents. Analyzed safety, tolerability, and pharmacokinetic data for nutraceutical study.
Served as liaison between the research center and the national Alzheimer's Disease Cooperative Society.

2005-2007 Richard Wurtman, MD Lab for Neuroendocrine Regulation, Cambridge, MA
Research Assistant: Performed dietary experimentation in rats and gerbils to study neuroprotective benefits of chronic supplementation of uridine and docosahexaenoic acid.

2006 Saoirse Corporation, Cambridge, MA
Research Intern: Aided in research and development of nanoparticle-based delivery of neuropharmaceuticals.

2004 Computational Cognitive Science Group, Cambridge, MA

Research Assistant: Designed and programmed computer-based cognitive experiments, and analyzed data to construct computational models of thought processes.

TEACHING EXPERIENCE

2018-present Spinal Cord Injury Medicine Fellow, taught and mentored residents and medical students daily

2015-2018 Physical Medicine and Rehabilitation Resident, taught and mentored medical students daily

2014-2015 Internal Medicine Resident, taught and mentored medical students daily

2009-2010 Mount Sinai Alzheimer's Disease Research Center Volunteer Mentor: Supervised and trained undergraduates in research operations, neuropsychiatric assessments and regulatory filing.

2006-2007 MIT "Pre-UROP" Mentor: Trained new undergraduate researchers in relevant material in neuroendocrinology and chemistry lab techniques.

LEADERSHIP ROLES AND SERVICE INVOLVEMENT

2017 Mount Sinai Rehabilitation Medicine Residency Technology Chair
advised department on website management and introduced new educational content for residents.

2016-2017 Residents & Fellows Council, Association of Academic Physiatrists
Technology Representative: Advisor for the national association's website, launched AAP News on the social publishing platform Medium to increase authorship and audience. Recruited authors for new content focused on rehabilitation technology.

2015-2017 Rock 'n Roll Half Marathon Medical Team (annually), New York, NY

2010-2014 MarzloffMedia.com Flashcards
Software Developer: Designed and programmed a web application of flashcards based on material specific to every basic science lecture. Ross students have used this application more than 100,000 times.

M Kristi Henzel, MD, PhD
Louis Stokes Cleveland Va Medical Center, Spinal Cord Injuries and Disorders Center, Case Western Reserve University/Metrohealth Rehabilitation Institute of Ohio, Dept of Physical Medicine and Rehabilitation

(no CV uploaded)

Impact of altering spinal cord excitability on exercise capacity during peak arm-crank ergometry; a case report

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Tom Nightingale, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

CV:
Biographical Sketch

Name: Tom E. Nightingale, PhD

A. Personal Statement

Presently, I am a Postdoctoral Research Fellow at the International Collaboration on Repair Discoveries (ICORD), University of British Columbia, working under the supervision of Dr.. Andrei Krassioukov in the Autonomic Dysfunctions Laboratory. Broadly, my research focuses on two themes; (1) assessing the impact of increasing physical activity, through various forms of exercise, on a range of health outcomes (i.e. cardiorespiratory fitness, metabolic regulation, body composition and autonomic functions) in persons with spinal cord injury (SCI) and, (2) understanding the mechanisms for cerebrovascular decline in this population. As an emerging researcher in the unique field of spinal cord injury (H-index = 7), I have published eighteen peer-reviewed manuscripts (fourteen as lead author), with a further four under consideration, along with fifteen published abstracts presented at various professional meetings around the world. My work to date has received 107 citations (as of September 9th, 2018). Since 2011, I have been investigating methods to accurately and reliably measure physical activity in persons with SCI, with the objective to further our understanding of how this multi-dimensional lifestyle behavior impacts health in this population. Given the high prevalence of cerebrovascular dysfunction (increased risk of stroke and cognitive impairment) in persons with SCI, my recent scholarly endeavours have focussed on the brain. By using the latest developments in magnetic resonance imaging technology I hope to elucidate the mechanisms whereby physical activity or autonomic dysregulation of the cardiovascular system may influence the structure and function of cerebral blood vessels in this population.

B. Positions and Honors

Positions and Employment

2017 – Present Postdoctoral Research Fellow, International Collaboration on Repair Discoveries (ICORD), University of British Columbia, Vancouver BC, Canada
2017 – 2018 Honorary Research Fellow, University of Bath, Bath, UK
2017 Postdoctoral Research Fellow & Research Scientist, Virginia Commonwealth University & Spinal Cord Injury & Disorders Service at Hunter Holmes McGuire Veteran Affairs Medical Center, VA, USA
2015 – 2017 Research Associate, University of Bath, Bath, UK
2011 – 2015 Graduate Teaching Assistant, University of Bath, Bath, UK 2010 – 2012 Research Assistant, University of Bath, Bath, UK
2008 – 2009 Assistant Scientific Officer, Ministry of Defence, Army Recruiting and Training Division, Wiltshire, UK.

Professional Memberships (ongoing)

2018 – Present Sexual Medicine Society of North America (SMSNA)

Honors

2018 Michael Smith Foundation for Health Research Trainee Fellowship (~$67,200 CAD)
2018 2nd place Post-Doctoral student Podium Presentation at the 9th Annual Rehabilitation Research Day at

GF Strong Rehabilitation Centre, Vancouver, Canada
2018 Annual ICORD Trainee Symposium poster award winner, senior category, Vancouver, Canada
2017 PLOS Early Career Researcher (ECR) Travel Award
2016 The Physiological Society Travel Grant
2015 Student poster presentation winner at the 4th International Conference on Ambulatory Monitoring of Physical Activity and Movement, Limerick, Ireland
2015 Ede & Ravenscroft prize for outstanding original postgraduate research finalist, University of Bath. (http:// www.bath.ac.uk/learningandteaching/student-engagement/er-prizewinners.html)
2013, 15, 16 University of Bath Postgraduate Research (PGR) conference funding awards.
2011 University of Bath Research Studentship, PhD Scholarship (~£62,000 GBP)

C. Contribution to Science – full Nightingale citation list at:
https://www.researchgate.net/profile/Tom_Nightingale2

I would like to highlight my most significant contributions:

1. HOMEX-SCI clinical trial:
- The influence of a home-based exercise intervention on human health indices in individuals with chronic spinal cord injury (HOMEX-SCI): study protocol for a randomized controlled trial (Nightingale et al, 2016, Trials)
- Impact of exercise on cardiometabolic component risks in spinal cord-injured humans (Nightingale et al, 2017. Med Sci Sports Exerc.)
- Home0based exercise enhances health-related quality of life in persons with spinal cord injury: A randomized controlled trial (Nightingale et al, 2018. Arch Phys Med Rehabil.)

Perhaps my most notable original research contribution to date is a 6-week randomized controlled trial (RCT) looking at the impact of upper-body exercise on; biomarkers of cardiometabolic component risks, subcutaneous adipose tissue metabolism and health-related quality of life in persons with SCI. Although over a short duration, this study demonstrated for the first time that a considerable volume (180 minutes per week) of exercise is not only achievable in this population, but that it also leads to significant improvements in hepatic insulin sensitivity, cardiorespiratory fitness and various quality of life outcomes. Primary and secondary outcomes were published in Med Sci Sports Exer and Archives Phys Med Rehabil, premier journals in the sport and exercise medicine and rehabilitation fields. A final manuscript is in preparation concerning immunological response to exercise in this population. As a result of the preliminary data collected for the HOMEX-SCI clinical trial I was shortlisted for the Ede & Ravenscroft prize for outstanding original postgraduate research in 2015.

2. Exercise guidelines to promote cardiometabolic health in spinal cord injured humans: time to raise the intensity? (Nightingale et al, 2017. Arch Phys Med Rehabil).
In this special communication we argued that the current exercise guidelines for persons with SCI are not sufficient to induce meaningful improvements in cardiometabolic disease risk factors. I posited that high-intensity interval training might be a viable alternative exercise strategy to prevent cardiometabolic disease in persons with SCI. Following the publication of this manuscript the corresponding author and I were asked by the American Congress of Rehabilitation Medicine (ACRM) Spinal Cord Injury Interdisciplinary Special Interest Group (SCI-ISIG) to present symposia at the 2017 annual conference. We collaborated with Dr. Mark Nash (Miami Project Cure for Paralysis) to deliver a thought provoking symposia, which attracted a large audience and instigated numerous discussions amongst clinicians and researchers in the area.

3. Predicting physical activity energy expenditure in wheelchair users with a multisensor device (Nightingale et al, 2015. BMJ Open Sport & Exercise Medicine).
This study demonstrated that performing an independent heart-rate calibration for a research-grade wearable device (ActiheartTM) resulted in a 3-fold reduction in physical activity measurement error. Through this adjustment, we described a method to accurately measure physical activity levels, with the lowest error ever reported in the wider-literature for persons with SCI. These data received international recognition, as I was awarded the student poster presentation prize at the 4th International Conference on Ambulatory Monitoring of Physical Activity and Movement (ICAMPAM), Limerick, Ireland. This happens to be one of the most comprehensive global conferences on the measurement of physical activity.

4. Research dissemination through media and charities (PhD thesis, University of Bath, Sept 2011 – Jan 2016).
I have previously written online communications for lay audiences i.e. Conversation article and guest blog for Sport + Recreation Alliance. I have also communicated closely with nationwide charities i.e. Back-up Trust, Spinal Injuries Association (SIA) and WheelPower. SIA featured my research (new study to help paraplegics become more active) in their Forward magazine (December 2014 Issue), which provides the UK SCI community with a wealth of information on topics including health, daily living, employment and sport. Moreover, I've had the pleasure of being interviewed on local radio (BBC radio Bristol & BBC radio Wiltshire) and television (BBC Points West) programs. From this media attention, my PhD work was also recognized by a visit from Prince Edward, Earl of Wessex.

5. Supporting/educating/training young scientists (2011 – PRESENT).
Having previously worked as a graduate teaching assistant, I taught across seven sport and exercise science undergraduate units. I also helped develop, and lectured on, a Disability Sport and Exercise MSc unit, receiving excellent student feedback (5/5). I currently play an important co-supervisory role for numerous undergraduate and graduate students in Dr. Krassioukov's laboratory, while maintaining and academic advisory position with a PhD student in the UK. I've also acted as an outreach facilitator, promoting secondary school pupils interest in Exercise Physiology.

D. Research Support

Ongoing Research Support
Funding Agency: Heart and Stroke Foundation of Canada (HSFC)
PI: Andrei Krassioukov
Grant Title: 'Evaluation of Cerebrovascular Health after Spinal Cord Injury using MRI'
Grant Dates: 09/2016 – 09/2019 Role: Co-investigator

Completed Research Support
Funding Agency: Medical Research Council (MRC) Proximity to Discovery Scheme
PI: James Bilzon
Grant Title: 'A double-blind randomised controlled trial to assess the efficacy of FLEXISEQ® for the treatment of pre-arthritic knee pain'
Grant Dates: 09/2015 – 08/2016 Role: Co-investigator

Matthias Walter, MD, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Alison Williams, MSc
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Tania Lam, PT, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Changes in Shoulder Pain, Function, and Pathology after a Home Exercise Program in Persons with Chronic Spinal Cord Injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Diana Cardenas, MD
University of Miami

CV:
IV. PUBLICATIONS

Refereed Publications:

1. Felix ER, Cowan RE, Clark TS, Cardenas DD, Irwin RW. Increased Reliability of Quantitative Ultrasound Measures of the Supraspinatus Tendon Using Multiple Image Analysts and Analysis Runs. Am J Phys Med Rehabil 2018,97:62-67 .

2. Widerstrom-Noga E, Biering-Sorensen F, Bryce TN, Cardenas DD, Finnerup NB, Jensen MP, Richards JS, Richardson EJ, Siddall PJ. The International Spinal Cord Injury Pain Extended Data Set (Version 1.0). Spinal Cord. 2016, 1-11.
3. Cardenas DD, Emir B, Parsons B. Examining the Time to Therapeutic Effect of Pregabalin in Spinal Cord Injury Patients With Neuropathic Pain. Clin Ther. 2015 May 1;37(5):1081-90.

4. Gaunaurd IA, Gómez-Marín OW, Ramos CF, Sol CM, Cohen MI, Cahalin LP, Cardenas DD, Jackson RM. Physical Activity and Quality of Life Improvements of Patients With Idiopathic Pulmonary Fibrosis Completing a Pulmonary Rehabilitation Program. Respir Care. 2014 Dec;59(12):1872-9.

5. Jackson RM, Gómez-Marín OW, Ramos CF, Sol CM, Cohen MI, Gaunarud IA, Cahalin LP, Cardenas DD. Exercise limitation in IPF patients: a randomized trial of pulmonary rehabilitation. Lung. 2014 Jun;192(3):367-76.

6. Widerström-Noga E, Biering-Sørense F, Bryce TN, Cardenas DD, Finnerup NB, Jensen MP, Richards JS, Siddall PJ. The International Spinal Cord Injury Pain Basic Data Set (version 2.0). Spinal Cord. 2014 Apr;52(4):282-6.

7. Cardenas DD, Ditunno JF, Graziani V, McLain AB, Lammertse DP, Potter PJ, Alexander, MS, Cohen R, Blight AR. Two phase 3, multicenter randomized, placebo-controlled clinical trials of fampridine-SR for treatment of spasticity in chronic spinal cord injury. Spinal Cord. 2014 Jan;52(1):70-6.

8. Dalal KL, Felix ER, Cardenas DD. Pregabalin for the management of neuropathic pain in spinal cord injury. Pain Manag. 2013 Sep;3(5):359-67.

9. Goetz LL, Cardenas DD, Kennelly M, Bonne Lee BS, Linsenmeyer T, Moser C, Pannek J, Wyndaele JJ, Biering-Sorensen F. International Spinal Cord Injury Urinary Tract Infection Basic Data Set. Spinal Cord, 2013 Sep;51(9):700-4.

10. Cardenas DD, Nieshoff EC, Suda K, Goto SI, Sanin L, Kaneko T, Sporn J, Parsons B, Soulsby M, Yang R, Whalen E, Scavone JM, Suzuki MM, Knapp LE. A randomized trial of pregabalin in patients with neuropathic pain due to spinal cord injury. Neurology. 2013 Feb; 80(60):533-39.

11. Widerström-Noga E, Pattany PM, Cruz-Almeida Y, Felix ER, Perez S, Cardenas DD, Martinez-Arizala A. Metabolite concentrations in the anterior cingulate cortex predict high neuropathic pain impact after spinal cord injury. Pain. 154 2013 Feb;2:204-12.

Presentations (International last 5 yrs):

“Treatment of Neuropathic Pain in SCI.” Presented at the 4th International Congress on Neuropathic Pain, Parallel Workshop 47: Spinal Cord Injury Pain, From Mechanisms to Treatment. Toronto, Canada. May 26, 2013.

“Findings from a Multicenter RCT Comparing Hydrophilic Coated vs Uncoated Intermittent Catheters.” Presentation at the 27th Annual Meeting of the Japanese Society of Geriatic Urology. Yamagata City, Japan. June 14, 2014.

Elizabeth Felix, PhD
University of Miami

(no CV uploaded)

Rachel Cowan, PhD
University of Alabama Birmingham

(no CV uploaded)

Robert Irwin, MD
University of Miami

(no CV uploaded)

Six Months of Comprehensive Lifestyle Intervention Lessens Cardiometabolic Component Risks in Persons with SCI and their Caregivers: A Three Dyad Case Series

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Jennifer Maher, PhD
University of Miami Miller School of Medicine

CV:
Curriculum Vitae
Jennifer L. Maher, Ph.D.

Present Position:
Postdoctoral Associate, University of Miami Miller School of Medicine

Academic/Research Positions:
2014 â€“Present Postdoctoral Associate, The Miami Project to Cure Paralysis, Miami, FL
2013-2014 & 2017 Adjunct Faculty, Florida International University, Miami, FL
2012 Research Intern, United States Army Research Institute for Environmental Medicine, Natick, MA
2011-2013 Exercise Physiology Lab Manager, University of Miami, Miami, FL
2009-2013 Graduate Research Assistant, University of Miami, Miami, FL
2003-2004 Graduate teaching Assistant, University of West Florida, Pensacola, FL

Honors and Awards:
2013 Thomas E. Miller Award for Outstanding Doctoral Student in Exercise Physiology
2013 School of Education and Human Development Travel Support Award
2011 & 2012 Barbara Marks/Katy Dean Travel Award
2009 -2013 University of Miami Graduate Assistantship
2003-2004 University of West Florida Graduate Assistantship

Service:
2017 Research and Awards Committee â€“ American Spinal Injury Association Annual Scientific Meeting , Albuquerque, NM

2017 Subject-matter expert on accreditation committee for National Council on Strength and Fitness (NCSF) Certified Strength Coach credential

2016 & 2017 National Institute of Health Summer Student Journal Club Facilitator

Manuscript/Grant Reviewer:
Applied Physiology, Nutrition and Metabolism
Medicine and Science in Sports and Exercise
Spinal Cord
The Journal of Spinal Cord Medicine
The Missouri Spinal Cord Injuries Research Program

Scientific Organizations/Societies:
American College of Sports Medicine

Research Support:
2012 Diabetes Research Institute Research Support: The effect of a 10-s maximal effort sprint performed prior to and immediately before moderate intensity exercise on glucoregulation of individuals with type 1 diabetes.

2012 School of Education and Human Development Research Support Award: The effect of a 10-s maximal effort sprint performed prior to and immediately before moderate intensity exercise on glucoregulation of individuals with type 1 diabetes.

2013 Barbara Marks/Katy Dean Research Award: The effect of a 10-s maximal effort sprint performed prior to and immediately before moderate intensity exercise on glucoregulation of individuals with type 1 diabetes.

Teaching:

2014-Present Pharmacology (PTS 650), Department of Physical Therapy, University of Miami, Miami, FL: Teaching Assistant

2017 Kinesiology (PET 3310), Department of Physical Education, Florida International University, Miami, FL

2013-2014 Health/Fitness Instructor (PEP 4111), Department of Physical Education, Florida International University, Miami, FL

2013 Introduction to Systemic Physiology (KIN 321), Department of Kinesiology and Sport Sciences, University of Miami, Miami, FL

2011 National Council on Strength and Fitness (NCSF) Personal Training Certification Workshop, National Council on Strength and Fitness, Miami FL

2010-2013 Exercise Physiology Cardiorespiratory Laboratory (KIN 322), Department of Kinesiology and Sport Sciences, University of Miami, Miami, FL

2010-2013 Exercise Physiology Neuromuscular Laboratory (KIN 222), Department of Kinesiology and Sport Sciences, University of Miami, Miami, FL

Bibliography:
Peer-reviewed Papers
Maher JM, McMillan DW, Nash MS. Voluntary exercise after SCI: Impact on Secondary Complications, Fitness and Function. Topics in Spinal Cord Injury Rehabilitation, 23(3): 175-87, 2017.
Palermo AE, Maher JM, Baunsgaard CB, Nash MS. Screening and use of bionic exoskeletons in SCI. Accepted, Topics in Spinal Cord Injury Rehabilitation, 23(3): 207-17, 2017.

Maher JM, Cowan RE. Impact of stage duration on incremental exercise test performance in individuals with SCI. Archives of Physical Medicine and Rehabilitation, 97(11): 1895-1900, 2016.

Hittinger, EA, Maher JM, Nash MS, Perry AC, Signorile JF, Kressler J, Jacobs KA. Ischemic preconditioning of the legs results in small improvements in peak exercise capacity at sea level, but not simulated high altitude in trained male cyclists. Applied Physiology Nutrition and Metabolism, 40(1):65-71, 2015.
Book Chapters

Maher JM, McMillan DW, Nash MS. Cardiometabolic Syndrome in SCI: The role of physical deconditioning and evidence-based countermeasures, In: The Physiology of Exercise in Spinal Cord Injury, Physiology in Health and Disease. DOI 10.1007/978-1-4939-6664-6_1, 2017.

International Meeting Presentations
Baunsgaard CB, Maher JM, van Gerven JJ, Palermo A, Irwin R, Nash MS. (2016). Effects of Bionic Ambulation on Heart Rate Variability during Head Up Tilt in Persons with Spinal Cord Injury. (International Spinal Cord Society Annual Scientific Meeting)
Maher JL, Cowan RE. (2015) The Relationship between Aerobic Fitness and Spinal Cord Injury Functional Index Domains Varies by Fitness Level. (International Spinal Cord Society and American Spinal Injury Association Joint

Scientific Meeting)

National Meeting Presentations
Maher JM, Baunsgaard CB, van Gerven JJ, Palermo A, Irwin R, Nash MS, (2017) Acute Effects of Bionic Ambulation on Metabolism and Substrate Utilization in Persons with Spinal Cord Injuries (SCI). (American Spinal Injury Association Annual Scientific Meeting)

Baunsgaard CB, Maher JM, van Gerven JJ, Palermo A, Irwin R, Nash MS, (2016) Energy Expenditure and Cardiovascular Drift Effect during an Extended Session of Bionic Walking. (American Spinal Injury Association Annual Scientific Meeting)

Maher JM, Nash MS. (2016) Cardiorespiratory Reponses to Intermittent Hypoxia Exposure in an Individual with Incomplete Spinal Cord Injury: A Case Study. (American Spinal Injury Association Annual Scientific Meeting)

Maher JM, Palermo A, Nash MS. (2016) Acute Effects of Bionic Ambulation on Metabolism and Substrate Utilization in Persons with Spinal Cord Injury. (University of Miami Neural Engineering Research Symposium)

Maher JM, Nash MS. (2015) Cardiorespiratory Reponses to Intermittent Hypoxia Exposure in an Individual with Incomplete Spinal Cord Injury: A Case Study. (University of Miami Miller School of Medicine 7th Annual Postdoctoral Research Day)

Oral Presentations
2017
My experiences as an ultrarunner and a little bit of physiology behind it. (Invited Speaker, South Florida Triathlon Group Meeting)

2016
Cardiometabolic Responses to Ambulation in Individuals with SCI. (Miami Project Wednesday Seminar Series)

2016 Clinical Applications for Robotic Exoskeletons in SCI: Current Status and Potential Enhancements. (University of Miami Neural Engineering Research Symposium)

2016 Effects of Acute Bionic Ambulation on Metabolism, Dysglycemia, and Cardiovascular-Autonomic Functions in Persons with Spinal Cord Injuries (SCI). (University of Miami Miller School of Medicine Neurosurgery Grand Rounds)

2015 Exercise for Health in Persons with SCI. (Spinal Cord Injury Support Group (SCISG), Miami Chapter, Jackson Hospital)

Luisa Betancourt, MD, MS
University of Miami Miller School of Medicine

(no CV uploaded)

Gregory Bigford, PhD
University of Miami Miller School of Medicine

(no CV uploaded)

Anthony Musto, PhD

University of Miami Miller School of Medicine

(no CV uploaded)

Armando Mendez, PhD
University of Miami Miller School of Medicine

(no CV uploaded)

Mark Nash, PhD
University of Miami Miller School of Medicine

(no CV uploaded)

“The Drugs Don’t Work”: A Twisted Tale of Neuroprotective Drugs to Promote Autonomic Recovery after Spinal Cord Injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Rahul Sachdeva, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

CV:

A. Personal Statement

I am presently a postdoctoral research fellow in laboratory of Dr. Andrei Krassioukov, at the International Collaboration on Repair Discoveries (ICORD), University of British Columbia in Vancouver, Canada. The overarching objective of my research is to understand and improve autonomic function after spinal cord injury (SCI).

Broadly, my animal research involves (1) investigation of morphological changes in central and peripheral autonomic pathways after SCI, (2) understanding how cardio-autonomic dysfunction is associated with cognitive decline, and (3) development of clinically relevant treatment strategies for structural and functional recovery after SCI. I routinely use complete and incomplete SCI at 3rd thoracic segment to model decentralized sympathetic control in order to study the SCI-associated deficits and to test promising therapies such as peripheral nerve grafts and chondroitinase treatment, pharmacological neuroprotection, rehabilitation by passive cycling exercise, and electrical neuromodulation. Our most recent findings show that peripheral nerve grafts and chondroitinase treatment lead to significant regeneration-mediated reduction in severity of autonomic dysreflexia, a debilitating condition characterized by rapid uncontrolled bursts in blood pressure in response to stimuli of daily routine e.g. a full bladder. Our recent data also shows that impaired cardio- and cerebrovascular control is associated with cognitive impairment in rats with SCI. Promoting cognitive recovery by improving cardiovascular function is of interest in future studies.

Clinical component of my research also focuses on cognitive impairment in individuals with SCI. My recent systematic review of clinical literature from 1946 – 2017 concludes that cognitive impairment is a serious issue in individuals with SCI and certainly cardiovascular dysfunction is a significant contributor. I am involved in a project funded by Heart and Stroke Foundation that is focused on studying cognitive function in SCI population susceptible to cardiovascular dysfunction i.e. with injury at T6 or above.

In addition to conducting my research, I mentor junior collogues (undergraduate, graduate and MD students) in the laboratory as well as facilitate multiple courses at the university. I am also a member of the American Spinal Injury Association.

With a multi-dimensional approach targeted towards improving the autonomic function following SCI, my long-term objective is to lead a multidisciplinary research laboratory that addresses clinically-relevant questions using appropriate pre-clinical models.

B. Positions and Honors

Positions

2015 –present Craig H Neilsen Postdoctoral Fellow, ICORD, University of British Columbia (UBC), Vancouver, BC, Canada.

2010 – 2015 Doctor of Philosophy (PhD) Candidate, Drexel University, Philadelphia, PA, USA.

2009 – 2010 Biotech Industrial Training Program (BITP) trainee, Auroprobe laboratories, UP, India.

2009 Undergraduate Trainee, New Drug Discovery Research Unit, Ranbaxy laboratories limited, Gurgaon, Haryana, India.

2005 – 2009 Bachelor of Technology (B. Tech.)- Biotechnology student, Padmashree Dr. D. Y. Patil University, Navi Mumbai, Maharashtra, India.

Honors/Awards

2018/05 2nd Place for Best Poster Presentation, 16th Annual Genomics Forum “Advancing Health Outcomes”, Genome British Columbia, Vancouver, BC, Canada - C$ 300

2018/05 Dr. Krassioukov International Autonomic Award, Eighth Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, BC, Canada – C$ 200

2018/05 Best overall Podium Presentation, Eighth Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, Canada – C$50

2018/05 Dr. Krassioukov International Autonomic Award, ICORD Trainee Symposium, Vancouver, BC,

Canada – C$ 1000
2018/05 2nd place for Best Oral Presentation, American Spinal Injury Association, Rochester, MN, USA- C$190 (USD 150)
2018/03 Travel Award: BC Regeneration Medicine Network (BCREGMED). – C$ 750
2018/03 Gordon Hiebert Award for Best Postdoctoral Fellow Poster, ICORD Annual Research Meeting, Vancouver, Canada. - C$ 750
2018/03 Honorable Mention: Dr. Chris Willie Graduate Prize for excellence in research, Okanagan Cardiovascular and Respiratory Symposium, Vernon, Canada.
2017/12 Best Poster Presentation: UBC Postdoc Research Day, Vancouver, Canada. –C$ 75
2017/06 Best Postdoctoral Fellow Poster: ICORD Annual Trainee Symposium, Vancouver, Canada. –C$ 250
2017/05 Best Postdoctoral Fellow Poster: Seventh Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, Canada. –C$ 50
2017/04 Best Oral Presentation: Experimental Biology Annual Meeting 2017, Chicago, USA.
2017/02 2nd Best Oral Presentation: 4th International Autonomic Symposium, Vancouver, Canada. –C$ 200

2016/10 Trainee Travel Award: International Collaboration on Repair Discoveries (ICORD), Vancouver, Canada. –C$ 1000
2013/12 ISNR Student Travel Award - 15th International Symposium on Neural Regeneration, Pacific Grove, CA, USA. –C$ 505 (USD400)
2013/03 Graduate Student Association Travel Award: Drexel University, Philadelphia, USA. –C$ 950 (USD 750)
2010/02 University Gold Medal for academic excellence (Shivshankar Bhau Patil Shegaon Medal), Navi Mumbai, Maharashtra, India.
2008/12 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2008/05 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2007/12 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2007/05 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
C. Contributions to Science
1) Cognitive impairment after SCI: We have recently completed a systematic literature review to evaluate the current incidence of cognitive impairment following SCI as well as identify the contributing and confounding factors. It is evident that impaired cardio- and cerebrovascular control, which is responsible for cognitive decline in able-bodied population is also one of the major factors leading to similar cognitive deficits in SCI population. We are also involved in both clinical and pre-clinical studies aimed towards understanding the role of cardio- and cerebrovascular dysfunction in cognitive impairment.
• Sachdeva R, Gao F, Chan CCH, Krassioukov AV. (2018). Cognitive Function After Spinal Cord Injury: A Systematic Review. Neurology (Impact factor: 8.3) In Press.

• Phillips AA, Matin N, Jia M, Squair JW, Monga A, Zheng MMZ, Sachdeva R, Yung A, Hocaloski S, Elliott S, Kozlowski P, Dorrance AM, Laher I, Ainslie PN, Krassioukov AV. Transient Hypertension after Spinal Cord Injury Leads to Cerebrovascular Endothelial Dysfunction and Fibrosis. J. Neurotrauma. (Impact factor: 5.2) 2018 Feb 1;35(3):573-581. PMID: 29141501

2) First in vivo evidence of the potential for intra-axonal protein synthesis in adult central nervous system (CNS) neurons after SCI: Our publication in the Journal of Neuroscience challenged the long-standing opinion that mature CNS axons contain negligible amounts of local (i.e. intra-axonal) mRNAs and translation machinery and therefore lack the intrinsic ability for regeneration. We are the first to show the axonal localization of several mRNA transcripts and protein synthesis machinery components when CNS neurons are provided with a growth-supportive substrate such as a nerve graft. This paper provides a new model to study local translation in vivo, identifies an exciting therapeutic target and opens up a promising avenue for future SCI research.
We further demonstrated that local translation potential is strongly associated with the regenerative effort of axons in vivo and that this phenomenon can be harnessed to promote regeneration after SCI. This study is an important finding as it strengthens the premise that intra-axonal protein synthesis is involved in

regeneration. We also reviewed this exciting new research avenue in context of promoting axonal regeneration following injury.

• Kalinski AL*, Sachdeva R*, Gomes C, Lee SJ, Shah Z, Houle JD, Twiss JL. mRNAs and Protein Synthetic Machinery Localize into Regenerating Spinal Cord Axons When They Are Provided a Substrate That Supports Growth. The Journal of Neuroscience (Impact factor: 6.34) 2015 Jul 15;35(28):10357-70. PMID: 26180210 *equal contribution. Citations = 6
Featured as Journal Cover| Recommended by F1000 prime| Editorial mention by The Neuroscientist

• Sachdeva R, Farrell K, McMullen MK, Twiss JL, Houle JD. Dynamic Changes in Local Protein Synthetic Machinery in Regenerating Central Nervous System Axons after Spinal Cord Injury. Neural Plasticity (Impact factor:3.6) 2016;2016:4087254. Epub 2016 Jun 7. PMID: 27375904 Citations = 6

• Twiss JL, Kalinski AL, Sachdeva R, Houle JD. Intra-axonal protein synthesis - a new target for neural repair? Neural Regeneration Research (Impact factor: 1) 2016 Sep;11(9):1365-1367. Review. PMID: 27857722 Citations = 7

3) Post-injury exercise enhances regeneration from CNS neurons into peripheral nerve grafts after acute SCI. This study was the first to directly show the pro-regenerative effects of exercise from a mechanistic standpoint, and provides the foundation for understanding benefits of exercise for promoting regeneration and recovery after SCI. We combined neuronal tracing and quantitative fluorescent in situ hybridization techniques to demonstrate that exercise increases the mRNA levels of regeneration associated genes and the actual number of CNS neurons regenerating into the peripheral nerve grafts. We also reviewed the pertinent literature in context of exercise as a non-invasive strategy for regeneration post SCI.

• Sachdeva R, Theisen CC, Ninan V, Twiss JL, Houlé JD. Exercise dependent increase in axon regeneration into peripheral nerve grafts by propriospinal but not sensory neurons after spinal cord injury is associated with modulation of regeneration-associated genes. Experimental Neurology (Impact factor: 4.65) 2015 Sep 12. pii: S0014-4886(15)30086-8. PMID: 26366525 Citations = 7

• Theisen CC, Sachdeva R, Austin S, Kulich D, Kranz V, Houlé JD. Exercise and Peripheral Nerve Grafts as a Strategy to Promote Regeneration after Acute or Chronic Spinal Cord Injury. J. Neurotrauma. (Impact factor: 5.2) 2017 May 15;34(10):1909-1914. Review. PMID: 28437223 Citations = 3

4) Using a triple combination approach to promote cardio-autonomic recovery following SCI. This ongoing study currently funded by Craig H. Neilsen Foundation, is focused at combining regeneration (nerve grafts and chondroitinase) and rehabilitation (passive exercise) to mitigate the severity of autonomic dysreflexia. Our results show that the combination approach can reduce the severity of autonomic dysreflexia by over 50%. Histological analyses are aimed at identifying the neuroanatomical correlates of recovery.

• R Sachdeva, R Gopaul, M Jia, A Monga, M Ramer, AV Krassioukov. A Triple Combination Approach Involving Nerve Transplantation, Glial Scar Digestion and Passive Exercise Promotes Cardiovascular Recovery after Spinal Cord Injury. The FASEB Journal 31 (1 Supplement), 1077.7-1077.7

D. Research Support
2019 – 2020 Bluma Tischler Postdoctoral Fellowship, University of British Columbia – C$ 20,400
Neuroprotective and Regenerative Strategies to Restore Supraspinal Control and Improve Vascular-Cognitive Impairment after Spinal Cord Injury. Principal Applicant.
2018 - 2021 Canadian Institutes of Health Research (CIHR) Project Grant –C$ 267,750
Transient Hypertension and Vascular-Cognitive Impairment after Spinal Cord Injury: Benefit of Passive Exercise. Co-applicant. (PI: Dr. Andrei V. Krassioukov)
2017 - 2019 Craig H. Neilsen Foundation Postdoctoral Fellowship –C$ 192,000 (USD 150,000) Regenerative Strategies for Autonomic Recovery After Spinal Cord Injury. Principal Applicant.
2016 - 2017 International Collaboration on Repair Discoveries (ICORD) Seed Grant –C$ 20,000 Combined neuroprosthetic and neuroprotective approach to promote restoration and recovery of autonomic circuitry. Co-applicant. (PI: Dr. Andrei V. Krassioukov)
2009 - 2010 Trainee Scholarship- Biotech Consortium India Limited, Govt. of India –C$ 740 (INR 39000)

Utilization of COBAS® AMPLICOR for the quantitation of HCV viral load in clinical specimens. Principal Applicant.

Steven Cao, BSc
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Arshdeep Marwaha, BSc
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Dennis Solomon, BSc
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Jie Liu, MD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Ward Plunet, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Jordan Squair, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Christopher West, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Wolfram Tetzlaff, MD, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Neurophysiological outcomes after subacute cell transplantation in AIS A subjects. Subclinical changes that redefine “completeness”.

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Andrea Santamaria, MD
The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine

CV:
Andrea J Santamaría MD

POSITION TITLE: Sr. Research Associate, The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine.

A. Personal Statement

I am a translational researcher committed to advancing treatments for spinal cord injury (SCI) with 8 years of training and experience beyond my MD degree. I came to the United States as a student volunteer and then decided to return after receiving my degree. As a young medical student, I was given the opportunity to develop, compile, direct the analysis of, and write the histopathological evaluation of SCI swine and primate pre-clinical studies for submission of an Investigational New Drug application to the US Food and Drug Administration. This opportunity was life changing and tilted my medical career into the SCI research field. It was exciting to participate in a world recognized team taking many years of animal studies into the first human trials. At that time our laboratory focused on translation of autologous Schwann cell transplantation strategies into clinical trials. We developed a primate cervical SCI model and a porcine thoracic SCI model. Much of the work involved in these experiments concerned the analysis of cell transplant survival, integration, function and neural axis biodistribution. Besides locomotion and hand dexterity, we performed several electrophysiological assessments developing transcranial electrical and magnetic stimulation protocols for both models. This work paralleled nicely when we undertook to conduct the neurophysiology assessments for two University of Miami/Miami Project clinical trials. Solving problems in the lab gave me several other opportunities to widen my skill set. As an example, based on experience with a clinical stereotaxic injector that requires transient apnea, we developed a simple inexpensive needle-free injection system for the transplantation of cells or other biomaterials into injury epicenters. We additionally conducted a pilot porcine study to test if epidural stimulation triggered stepping was feasible in the porcine SCI model, and serve as collaborators in a study testing DBS of the porcine MLR to evoke gait. I initiated other alliances such as with the UCL Bradbury group to test chondroitinase viral constructs in our primate model and a cooperation with the National High Magnetic Field Laboratory to perform high strength ex-vivo MRI studies that allow almost histological grade imaging. We also collaborate with industry and created an automated device intended for the transplant of cellular trails, MRI guided targeted injections of DRGs for viral vector delivery, and spinal cord decompression and acute implantation of scaffold biomaterials into the injury epicenter. Some very exciting ultrasound data lead us to recently shift our research into more mechanistic neuroprotection studies focused on the peri-epicenter after SCI, and are currently scrutinizing anesthetic and physiological parameters to monitor and improve penumbra preservation after primary injury. I have supervised a diverse array of students and junior lab members and constantly strive for them to learn the rationale and fundamental knowledge behind their work. I believe there is a large gap to be filled in between the PhD and MD mindsets, and much of the potential success of translational research depends on a balanced collaboration.

B. Positions

2009-2010 Medical Intern, Hospital Universitario de la Samaritana, Bogotá, Colombia.
2010-2011 Visiting Student volunteer Scholar. The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine.
2012-2014 Research Associate. The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine.
2015-Present Senior Research Associate. The Miami Project to Cure Paralysis, University of Miami, Miller

School of Medicine.

C. Contributions to Science

2015 to present
During this period I have worked as the lead member in Dr. James Guest laboratory. I am responsible for the organization of team, project planning, milestone development and execution of experiments. We performed the electrophysiology studies of a single patient expanded access clinical trial for targeted intrathecal infusions of bone marrow derived mesenchymal stem cells for complete C3/4 injury. Recently, we have started studies of spinal cord blood flow and metabolism and are envisioning the translation of these techniques into the intensive care acute management of SCI patients. Additionally, I established a cooperation with a research group at King's College London for the sharing of a lentiviral construct designed for the digestion of Chondroitin sulfate proteoglycans. I designed and executed a primate cervical hemi-contusion experiment for the testing of this construct. I was selected to represent the Miami Project to Cure Paralysis at a Spinal cord meeting in Madrid for the education of patients in current SCI research approaches. Due to expertise in the porcine model we have established a collaboration with another group at The Miami Project studying deep brain stimulation techniques for paraplegia; my role within this cooperation is the development of MRI guided surgical procedures for the implantation of multi-array commercial and experimental electrodes in the brainstem mesencephalic locomotor region. This background also allowed us to assist a biotechnology company in the clinical design of several porcine experiments.

Manuscripts related to period:
1) James D. Guest, Simon W. Moore, Alex A. Aimetti, Artem B. Kutikov, Andrea J. Santamaria, Christoph P. Hofstetter, Alexander E. Ropper, Nicholas Theodore, Thomas R. Ulich, Richard T. Layer. Biodegradable scaffold implantation after internal decompression of acute spinal cord contusion injury: Neuroprotection with increased endogenous repair. (Revision submitted Biomaterials. 9/2018).
2) Andrea J. Santamaria, Francisco D. Benavides, Kyle R. Padgett, Luis G. Guada, Juan P. Solano, and James D. Guest. Dichotomous locomotor recoveries are predicted by acute changes in segmental blood flow after thoracic spinal contusion injuries in pigs. (submitted Journal of Neurotrauma. 7/2018).
3) Artem B. Kutikov, Simon W. Moore, Richard T. Layer, Pamella E. Podell, Sridhar Nadia, Andrea J. Santamaria, Christoph P. Hofstetter, Thomas R. Ulich, James D. Guest. Method and Apparatus for the Automated Delivery of Continuous Neural Stem Cell Trails Into the Spinal Cord of Small and Large Animals. Neurosurgery. 2018 Aug 29. doi: 10.1093/neuros/nyy379. Epub ahead of print.
4) Andrea J Santamaria, Francisco D Benavides, Mohamed S Elhammady, Darcy L DiFede, Aisha Khan, Pujol M, W. Dalton Dietrich, Barth A Green, Joshua M Hare and James D Guest. Neurophysiological and clinical outcomes after three targeted intrathecal injections of bone marrow stem cells in a C3 tetraplegic subject. J Neurotrauma. Published Online:23 Jul 2018https://doi.org/10.1089/neu.2018.5716.
5) Benavides, F.D., Santamaria, A.J., Guada Delgado L., Bodoukhin N., Solano J., Guest J. Characterization of motor and somatosensory evoked potentials in the Yucatan micropig using transcranial and epidural stimulation. J Neurotrauma, 2016. Epub ahead of print.
6) Soderblom, C., D.H. Lee, A. Dawood, M. Carballosa, A. Jimena Santamaria, F.D. Benavides, S. Jergova, R.M. Grumbles, C.K. Thomas, K.K. Park, J.D. Guest, V.P. Lemmon, J.K. Lee, and P. Tsoulfas, 3D Imaging of Axons in Transparent Spinal Cords from Rodents and Nonhuman Primates. eNeuro, 2015. 2(2).

Book chapters related to period:
1. Andrea J. Santamaria, Juan P. Solano, Francisco D. Benavides and James D. Guest. (2018). "Intraspinal delivery of Schwann cells for spinal cord injury", in Schwann cells: Methods and Protocols. Monje, Paula V., Kim, Haesun A. (Eds) Methods Mol Biol. 2018;1739:467-484. doi: 10.1007/978-1-4939-7649-2_31.
2. Santamaria A.J., Guest J.D. (2017) The Current Status of Neuroprotection for Spinal Cord Injury. In: Weidner N., Rupp R., Tansey K. (eds) Neurological Aspects of Spinal Cord Injury. Springer, Cham. ISBN 978-3-319-46293-6

Abstracts and presentations related to period:
1. A.J. Santamaria. Dual strategy of lentiviral chondroitinase acute transfection and subacute autologous Schwann cell transplantation in primates with C3/4 hemi-contusion injury. Presented at Seventeenth Hubert L. Rosomoff Research Day. University of Miami, June 2017.
2. I. Opris, S. Chang, FD Benavides, FJ Sanchez, LM Villamil, AJ Santamaria, Y Nunez-Gomez, JP Solano, JD

Guest, BR Noga; Deep brain stimulation of the mesencephalic locomotor region in freely moving vs. anesthetized minipigs. Nov 2017. Soc Neurosci.Abstract 234.03.
3. Y. Flores, A. J. Santamaria, R. de Negri, F. D. Benavides, N.D. James, Y. Nunez, J. P. Solano, J. Verhaagen, E. J. Bradbury, J. D. Guest. Assessment of the combined effects of chondroitinase and autologous Schwann cells on hand function after cervical SCI in primates. Presented at The Society for Neuroscience meeting, San Diego November 2016.
4. R. de Negri, A. J. Santamaria, Y. Flores, F. D. Benavides, N.D. James, Y. Nunez, J. P. Solano, J. Verhaagen, E. J. Bradbury, J. D. Guest. The Impact of combination biologics on treadmill quadrupedal locomotion after spinal cord hemi-contusion in non-human primates. Presented at The Society for Neuroscience meeting, San Diego November 2016.
5. Benavides, F.D., Santamaria, A.J., Bodoukhin N., Guada Delgado L., Nunez Y., Solano J., Guest J. Characterization of motor and somatosensory evoked potentials in the Yucatan micropig using transcranial and epidural stimulation. Presented at The Society for Neuroscience meeting, San Diego November 2016.
6. FD Benavides, I Opris, AJ Santamaria, FJ Sanchez, IM Villamil, Y Nunez-Gomez, JP Solano, BR Noga, JD Guest. MRI guided targeting and stimulation of the mesencephalic locomotor region in the Yucatan minipig. Presented at The Society for Neuroscience meeting, San Diego November 2016.
7. Ioan Opris, Francisco D. Benavides, Francisco J. Sanchez, Luz M. Villamil, M.D, Andrea J. Santamaria, Juan P. Solano, Yohjans Nunez, James D. Guest, Brian R. Noga. Translation into humans of deep brain stimulation of the mesencephalic locomotor region via the rodent and Yucatan minipig models. Will be presented at Neural engineering symposium. University of Miami, miller School of Medicine. October 13, 2016.
8. F.D. Benavides A.J. Santamaria, A. Y. Flores, JD Guest. Assessment of thoracic and cervical spinal cord injuries using intercostal motor evoked potentials in humans. Presented at Society for Neuroscience Chicago November 2015.
9. A.J. Santamaria. Regeneración de la Medula espinal. Avances. Presented at III Foro Catedra Asepeyo para personas con Lesión medular y su cuidador. Hospital Asepeyo Coslada. Madrid. Spain. October 22, 2015.

2012-2014
During this period I received training in neurosurgical approaches in primates and minipigs for the creation of experimental SCI, cell transplantation and neuroanatomical tracing. I compiled and directed analysis of the histopathological evaluation of the swine and primate pre-clinical studies for the submission and approval of an Investigational New Drug application and consequent Miami Project Phase 1 clinical trials: Safety of Autologous Human Schwann Cells (ahSC) in Subjects with Subacute and Chronic SCI (ClinicalTrials.gov Identifiers NCT02354625 and NCT02354625). Along with a research colleague and principal investigator we developed the electrophysiology protocols for the evaluation of patients enrolled in the sub-acute cohort. As an unexpected project I developed a needle free injection system device for the reduction of cell shear stress and complications related to spinal cord transplantation, I drafted together with PI, the IND amendment for FDA approval of this system which is currently used in the chronic trial. I additionally designed and executed an experiment involving a triple hemi-contusion thoracic approach in minipigs for the evaluation of immunologic responses of virally transduced Schwann cell transplants and executed together with team pilot experiments for the evaluation of Epidural electrical stimulation and weight supported stepping in minipigs with SCI.

Manuscripts related to period:
1. Guest, J., A. J. Santamaria and F. D. Benavides (2013). "Clinical translation of autologous Schwann cell transplantation for the treatment of spinal cord injury." CurrOpin Organ Transplant 18(6): 682-689.

Abstracts and presentations related to period:
1. A.J. Santamaria, F.D. Benavides, L.G. Guada, Y. Nunez, A. Brooks, J.P. Solano, Guest JD. Immune responses following transplantation of expanded autologous Schwann cells for spinal cord injury in minipigs. Presented at Society for Neuroscience Washington November 2014.
2. A.J. Santamaria, F.D. Benavides, L.G. Guada, Y. Nunez, K. Nasser, L.P. Guest, H. Levene, J.P. Solano, Guest JD. Causes of injury variation in a porcine thoracic contusion model. J Neurotrauma 31(12) [D2-16], 2014F.
3. A. Santamaria, F. Benavides, L. Guada, Y Nunez, A. Nanayakkara, H. Levene, J. Solano, J. Guest. Immunological tolerance of autologous Schwann cell transplantation for Spinal Cord Injury. Presented at

Fourteenth Hubert L. Rosomoff Research Day, University of Miami. May 3rd, 2014.
4. A. Santamaria, L. Guada, F. Benavides, Y. Nunez, L. Guest, A. Nanayakkara, N. Bodoukhin, J. Solano, J. Guest. The Miami Porcine Walking Scale (MPWS): minimum substrate associated with locomotion after sub-acute or chronic contusive thoracic spinal cord injury (SCI). Presented at International symposium for Neural Regeneration. Pacific Grove CA. December 2013
5. F. Benavides, A. Santamaria, N. Bodoukhin, A. Nanayakkara, L. Guada, J. Solano, J. Guest. Monitoring spared evoked potential conduction during cell transplantation in minipigs with SCI to increase procedural safety. Presented at International symposium for Neural Regeneration. Pacific Grove CA. December 2013.
6. L Guada, AJ Santamaria, FD Benavides, Y Nunez, K Nasser, JP Solano, JD Guest. Change in Miami Porcine Walking Scale scores during chronic survival after thoracic SCI, Schwann cell transplantation and intensive rehabilitation. 831.01/JJ6. Presented at Society for Neuroscience San Diego. November 2013.
7. AJ Santamaria, FD Benavides, L Guada, Y Nunez, K Nasser, JP Solano, JD Guest. Epidural electrical stimulation in the porcine SCI model, initial observations of long-term tissue effects. 831.19/KK6. Presented at Society for Neuroscience San Diego. November 2013.
8. AJ Santamaria, FD Benavides, LG Guada, Y Nunez, K Nasser, H Levene, JP Solano, JD Guest. Minimum preserved white matter associated with recovery of hindlimb locomotion after thoracic contusive SCI in micropigs. Correlation of Locomotor score with axonal preservation, and electrophysiological conduction. Presented at Society for Neuroscience New Orleans. October 2012. Abstract 2012-S-16476-SfN.
9. FD Benavides, DF Tovar, AJ Santamaria, LG Guada, Y Nunez, JD Guest. Lateralized stimulation of conduction through motor pathways using evoked potentials in non-human primates (Macaca fascicularis). Presented at Society for Neuroscience New Orleans. October 2012. Abstract 2012-S-17141-SfN.
10. L Guada, FD Benavides, AJ Santamaria, JP Solano, Y Nunez, JD Guest. Epidural stimulation and quipazine applied following subacute Schwann cell transplantation produces hindlimb stepping in minipigs with severe thoracic spinal cord injury. Presented at Society for Neuroscience New Orleans. October 2012. Abstract 2012-S-14777-SfN.
11. K. Nasser, FD Benavides, AJ Santamaria, LG. Guada, Y Nunez-Gomez, J. Guest, JP Solano. Ultrasonographic quantification of lesion size and spared tissue predicts functional outcome following acute spinal cord injury (SCI) in pigs. Presented at Society for Neuroscience New Orleans. October 2012. Abstract 2012-S-14009-SfN.

2010-2011
During my volunteer period as a medical student I received training in cell culture, brightfield, fluorescence, confocal and electron microscopy, primate behavioral analysis and neurophysiology. I developed an immunostaining technique for the identification of corticospinal tract axons and validated these findings across rodent, swine and primate species. Aided research group in identification and characterization of transplanted Schwann cells in a previously completed primate experiment. These findings served as proof for long-term (1 year) survival and remyelination potential after SCI. I joined the pre-clinical team in the development of a minipig SCI model for the testing of autologous and allogeneic Schwann cell transplantation, together with the creation of an drop weight injury device for large animals, and validation of behavioral outcomes and pilot electrophysiology assessments. I developed all histological and microscopy protocols for the analysis and characterization of cell transplants and injury extension related to these studies, and was given the opportunity to present results of year as first author or coauthor in several international meetings.

Abstracts and presentations related to period:
1. Santamaria, F. Benavides, L. Guada, G. Athauda, H. Levene, J. Solano, J. Guest. Allogeneic and autologous Schwann cell grafts in a porcine SCI contusion model: Immune response and CNS integration. Neurorehabilitation and Neural Repair, 2011.
2. F. Benavides, D. Tovar, A. Santamaria, L. Guada, J. Guest. Evaluation of conduction through motor pathways: using evoked potentials in non-human primates. Neurorehabilitation and Neural Repair, 2011.
3. F. Benavides, A. Santamaria, L. Gauda, H. Levene, J. Solano, James Guest. Schwann Cell transplantation to support axonal repair in large animal models of SCI. Presented at the 13th Spinal Research Network Meeting, Sept 2011, London UK
4. Santamaria J, Benavides F, Guest J. Assessment of Cam Kinase IIα antibody labeling of the Corticospinal Tract after spinal cord injury in rodents, pigs and non-human primates. Presented at the 29th National Neurotrauma Symposium, Hollywood, Florida, July 2011. J Neurotrauma 28. A35.2011.
5. Solano J, Levene H, Padgett K, Benavides F, Santamaria J, Garcia-Canet C, Guest J. Tolerance of three

volumes of injected Schwann cells into the contused porcine spinal cord. Maximum tolerated dose study. Presented at the 29th National Neurotrauma Symposium, Hollywood, Florida, July 2011. J Neurotrauma 28. A24, 2011.
6. F Benavides, J Santamaria, J Solano, H Levene, J Guest. Utility of monitoring spinal cord conduction during transplantation in incomplete SCI. Presented at ASIA/ISCOS Washington, DC. June 2011. Published in Topics in Spinal Cord Injury Rehabilitation. 16:8.
7. Santamaria AJ, Benavides FD, Athauda G, Garcia-Canet C, Solano J, Levene H, Guest JD. Histological assessment of allogeneic and autologous Schwann cell grafts in a porcine spinal cord injury contusion model. Presented at Society for Neuroscience Washington, DC. November 2011. Abstract 65.10, 2011.
8. Santamaria AJ, Benavides FD, Guest JD. Corticospinal tract labeling and characterization with alpha calcium/calmodulin-dependent protein kinase II in naive and spinal cord injured rodents, pigs and non-human primates. Presented at Society for Neuroscience Washington, DC. November 2011. Abstract 160.10, 2011.

D. Current Research Support

1. Sponsor. Craig Nielsen Foundation
Topic: Neuroprotective effects of internal decompression of the spinal cord.
Role. Key Person
Amount. 600,000 USD 2015-2018.
List of specific Aims:
1) Determine the baseline local blood flow, tissue pressure, and tissue PO2 in the thoracic spinal cord of Yucatan minipigs and how this varies with mean arterial blood flow (MAP).
2) Determine the minimal physiological criteria for neural tissue survival after thoracic SCI.
3) Determine if spinal cord internal decompression via piotomy, after severe SCI, improves locomotor functional outcome.
Principal Investigator: James Guest
OVERLAP: None

Pedro Saraiva, Msc
The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine

(no CV uploaded)

Francisco Benavides, MD
The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine

(no CV uploaded)

Aisha Khan, MBA
The Interdisciplinary Stem Cell Institute, University of Miami, Miller School of Medicine

(no CV uploaded)

Joshua Hare, MD
The Interdisciplinary Stem Cell Institute, University of Miami, Miller School of Medicine

(no CV uploaded)

Barth Green, MD
The Miami Project to Cure Paralysis, Department of Neurological Surgery, University of Miami, Miller School

of Medicine

(no CV uploaded)

Dalton Dietrich, PhD
The Miami Project to Cure Paralysis, Department of Neurological Surgery, University of Miami, Miller School of Medicine

(no CV uploaded)

James Guest, MD, PhD
The Miami Project to Cure Paralysis, Department of Neurological Surgery, University of Miami, Miller School of Medicine

(no CV uploaded)

"A Structured Spinal Cord Injury Educational Program can Elevate Staff Engagement and Clinical Practice."

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Lauren Snowdon, PT, DPT
Kessler Institute for Rehabilitation

CV:

LAUREN SNOWDON
29 May Place. Nutley, NJ 07110
973-568-3697
Lsnowdon8@yahoo.com

PROFESSIONAL EXPERIENCE
KESSLER INSTITUTE FOR REHABILITATION West Orange, NJ 2001-present

Clinical Manager (January 2006-present)
Supervise Physical Therapy, Occupational Therapy, and Support Staff across all floors and diagnostic categories
Contribute to daily operations of the Inpatient Rehabilitation Department through interdisciplinary communication, monitoring of clinical needs, equipment management, and completion of administrative tasks
Foster staff development through education and mentorship
Facilitate clinical program development, with specific focus on clients with Spinal Cord Injury, Neurologic conditions, and Orthopedic diagnoses
Contribute to varied multi-campus committees, including serving in lead roles on the Neurologic Program Committee and as the Orthopedic Program Clinical Chair
Active involvement in direct patient care needs including evaluation and treatment, discharge planning, team collaboration, customer service excellence, and focus on successful outcomes
Participate in employee interview, selection, and orientation processes
Complete Annual and Introductory Performance Appraisals
Participated in development of varied resources for staff and operational needs including competency assessments, clinical pathways, weekend scheduling guidelines, team conference documents, and audit tools
Involvement in training of therapy managers and therapists within the Select Division
Clinical focus areas: Evaluation and treatment of the spinal cord injured client, advanced mat mobility and transfer strategies, wheelchair skills training, management of shoulder pain and upper limb preservation

Center Coordinator of Clinical Education (January 2008-present)
Oversee Clinical Education Program for Physical Therapy, Occupational Therapy, Speech Therapy, and Therapeutic Recreation across three Kessler campuses
Lead discipline specific and interdisciplinary meetings
Facilitate program development and achievement of annual goals
Coordinate with university specific representatives regarding establishment of contracts, student placements, and management of challenged students
Developed and implemented core program documents including Weekly Evaluation Forms, Annual Student Tracking Log, Pre-Requisite Guidelines, Orientation Presentations, Essential Functions, and Medical Record Training Manual documents
Created standardized Student Seminar Series and updated approach to utilize a collaborative flip-classroom format

Program Director Neurologic Physical Therapy Residency Program (June 2011-present)

Established the 17th Neurologic Physical Therapy Residency in the country through completion of successful application, review, credentialing, and reaccreditation processes with the American Physical Therapy Association

Oversee Residency Leadership Team and Faculty across three Kessler campuses through individual consultation, formal meetings, coordination of structured mentorship experiences, and facilitation of educational opportunities

Interview, select, orient, and supervise Residents annually

Uphold all standards related to program documentation

Implemented teaching partnerships with two local universities

Coordinate and advise interdisciplinary expert panel and presenters for the Annual Interprofessional Symposium with Seton Hall University

Active Member of Residency and Fellowship Think Tank, contributing to review of best practices in mentoring

Serve as a Research Mentor on Neurologic Residency participant research projects

Acting Director of Rehabilitation (August 2014-December 2014)

Leadership of 4 Clinic Managers and approximately 100 staff members in the Inpatient Rehabilitation Department

Active participation in Hospital Management Team, Utilization Review, and Business Development Meetings

Completion of departmental, facility specific, and divisional audits focused on quality outcomes and performance improvement

Management of departmental budget and expenses

Positively impacted the employee and patient experience through hiring into 20 open department positions, maintaining high staff retention, and producing exceptional employee engagement survey results, including a score of 4.96 out of 5 for the management team of direct reports

TEACHING EXPERIENCE

RUTGERS SCHOOL OF HEALTH PROFESSIONS (UMDNJ) Newark, NJ September 2005-present

Adjunct Instructor, Motor Learning and Control Course (September 2005-present)

Provide lectures on a range of content areas in the realm of Motor Learning and Control, using current research, clinical examples, and patient-centered videos

Plan and implement curricular modifications integrating varied teaching and testing strategies, and incorporating updated evidence and case-based content

Present and coordinate video case presentation series with Kessler Neurologic Residents

Manage grading of all course components including essay examinations and group presentations

Mentored a collaborative Adjunct Instructor in course content, clinical lecture materials, and grading requirements upon expansion of class size

Consistently achieve top scores and positive written feedback on annual course evaluations

Adjunct Instructor, Neurologic Physical Therapy Course (January 2006-May 2012)

Developed and provided comprehensive, evidence-based lectures incorporating video cases on topics of Spinal Cord Injury Evaluation and Treatment of the Spinal Cord Injured Patient

Served as a lab assistant responsible for training students in varied physical therapy treatment techniques

Proctored and graded lab practical examinations, and trained Teaching Assistants and PT Residents in this area

Annually received top scores and positive comments on course evaluations

SETON HALL UNIVERSITY South Orange, NJ August 2017-present

Adjunct Instructor, Critical Thinking and Clinical Reasoning Process (July-August 2017)

Manage all components of course including syllabus design, lecture preparation and provision, group project development, and assignment grading

Coordinate opportunities for increased access to evidence-based materials through library and database resources

Introduce first year doctoral students to graduate workload expectations, study strategies, and clinical reasoning skills through application of peer-reviewed articles to patient-based cases

Adjunct Instructor, Critical Inquiry I (August 2017-December 2017)

Integrated as lead instructor in pivotal line of graduate coursework secondary to innovative modifications to curricular content and outstanding feedback from students on course evaluations from Critical Thinking and Clinical Reasoning Process course

Provide video-based instruction facilitating active participation and critical thinking through application of medical literature to patient cases

Created core documents for utilization within the program's Critical Inquiry line of coursework with a faculty colleague, including a Critical Appraisal Form, Literature Review Rubric, and Presentation Grading Rubric

EDUCATION

Creighton University Omaha, NE
Doctorate of Education (EdD) in Interdisciplinary Leadership, In Progress

University of Medicine and Dentistry of New Jersey Newark, N.J.
Post-professional Doctorate of Physical Therapy (DPT), December, 2003

Ithaca College Rochester, N.Y.
Master of Science, September, 2001. Major: Physical Therapy

Ithaca College Ithaca, N.Y.
Bachelor of Science, May, 2000. Major: Clinical Science, Minor: Gerontology

HONORS AND AWARDS

Awarded 2016 Rutgers School of Health Related Professions' Distinguished Service Award in recognition of teaching and scholarly efforts to further the educational experiences of students in the physical therapy program

Received ribbon from the Global Health SIG applauding work in the area of Social Responsibility for 2016 APTA Combined Sections Meeting Poster Presentation entitled "Planning and Resource Development to Facilitate Successful Implementation of a Collaborative Model of Clinical Supervision"

Awarded the 2011 Cathy Doetzer Kohlenstein Clinical Educator's Award for outstanding contributions to the education of University of Delaware students

Recognized for 15 years of contributions to the Kessler organization via the Kessler Service Award

PUBLICATIONS

Academicians and Neurologic Physical Therapy Residents Partner to Expand Clinical Reflection Using the SOLO Taxonomy: A Novel Approach.
Pinto Zipp, G, Maher C, Donnelly E, Fritz B, Snowdon L. J Allied Health. 2016 Summer; 45(2): e15-20.

IV Step: Video Case V
Manuscript submitted for publication in Pediatric Physical Therapy. September 2016.

Take a Deep Breath: Therapists at Kessler Institute for Rehabilitation Ensure Clinical Competency in the Respiratory Care of Medically Complex Patients
Publication: Advance for Physical Therapists. August 2015.

We All Can Call: Enhancing Accessible Phone USAge for Clients with Spinal Cord Injury
Publication: Assistive Technology Journal. May 2011.

Wheels of Progress
Publication: Assistive Technology Journal. May 2011.

Stroke: Case Study #10
Publication: Improving Functional Outcomes in Physical Rehabilitation. Textbook, Case Study. March 2010.

Attacking Agitation: The Benefits of a Behavior Management Plan for the Agitated Patient.
Publication: Advance for Physical Therapists. October 2008.

Unite and Conquer: An Interdisciplinary Approach to Pain Management Following Spinal Cord Injury
Publication: Advance for Physical Therapists. February 2007.
Republication: Advance for Physical Therapists. February 2008.
Republication: Advance for LPN's. February 2008.

PRESENTATIONS
Clinical Education

Flipping for Self-Directed Learning: The Link between the Classroom and the Clinic
Platform Presentation: APTA Combined Sections Meeting, New Orleans, LA. February 2018.

Flipping for Clinical Reasoning: The Link between the Classroom and the Clinic
Poster Presentation: APTA Education Leadership Conference, Columbus, OH. October 2017.

Integrating a Flipped Teaching Approach into a Clinic Based Student Lecture Series
Presentation: APTA Education Leadership Conference, Phoenix, AZ. October 2016.

Flip Classroom, Flip Clinic: Utilization of a Flipped Teaching Approach to Enhance Application of Student Lecture Series Material
Poster Presentation: APTA Combined Sections Meeting, Anaheim, CA. February 2016.

Planning and Resource Development to Facilitate Successful Implementation of a Collaborative Model of Clinical Supervision
Poster Presentation: APTA Combined Sections Meeting, Anaheim, CA. February 2016.

The Development of a Neurologic Residency Program
Presentation: Mini-CSM conference, Philadelphia, PA. March 2015.

Kessler Institute's Clinical Competence Assessment Program
Poster Presentation: APTA Combined Sections Meeting, Las Vegas, NV. February 2014.

Clinical Competence Assessment
Poster Creation, presented by colleague: The First National Summit on Safety and Quality for Rehabilitation Hospitals, Alexandria, VA. May 2013.

Neurologic Physical Therapy Practice

Competency Training for the Interdisciplinary Team
Presentation, Lab Facilitator: New Orleans, LA. March 2018.

Spinal Cord Injury 101
Presentation: West Gables, FL. November 2017

The Rehabilitation Services and Special Programs at Kessler Institute
Presentation: Millburn Old Guard, South Orange, NJ. April 2014.

A Practitioner's Recommendations for Standardized Medical Equipment
National Webinar Presentation: US Access Board, West Orange, NJ. May 2013.

SCI Roundtable, Physical Therapy Equipment and Programming
Presentation, Group Facilitator. 34th Annual SCI Model Systems Meeting, West Orange, NJ. October 2012.

Wheelchair Seating and Mobility

Wheelchair Skills Program: A Case Study Report
Poster Presentation: APTA Combined Sections Meeting, Las Vegas, NV. February 2014.

Clinical Application of the Wheelchair Skills Program: Objective Testing and Training Methods for Power and Manual Wheelchair Users
Poster Presentation: ASIA/ISCOS Conference, Washington, DC. June 2011.

Wheelchair Seating and Mobility: What's the Latest Evidence?
Presentation: Kessler Institute for Rehabilitation, West Orange, NJ. March 2011.

Clinical Application of the Wheelchair Skills Program: Objective Testing and Training Methods
Poster Presentation: APTA NJ Conference, Robbinsville, NJ. April 2010.

Wheelchair Skills and Transfer Break-Out Session
Presentation, Lab Session Facilitator: SCI Seminars, Fairfield, CT. November 2006.

Wheelchair Seating: Obtaining the Optimal Patient Client Match
Presentation: Kessler Institute for Rehabilitation, West Orange, NJ. November 2005.

RESEARCH

Evaluating the Psychometric Properties of the miniBEST for Individuals with Acute TBI (E-985-17)
Role: Co-Investigator. September 2017-present.

The Effectiveness of a Theoretically Informed Tailored Multimodal Knowledge Translation Intervention on the Use of Outcome Measures by Physical Therapists Who Work in Inpatient Rehabilitation (R-919-16)
Role: Study Coordinator. June 2016-present.

Spatial Neglect and Its Clinical Impact after Traumatic Brain Injury and Stroke (E-754-12)
Role: Research Mentor, Neurologic Residency Program Director. July 2015-June 2016.

Whole Body Vibration for Treating Spasticity Post-TBI
Role: Research Mentor, Neurologic Residency Program Director. August 2014-June 2015.

Sleep, Procedural Learning, and Therapeutic Engagement among Inpatients with Brain Injury in an Acute Rehabilitation Setting (E-756-12)
Role: Research Mentor, Neurologic Residency Program Director. August 2013-June 2014.

10 Meter Walk Test: Functional Outcomes to Measure Gait Speed in the Stroke Population (R-909-16)
Role: Research Mentor, Neurologic Residency Program Director. August 2012, ongoing.

Rehabilitation of Wayfinding and Spatial Navigation after Brain Injury: A Pilot Study
Role: Research Mentor, Neurologic Residency Program Director. January 2012-January 2013.

CONTINUING EDUCATION

APTA Combined Sections Meeting. February 2018. New Orleans, LA.

APTA Combined Sections Meeting. February 2017. San Antonio, TX.
APTA Education Leadership Conference. October 2016. Phoenix, AZ.
APTA Combined Sections Meeting. February 2016. Anaheim, CA.
APTA Education Leadership Conference. October 2015. Baltimore, MD.
Philadelphia Consortium Mini-CSM. March 2015. Philadelphia, PA.
Generational Diversity. October 2014. West Orange, NJ.
APTA Combined Sections Meeting. February 2014. Las Vegas, NV.
Physical Therapy Ethics and Jurisprudence. September 2014. Newark, NJ.
Home Modifications. December 2013. Parsippany, NJ.
Integrating Yoga into PT Practice. October 2013. Newark, NJ.
SCI Model Systems Meeting. October 2012. West Orange, NJ.
Physical Therapy Ethics and Jurisprudence. September 2012. Newark, NJ.
ASIA/ISCOS Conference. June 2011. Washington, DC.
Wheelchair Seating and Mobility: What's the Latest Evidence? March 2011. West Orange, NJ.
APTA Combined Sections Meeting Pre-Conference Sessions: Clinical Residency 101-Getting Started and Doing it Well, and Residency and Fellowship Mentoring. February 2011. Atlanta, GA.
APTA Combined Sections Meeting. February 2011. Atlanta, GA.
Summit Educational Seminars Evaluation and Treatment of the Shoulder. October 2011. Saddle Brook, NJ.
APTA NJ Sectional Meeting, Fall Prevention Educational Session. April 2010. Robbinsville, NJ.
APTA CI Credentialing Course. February 2010. Livingston, NJ.
Bioness L300 Certification Course. October, 2009. Saddle Brook, NJ.
Benign Paroxysmal Positional Vertigo: Evaluation and Treatment. February 2009. West Orange, NJ.
The Pediatric Primer. January 2009. Jamaica, NY.
BIANJ Annual Brain Injury Course (Exhibitor and Course Attendee). May 2008. Eatontown, NJ.
APTA Combined Sections Meeting. February 2008. Atlanta, GA.
Functional Orthopedics II. November 2007. Bay Shore, NY.
SCI Seminars. November 2006. Fairfield, CT.
PNF I. November 2005. Bay Shore, NY.
Facilitating Movement and Improving Function in Adult Hemiplegia. December 2004. West Orange, NJ.
McConnell Approach to the Problem Shoulder. October 2004. Doylestown, PA.
Contemporary Forums for Spinal Cord Injury Conference. May 2003. Miami, FL.
Functional Orthopedics I. November 2002. Bay Shore, NY.

SPECIAL CERTIFICATIONS/MEMBERSHIPS
APTA Member, Education Section and Neurology Section
APTA Certified Clinical Instructor
Certified in adult and child/infant CPR
Certified in Bioness L300
RESNA Certified Assistive Technology Professional 2005-2007

REFERENCES
Available upon request

Isa McClure, PT, MAPT
Kessler Institute for Rehabilitation

CV:

Isa A. McClure, PT, MAPT
26F Heritage Drive
Chatham, NJ 07928
732.371.2050
Imcclure16@gmail.com

EDUCATION:
Master of Arts, Physical Therapy, 1996
Touro College, Barry Z. Levine School of Health Sciences Dix Hills, NY

Bachelors of Science, Health Sciences, 1996
Touro College, Barry Z. Levine School of Health Sciences
Dix Hills, NY

Bachelors of Science, Biology, 1991
Springfield College
Springfield, MA

LICENSURE:
Active: Licensed Physical Therapist in the State of New Jersey, 1996-present.License Number: 40QAO714700
Inactive: Licensed Physical Therapist in the State of New York, 1996-present

EMPLOYMENT:
Kessler Institute for Rehabilitation, 1996-present
1199 Pleasant Valley Way
West Orange, NJ, 07052
1996-present

Title: Advanced Clinical Specialist, Spinal Cord Injuries and Ventilator Dependent Spinal Cord Injuries

Responsibilities:
• Plan and deliver physical therapy interventions to persons with spinal cord injury at the Kessler Institute
• Serve as resource for staff and intermediate PT and OT therapists in acute management of SCI and respiratory care interventions
• Supervise PT students assigned to Spinal Cord Injury rotation
• Assist administration in orientation and mentor program for new staff
• Assist administration in the management and maintenance of competency program for SCI PT and OT staff
• Participate and promote internal research activities within the SCI program
• Support and develop new programming for inpatient rehabilitation services, including wound care and electric stimulation.
• Serve as mentor and instructor for ventilator dependent patient competencies for all physical and occupational therapy staff.
• Development and implementation of patient and family education series on research and trends of care in spinal cord injury.

Past Employment:
Select Rehab
Geriatrics, Neurology Long term care, Sub-acute Rehabilitation
2010-2015

Touro College-Manhattan Campus
Adjunct Professor, DPT program
“Physical Therapy Interventions, Basic Test and Measures.” 2000-2007

Touro College-Manhattan Campus
PTA program: “Special Topics in Cardiopulmonary, Prosthetics and Orthotics and Spinal Cord Injuries.” 1998-2002

St. Barnabas Rehabilitation Associates
Per Diem Physical Therapist,
Geriatrics and Long Term Care, 1998-2010

E-LEARNING:
Director and lead physical therapist and author of SkinStep e-learning module for American Spinal Injury Association

PUBLICATIONS/
POSTERS:
McClure I, Kirshblum S. The cost of a recommended protocol for heterotopic ossification in SCI rehabilitation. Topics Spin Cord Injury Rehab.2017;23(Supp 1):35.

McClure I, Gabarini E, Kirshblum S, Forrest G. Exoskeleton assisted walking: the patients perspective. J Spin Cord Med. 2017; 40: 612.

McClure, I, Malady, M “A Case Report: Utilizing MobilePhone Technology for Long Distance Home Modification Recommendations.” Journal of Spinal cord Medicine

McClure IA, McCarthy SK, Kirshblum SC, Nieves JD. Comparison of pressure in commercially available seat cushions in fulltime wheelchair users with spinal cord injury [ICSMR abstract P43]. Top Spinal Cord Inj Rehabil. June 2011;16:67.

Development of Web Based Durable Medical Equipment Guide, American Spinal Cord Injury Association, Topics Spin Cord Injury Rehab 2012

Development of Consumer Guidelines for Choosing a Rehabilitation Facility after Spinal Cord Injury, Topics Spin Cord Injury Rehab May, 2013

ASIA Executive Summary and Guidelines for Spinal Cord Injury Rehabilitation, Topics in Spinal Cord Injury, April 2012

“The Extracellular Amino-Terminal Region of the
Parathyroid Hormone (PTH)/PTH-Related Peptide Receptor Determines the Binding Affinity for Carboxyl-Terminal Fragments of PTH-(1-34). ASBMR, 1993

“Body Weight Supported Treadmill Training in the Acute Rehab Setting.” NJPTA, 2004

“Heterotopic Ossification in Persons with Spinal Cord Injuries from Violence related Causes.” Topics Spin Cord Injury Rehab ASIA, 2005

LOCAL ORAL
PRESENTATIONS:
“Skin and Trauma” Kessler Institute Neuro-trauma Conference, December 2016

“Pressure Injury and Staging” Kessler Institute for Rehabilitation Nursing Liaison Meeting 2017

“Durable Medical Equipment: What Medically Necessary Versus What’s Medically Beneficial,” Kessler Institute for Rehabilitation, Grand Rounds 2010

Development of Spasticity Clinic for Brain Injury and Severe Disorders of Consciousness. Kessler Institute

for Rehabilitation 2009

Beyond Rehabilitation, Kessler Institute for Rehabilitation, 1999-present

Functional Outcomes by Level of Injury, Kessler Institute for Rehabilitation, 1999-present

Introduction to SCI, Kessler Institute for Rehabilitation, 1999-present

Lab Assistant for SCI Evaluation and Treatment
Techniques, UMDNJ/Rutgers, Kessler Institute for Rehabilitation, 1999-present

Beyond Rehabilitation, Patient and Family Lecture Series, Kessler Institute for Rehabilitation, 1999-present

ALS Support Group, 1999-2001

NATIONAL AND INTERNATIONAL PLATFORM
PRESENTATIONS:
Prevention and Management of Pressure Injuries by the Physiotherapist. XXVIII Latin American Rehabilitation Congress AMLAR 2018

An Evidence-based, Hands-on Approach to Upper Extremity Pain Management for Individuals with Spinal Cord Injury (SCI.) American Spinal Injury Association, To be presented in May, 2018

An Introduction to SkinStep, Academy of Spinal Cord Injury Professionals, Denver, Colorado, September, 2017

Update on Pressure Injuries and their Staging, Kessler Institute, April 2017

“Health and Wellness in Spinal Cord Injury”, American Spinal Injury Association, New Mexico, 2017

“Comprehensive, Interdisciplinary Upper Extremity Evaluation and Treatment for in Tetraplegia”
Instructional Course/Symposium, Inter-active (hands on),
American Spinal Injury Association, 2016 Philadelphia, PA

“Name that Wound!” An Interactive Discussion on the Staging/Prevention and Treatment and Pressure Ulcer in Spinal Cord Injury.
Academy of Spinal Cord Injury Professional, September, 2015, New Orleans, Louisiana

“Stem Cells and Medical Tourism”
SCI Model Centers Leadership Forum, October, 2014 Atlanta, Georgia

“The Stem Cell Question and the Patient Family Education Series; an Update.”
Academy of Spinal Cord Injury Professional, September, 2014 St. Louis, Missouri

“Prevention and Treatment of Pressure Ulcers in Patients with Spinal Cord Injury: A Transdisciplinary Approach”
American Spinal Injury Meeting, San Antonio Texas 2014

“Splinting the Upper Limb in Tetraplegia,” Instructional May, 2013 American Spinal Injury Association Meeting

“Spinal Cord Injury and E-Learning” Presented at the 2012 SCI Model Centers Leadership Forum, October, 2012

“Use of Commercially Available Cushions for Traveling Motor Vehicles after Spinal Cord Injury,”
American Spinal Cord Injury Association, May 2011
Academy of Spinal Cord Injury Professional, September2011

“Mentoring the New Physical Therapist in Wound Care,” Academy of Spinal Cord Injury Professionals, September, 2011

Moderator, Awards Posters, American Spinal Cord Injury Association, May 2011

Moderator, Therapy Interventions, American Spinal Cord Injury Association, April 2012

“Durable Medical Equipment: What Medically Necessary Versus What’s Medically Beneficial,” American Spinal Cord Injury Association, May 2010
Academy of Spinal Cord Injury Professional, September, 2010

"Novel Wound Care Treatments for Persons with SCI.” Contemporary Forums SCI Conference, March 2009

“High Volt Pulsed Current and Wound Care; A Case Study”
Wound, Ostomy, Continence Nursing Conference, 2010

“Family Training for the Complex SCI Patient: A Multidisciplinary Approach to Managing the Dual Diagnosis Patient,” Contemporary Forums SCI Conference, March 2009

"Aging and the Acute Spinal Cord Injury: The Long Road Home." Congress on Spinal Cord Medicine and Rehabilitation, September 2009.
"The Use of High Volt Pulsed Current on a Stage IV Sacral Wound in a Medically Complex Spinal Cord Injury Patient: A Case Study." Congress on Spinal Cord Medicine and Rehabilitation, September 2009.

“Use of Specialty Cushions in Full Time Wheelchair Users with Spinal Cord Injury.” American Spinal Injury Association June 2008

"Pressure Mapping of Seating in Motor Vehicles in Full Time Wheelchair Users with Spinal Cord Injury." Congress on Spinal Cord Medicine and Rehabilitation, September 2009.

SELECTED RESEARCH:
Safety and Efficacy of the Indego Exoskeleton, FDA study, September 2014-present
The Efficacy of Denosumab to Reduce Osteoporosis after Acute Spinal Cord Injury
US Department of Veteran Affairs
Rehabilitation and Research Development Service
Center for Excellence of the Medical Consequences of Spinal Cord Injury
Co-Investigator, Current and Ongoing

“Responsiveness of a Neuromuscular Recovery Scale for Spinal Cord Injury: Inpatient and Outpatient Rehabilitation,” Co-Investigator, 2012-present

Pending IRB Approval: Comparison of Pressure in Airline Seating in Economy and First Class Seating in Fulltime Wheelchair Users with Spinal Cord Injury, Primary Investigator

Use of Specialty Cushions in Full Time Wheelchair Users with Spinal Cord Injury.
.Platform Presentation, ASIA conference, 2008, 2009, 2010, 2011, Primary Investigator

"Pressure Mapping of Seating in Motor Vehicles in Full Time Wheelchair Users with Spinal Cord Injury." Primary Investigator, 2008-2010

BOOK CHAPTERS/
REVIEWS:
Peer Reviewer
Pressure Ulcer Prevention and Treatment Following Spinal Cord Injury

Clinical Practice Guides, Consortium for Spinal Cord Medicine
Clinical Practice Guidelines, 2014

Kirshblum SC, Bloomgarden J, Nead C, McClure I, Forrest G, Mitchell J. Rehabilitation after Spinal Cord Injury. In Kirshblum SC, Campagnolo D. Spinal Cord Medicine. Second Edition. Lippincott/Williams and Wilkins. Philadelphia. 2011. Pages 309-340.

Clinical Review
Martha Freeman Somers
Spinal Cord Injury; Functional Rehabilitation. Third Edition Skin Care, Pages 66-85, Martha Somers. Pearson Education Inc., Upper Saddle River, New Jersey 2010

SPECIAL INTERESTS:
The Integument and Skin Integrity
Wounds and Wound Care
Spinal Cord Injury
Gait Dysfunction
Pulmonary/Respiratory Complications

CERTIFICATIONS:
American Heart Association Basic Life Support for Healthcare Providers,
Ventilator/Respiratory Certification at Kessler Institute for Rehabilitation

NATIONALCOMMITTEES:

Board Of Directors, American Spinal Injury Association, 2018-present
Vice Chair: Education Committee, 2017- present, American Spinal Injury Association
Chair: Rehabilitation Standards Committee, 2010-2017, American Spinal Injury Association
Co- Chair: Rehabilitation Standards Committee, American Spinal Injury Association, 2008-2010
Chair: Durable Medical Equipment Committee, American Spinal Injury Association, 2008-present
Membership Committee, American Spinal Injury Association, 2008-2017

LOCAL COMMITTEES:
Center Director for Clinical Education, 1996-2005
Ethics Committee, 2006-present
Ventilator Committee, 2006-2017
Shared Governance, Group Facilitator for Clinical Excellence, 2009-2016

CONTINUING
EDUCATION:
Partial List:
ASIA Conference, 1999-present
Mulligan Mobilization
Kinesiotaping 1 and 2
Ethics for PT's
Spinal Cord Injury, 2000
Wheelchair Assessment and Seating
Yoga for PT's
Pilates for PT's
Complete Chronic Wound Management
Chronic Wounds: Are You Seeing The Whole Picture?
Muscle Imbalances
Current Concepts in Wound Healing
NDT Swiss Ball Techniques
If You Can't Breathe, You Can't Function
Diagnosis and Treatment of Movements Impairment Disorders
Core Stability in the Neurologic Population

COMMUNITY SERVICE:
Walk To Victory Over Paralysis, 2015-present
Relay for Life, Team Member, 2006-present
What is Physical Therapy" Essex County Girl Scouts, 2008
Breast Cancer 5K, 2007-present
Life Rolls On, They Will Surf Again, 2009

REFERENCES: Available upon request

Feasibility and Potential Efficacy of TSCS on lower extremity recovery and walking function in patients with iSCI

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Liza McHugh, PT, DPT, ATC, CMPTP
Kennedy Krieger Institute

CV:
Work Experience
August 2013 - Present

Physical Therapist 3, Kennedy Krieger Institute, Baltimore, MD
Clinical specialization in advanced manual therapy techniques and novel application of stimulation in patients diagnosed with spinal cord injuries. Developed and implemented transcutaneous spinal cord stimulation (TSCS) treatment protocols for patients diagnosed with spinal cord injuries. Constructed project design and collected data on 10 subjects to examine the safety and preliminary effects of TSCS in combination with walking-based physical therapy on walking function.

August 2008 – June 2010
Science Engineer Research, University of Delaware, Newark, DE
Completed an in-depth apprenticeship with faculty researcher. Constructed project design and collected data for a study titled “Postural Sway and Neuropsychological Performance Following an Acute Bout of Soccer Heading.”

Publications

Kaminski T, McHugh LV, Chakraborty S, Glutting JJ. Examining Concussion-Related Symptoms Before and After Acute Bout of Heading in a Group of Female Collegiate Soccer Players. 3rd World Conference on Science and Soccer. May 2012. Ghent, Belgium.

Awards
Friend of Spinal Cord Injury Care and Cure, 7th Annual Trends in Spinal Cord Rehabilitation Symposium, Kennedy Krieger Institute, Baltimore, MD, March 2018

Professional Presentations

Holsinger R, McHugh LV. Musculoskeletal Considerations Impacting Activity Based Rehabilitation for Patients with Spinal Cord Injury. American Congress of Rehabilitation Medicine. October, 2018. Dallas, Texas.

McHugh LV, Miller AS, Martin R. Augmenting Therapy with Transcutaneous Electrical Spinal Cord Stimulation (TSCS) to Improve Walking Function in an Individual with Motor-Incomplete Spinal Cord Injury: A Case Report. ASIA annual scientific meeting. May, 2018. Rochester, MN

McHugh LV, Miller AS, Martin R. Clinical effectiveness and safety of utilizing TSCS to facilitate voluntary motor control in 3 individuals with chronic tetraplegia and diaphragmatic pacemakers: A Case Series. ASIA annual scientific meeting. April, 2017. Albuquerque, NM.

McHugh LV, Miller AS, Cabahug P. Facilitation of Voluntary Motor Activation Utilizing Transcutaneous Electrical Spinal Cord Stimulation in an Individual with Motor-Incomplete Spinal Cord Injury: A Case Report. ASIA annual scientific meeting. March, 2016. Philadelphia, PA.

McHugh LV, Miller AS, Martin R. Facilitation of Voluntary Motor Activation Utilizing Transcutaneous Electrical Spinal Cord Stimulation in Individuals with Spinal Cord Injury. Spinal Cord Symposium. June, 2016. Baltimore, MD.

McHugh LV, Kaminski T, Glutting JJ. Postural Sway and Neuropsychological Performance Following an Acute Bout of Soccer Heading. National Athletic Trainers Association Annual Meeting. June 2010. Philadelphia, PA.

McHugh LV, Kaminski T, Glutting JJ. Postural Sway and Neuropsychological Performance Following an Acute Bout of Soccer Heading. Eastern Athletic Trainers' Association Annual Meeting. January 2010. Boston, MA.

Certifications and Licensures

Certified Blood Flow Restriction Provider: March 2018 - Present
Certified Graston Technique Provider: October 2017 - Present
Certified Myofascial Trigger Point Therapist: October 2016 - Present
Licensed Physical Therapist: June 2013 - Present
The Maryland State Board of Physical Therapy Examiners: August 2013 – Present
Certified Athletic Trainer: Spring 2010 – Present

Ashley Miller, PT, DPT
Kennedy Krieger Institute

CV:
B. Positions and Honors
Positions and Employment
07/2013-present Physical Therapist I
International Center for Spinal Cord Injury at Kennedy Krieger Institute, Baltimore, MD

Other Experience and Professional Memberships
08/2010-present American Physical Therapy Association, Member
06/2015-08/2015 Clinical Education Internship Instructor, Clinical Instructor for full-time Doctorate of Physical Therapy Candidate
10/2015-present Certified Walk-Aide Clinician
3/2018-present Certified Blood Flow Restriction Clinician

Honors
2010 Magna Cum Laude, University of Dayton, Dayton, OH

C. Publications
Abstract:
1. McHugh LV, Miller AA, Cabahug P. Facilitation of Voluntary Motor Activation Utilizing Transcutaneous Electrical Spinal Cord Stimulation in an Individual with Motor-Incomplete Spinal Cord Injury: A Case Report. April, 2016. Philadelphia, PA.
2. McHugh LV, Miller AA, Martins R. Clinical effectiveness and safety of utilizing transcutaneous spinal cord stimulation to facilitate voluntary motor control in individuals with chronic tetraplegia and diaphragmatic pacemakers; A Case Series. April, 2017. Albuquerque, NM.
3. McHugh LV, Miller AA, Martins R. Augmenting Therapy with Transcutaneous Electrical Spinal Cord Stimulation (TSCS) to Improve Walking Function in an Individual with Motor-Incomplete Spinal Cord Injury: A Case Report. May 2018. Rochester, MN.

D. Research Support
Ongoing Research Support
Orokawa Foundation

Completed Research Support (Past 3 Years)
N/A

Sustained Interleukin-10 Delivery Reduces Inflammation and Improves Motor Function after Spinal Cord Injury

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Daniel Hellenbrand, MS
University of Wisconsin

CV:
CURRICULUM VITAE
Daniel J. Hellenbrand
Date of Birth: May 8, 1977

Address: Room K4/884 Medical Sciences Center
600 Highland Avenue
Madison, WI 53792
Telephone: (608) 265-8800
Email: d.hellenbrand@neurosurgery.wisc.edu

Current Position: Assistant Researcher
Department of Neurological Surgery
Spinal Cord & Peripheral Nerve Lab

Research Interest:
• Biomaterials for Controlled Protein Delivery
• Drug Delivery Methods for Neural Tissue Regeneration
• Inducing Axonal Growth After Spinal Cord Injury

Education and Training:
2008 B.S. Miami University, Oxford, OH
Bachelor of Science, Engineering Technology
Concentration in Mechanical Engineering

2010 M.S. University of Wisconsin, Madison, WI
Master of Science, Biomedical Engineering
Emphasis on Tissue Engineering & Stem Cells

Positions and Employment:
2007 Mech. Engineer, Proctor & Gamble, Cincinnati, OH
2011 – 2017 Research Specialist, UW Madison, Madison, WI
2017-Pres. Assistant Researcher, UW Madison, Madison, WI

Awards & Honors:
2006 Statistical Award, Miami University
2007 Dave Young Award, Most outstanding Student in Engineering Technology
2007 Mathematics Award, Miami University
2007 Most Successful Co-op Student Award Miami University
2008 Graduation Recognition Speaker, Miami University
2014 Lincoln F. Ramirez Award for restorative Neurosciences, University of Wisconsin

PROFESSIONAL SOCIETY MEMBERSHIPS:
2006-Pres. Member of Epsilon Pi Tau, International society for professions in technology

Publications:
1. Hanna, A., Kaeppler, K.E., Ehlers, M.E., Dadsetan, M.D., Yaszemski, M.J., Toigo, T.D., Kim, J., Hwang, E., Bogarin-Miranda, E., Buchholz, M.M., Springer, A.R., and Hellenbrand, D.J., Peripheral Nerve Grafts and

Chondroitinase ABC Application Improves Functional Recovery After Complete Spinal Cord Transection. Journal of Neurology Research, 2013, 3(3-4):85-95
2. Thompson CD, Zurko JC, Hanna BF, Hellenbrand DJ, Hanna A. The Therapeutic Role of Interleukin-10 after Spinal Cord Injury. Journal of neurotrauma. 2013, 30(15):1311-24.
3. Hellenbrand, D.J., Kaeppler, K.E., Hwang, E., Ehlers, M.E., Toigo, R.D., Giesler, J.D., Vassar-Olsen, E.R. and Hanna, A. Basic Techniques for Long Distance Axon Tracing in the Spinal Cord. Journal of Microscopy and Research Techniques, 2013, 76(12):1240-1249.
4. Hanna A, Thompson DL, Hellenbrand DJ, Lee JS, Madura CJ, Wesley MG, Dillon NJ, Sharma T, Enright CJ, Murphy WL Sustained release of neurotrophin-3 via calcium phosphate-coated sutures promotes axonal regeneration after spinal cord injury. Journal of Neuroscience Research 2016, 94:645-652.
5. Hellenbrand DJ, Hanna A (2016) Treating spinal cord injury via sustained drug delivery from calcium phosphate coatings. Neural Regen Res 11(8):1236-1237.
6. Daniel J. Hellenbrand, Katie E. Kaeppler, Mark E. Ehlers, Colton D. Thompson, Joanna C. Zurko, Morgan M. Buchholz, Alexandra R. Springer, Daniel L. Thompson, Rami K. Ibrahim & Amgad Hanna (2016) Immunohistochemical assessment of rat nerve isografts and immunosuppressed allografts, Neurological Research, 38:12, 1094-1101.
7. Rosich K, Hanna B, Ibrahim RK, Hellenbrand DJ, Hanna A. (2017) The Effects of Glial Cell Line-Derived Neurotrophic Factor After Spinal Cord Injury. Journal of Neurotrauma, 34(24): 3311-3325.
8. Ortmann SD, Hellenbrand DJ. Glial cell line-derived neurotrophic factor as a treatment after spinal cord injury. Neural Regen Res 2018;13:1733-4

Invited Talks / Presentations:

Daniel Hellenbrand. Guest speaker at the 15th Annual Bryon Riesch Paralysis Foundation Golf Outing Dinner. “peripheral nerve grafts in combination with local therapeutic proteins to promote spinal cord regeneration” June 2014, Waukesha WI.

Daniel Hellenbrand. A Novel Drug Delivery Approach for Neural Tissue Healing. October 2014, Neurosurgery Research Day. University of Wisconsin, Madison, WI.

Daniel Hellenbrand. Local Sustained Delivery of Therapeutic Molecules To Treat Spinal Cord Injury. November 2015, Neurosurgery Research Day. University of Wisconsin, Madison, WI.

Daniel Hellenbrand. Treating Spinal Cord Injury with Nano-Porous Biomineral Coatings Releasing Therapeutic Proteins, November 2015, State Eagles Convention, Merrill, WI

Daniel Hellenbrand. Sutures Releasing Neurotrophin-3 Promote Axon Growth After Spinal Cord Injury. November 2016, Neurosurgery Research Day. University of Wisconsin, Madison, WI.

Amgad Hanna and Daniel Hellenbrand. Sustained Release of Neurotrophin-3 Via Calcium Phosphate-Coated Sutures Promotes Axonal Regeneration After Spinal Cord Injury. November 2016, World Gene Convention. Shanghai, China

Daniel Hellenbrand. Promoting Axonal Regeneration via Sustained Cytokine Delivery. October 2017, Wisconsin Nerve Symposium. University of Wisconsin, Madison, WI.

Amgad Hanna, Mallory Filipp, Benjamin Travis, and Daniel Hellenbrand. Sustained Interleukin-10 Delivery Reduces Inflammation and Improves Motor Function after Spinal Cord Injury. March 2018, AANS/CNS joint section for spine and peripheral nerves, Orlando , FL.

Amgad Hanna and Daniel Hellenbrand. Treating Neurological Disorders via Sustained Drug Delivery from Calcium Phosphate Coatings. September 2018, Forum on Alzheimer’s and Dementia Research, Venice, Italy.

Amgad Hanna, MD
University of Wisconsin

(no CV uploaded)

Power Assist Devices for Manual Wheelchairs, What are the Benefits and Barriers as reported by End Users

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Janelle Carnahan, PT, DPT, ATP
Kessler Institute for Rehabilitation

CV:
Kessler Institute for Rehabilitation, West Orange, NJ
Title: Clinical Specialist Physical Therapist
2014-present

Mount Sinai Hospital, New York, NY
Title: Physical Therapist
2013-2014

Shepherd Center, Atlanta, GA2010-2013
Title: Physical Therapist
2010-2013

Helen Hayes Hospital, West Haverstraw, New York
Title: Physical Therapist
2008-2010

ADDITIONAL CERTIFICATIONS
APTA Credentialed Clinical Instructor
Assistive Technology Professional (ATP)

PROFESSIONAL PRESENTATIONS/PUBLICATIONS
Carnahan, J., McNair, K. (April 14, 2016) Comprehensive, Interdisciplinary Upper Extremity Evaluation and Treatment for Incomplete Tetraplegia. Educational Course presentation at American Spinal Injury Association Annual Meeting, Philadelphia, PA.

Carnahan, J. (April 27, 2017) Balancing the Shoulder with Unbalance Innervation. Educational Course presentation at American Spinal Injury Association Annual Meeting, Albuquerque, NM.

Carnahan, J; Garrett, B; McNair, K. Emerging Function in Incomplete Spinal Cord Injury. Advance Magazine. November 2016.

Carnahan, J. McNair K. McClure I. (May 2, 2018) Hands on Evidence Based Approach to Decreasing Pain in the Upper Extremity in Spinal Cord Injury. Educational Course presentation at American Spinal Injury Association Annual Meeting, Rochester, MN. 2018

Carnahan, J. Knick-Koppenhofer, A. Pressure Mapping Good at Assessment, But Can it Predict Pressure Inury Deveolpment? Rehab Management Magazine. January 2018.

Isa McClure, PT, MAPT
Kessler Institute for Rehabilitation

CV:
Kessler Institute for Rehabilitation, 1996-present
1199 Pleasant Valley Way
West Orange, NJ, 07052
1996-present

Title: Advanced Clinical Specialist, Spinal Cord Injuries and Ventilator Dependent Spinal Cord Injuries
E-LEARNING:
Director and lead physical therapist and author of SkinStep e-learning module for American Spinal Injury Association

PUBLICATIONS/
POSTERS:
McClure I, Kirshblum S. The cost of a recommended protocol for heterotopic ossification in SCI rehabilitation. Topics Spin Cord Injury Rehab.2017;23(Supp 1):35.

McClure I, Gabarini E, Kirshblum S, Forrest G. Exoskeleton assisted walking: the patients perspective. J Spin Cord Med. 2017; 40: 612.

McClure, I, Malady, M "A Case Report: Utilizing MobilePhone Technology for Long Distance Home Modification Recommendations." Journal of Spinal cord Medicine

Development of Consumer Guidelines for Choosing a Rehabilitation Facility after Spinal Cord Injury, Topics Spin Cord Injury Rehab May, 2013

LOCAL ORAL
PRESENTATIONS:
"Skin and Trauma" Kessler Institute Neuro-trauma Conference, December 2016

"Pressure Injury and Staging" Kessler Institute for Rehabilitation Nursing Liaison Meeting 2017

NATIONAL AND INTERNATIONAL PLATFORM
PRESENTATIONS:
Prevention and Management of Pressure Injuries by the Physiotherapist. XXVIII Latin American Rehabilitation Congress AMLAR 2018

An Evidence-based, Hands-on Approach to Upper Extremity Pain Management for Individuals with Spinal Cord Injury (SCI.) American Spinal Injury Association, Rochester, Minnesota, May, 2018

An Introduction to SkinStep, Academy of Spinal Cord Injury Professionals, Denver, Colorado, September, 2017

Update on Pressure Injuries and their Staging, Kessler Institute, April 2017

"Health and Wellness in Spinal Cord Injury", American Spinal Injury Association, New Mexico, 2017

"Comprehensive, Interdisciplinary Upper Extremity Evaluation and Treatment for in Tetraplegia"
Instructional Course/Symposium, Inter-active (hands on),
American Spinal Injury Association, 2016 Philadelphia, PA

"Name that Wound!" An Interactive Discussion on the Staging/Prevention and Treatment and Pressure Ulcer in Spinal Cord Injury.
Academy of Spinal Cord Injury Professional, September, 2015, New Orleans, Louisiana

"Stem Cells and Medical Tourism"
SCI Model Centers Leadership Forum, October, 2014 Atlanta, Georgia

"The Stem Cell Question and the Patient Family Education Series; an Update."
Academy of Spinal Cord Injury Professional, September, 2014 St. Louis, Missouri

"Prevention and Treatment of Pressure Ulcers in Patients with Spinal Cord Injury: A Transdisciplinary Approach"
American Spinal Injury Meeting, San Antonio Texas 2014

“Splinting the Upper Limb in Tetraplegia,” Instructional May, 2013 American Spinal Injury Association Meeting

Demographic and health profile of people living with spinal cord injury 2013-2017

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Yuying Chen, MD, PhD
University of Alabama at Birmingham

CV:
NAME: Chen, Yuying
A. Personal Statement
I am a board-certified physiatrist from Taiwan and also an epidemiologist by training with extensive experiences in database management, research methodology, and statistical analysis. With the unique blend of medical and research training and my passion for spinal cord injury (SCI), I have devoted my research to understanding the nature course of SCI by analyzing data from large datasets and through application of advanced methodology. My secondary research interests are to identify risk and risk factors for obesity after SCI and to develop sustainable intervention for this population. My research has been continuously funded through the NIDILRR, NIH, Paralyzed Veterans of America, and industries over the last 2 decades. I have also gained international recognition for my research involving epidemiology, mortality, and secondary conditions after SCI. I currently serves on the Editorial Board of the Topics in Spinal Cord Injury Rehabilitation and Executive Committee of the American Congress of Rehabilitation Medicine SCI Interdisciplinary Special Interest Group and the Sociodemographic data set of the International SCI Data Sets Committee. I am also a member of the Oversight Committee of the NINDS SCI Common Data Elements, International Spinal Cord Society Prevention Committee, as well as American Spinal Injury Association Award Committee. I have continuously provided consultation and technical assistance to investigators in the US and outside US who are interested in analyzing the SCI Model Systems National Database for research. In addition to research, I have served as a mentor/preceptor in various capacities for students, resident physicians, and visiting scholars.

a) Chen Y, DeVivo MJ. Richards JS, SanAgustin TB. Spinal Cord Injury Model Systems: Review of Program and National Database from 1970 to 2015. Arch Phys Med Rehabil 2016;97(10):1797-1804.
b) Chen Y, Heinemann AW. Current research outcomes from the spinal cord injury model systems. Arch Phys Med Rehabil 2016;97(10):1607-1609.
c) Charlifue S, Tate D, Biering-Sorensen F, Burns S, Chen Y, Chun S, Jakeman LB, Kowalski RG, Noonan VK, Ullrich P. Harmonization of databases: a step for advancing the knowledge about spinal cord injury. Arch Phys Med Rehabil 2016;97(10):1805-1818.
d) Biering-Sørensen F, Alai S, Anderson K, Charlifue S, Chen Y, DeVivo M, Flanders A, Jakeman L, Jones L, Kleitman N, Lans A, Noonan VK, Odenkirchen J, Steeves J, Tansey K, Widerström-Noga E. Common data elements for spinal cord injury clinical research: a National Institute for Neurological Disorders and Stroke Project. Spinal Cord 2015;53:265-277.

B. Positions and Honors
Positions and Employment
2000-01 Associate, Department of Physical Medicine & Rehabilitation (PM&R), UAB, Birmingham, AL
2001-02 Instructor, Department of PM&R, UAB, Birmingham, AL
2002-08 Assistant Professor, Department of PM&R, UAB, Birmingham, AL
2005- Director, National Spinal Cord Injury Statistical Center, Birmingham, AL
2007- Assistant Professor, Department of Epidemiology, UAB, Birmingham, AL
2008-2012 Associate Professor, Department of PM&R, UAB, Birmingham, AL
2012-2017 Associate Professor, tenured, Department of PM&R, UAB, Birmingham, AL
2017- Professor, tenured, Department of PM&R, UAB, Birmingham, AL

Awards and Honors (last 5 years)
2013 Runner-up, Best Research Paper Award, National Association of Rehabilitation Research and Training Centers
2013 Finalist, best platform presentation award, 2013 Annual Meeting of International Spinal Cord Society
2013 Best neurological rehabilitation research podium presentation, 2013 Annual Assembly of the American

Academy of Physical Medicine and Rehabilitation
2013 Finalist, best poster award, 2013 Annual Meeting of American Spinal Injury Association
2016 Outstanding Alumnus Award, Chung Shan Medical University, Taichung, Taiwan
2016 Finalist, best poster award, 2016 Annual Meeting of American Spinal Injury Association
2016 Keynote speaker, 2016 International SCI Rehabilitation Seminar: SCI Statistics, Rehabilitation, and Policy Making from Quickening toward Takeoff. Korea SCI Association, Seoul, South Korea
2017 Third place, best poster award, 2017 Annual Meeting of American Spinal Injury Association
2017 Finalist, Best Research Paper Award, National Association of Rehabilitation Research and Training Centers

Other Experience
2003- Editorial Board, Taiwan Journal of Physical Medicine and Rehabilitation
2006- Advisory Board, TBI Model Systems National Data and Statistical Center
2008-13 Editorial Committee, World Health Organization report “International Perspective on SCI”
2011- National Advisory Committee, Model Systems Knowledge Translation Center, Washington, DC
2011, 2013, 2015 Reviewer, NIDILRR, US Department of Health and Human Services
2012, 2013 Reviewer, Alessandro Liberati Programme for Young Investigators, Emilia-Romagna Regional Health Authority and the regional Universities, Italy
2013-15 Chair, NINDS SCI-CDEs: Demographics Work Group
2013- Editorial Board, Topics in SCI Rehabilitation
2013- Member, Executive Committee, “Setting up SCI Database amongst selected Asian Spinal Cord Network members” Task Force, International Spinal Cord Society
2014, 2015 Reviewer, Paralyzed Veterans of America Research Foundation
2014- Member, International SCI Data Sets
2014-16 Editor, special issue “Current SCI Model System Research Outcomes,” Arch Phys Med Rehab, 2016;97(10)
2015- Member, Oversight Committee, NINDS SCI-CDEs
2015-2017 Chair, SCI-Interdisciplinary Special Interest Group, American Congress of Rehabilitation Medicine (ACRM)
2015, 2016 Reviewer, Conquer Paralysis Now Challenge Stage I Grants, Sam Schmidt Paralysis Foundation
2017- Past Chair, SCI-Interdisciplinary Special Interest Group, ACRM
2017 Grant reviewer, Wings for Life Foundation, Salzburg, Austria
2017 Merit Review Panel, Veterans Affairs Health Services Research and Development Service

Professional Memberships
Taiwan Academy of Physical Medicine and Rehabilitation (1990-), American Public Health Association (1994-), Society for Epidemiologic Research (1997- 2013), American Academy of Physical Medicine and Rehabilitation (1998-2005), International Spinal Cord Society (2002-), American Spinal Injury Association (2002-), American Congress of Rehabilitation Medicine (2006-)

C. Contribution to Science

1. My primary research interest is to apply modern epidemiologic and statistical methodology in studies of long-term outcomes after SCI. When I first analyzed data from the National SCI Database for my dissertation research in 1997, there were numerous publications based on this database, but virtually none of them used longitudinal approach, although the National SCI Database contained 78,627 follow-up records up to 25 years post-injury at that time. As a result, clinical utility of those database research is limited. Modern epidemiologic methodology has been applied in my research in various areas, including case definition, selection of controls (i.e., incident density sampling), and study design (i.e., retrospective dynamic cohort, nested case-control, matched case-control, and person-time approach). Longitudinal statistical techniques have also been utilized, including, but not limited to, Generalized Estimation Equation (GEE), Hierarchical Linear Model (HLE), Random Effects Model, Poisson regression analysis, time-to-event approach, Transition model, and Difference model analysis.
a) Chen YY, DeVivo MJ, Jackson AB. Pressure ulcer prevalence in people with spinal cord injury: age-period-duration effects. Arch Phys Med Rehabil 2005;86:1208-1213.
b) Chen Y, Anderson CJ, Vogel LC, Chlan KM, Betz RR, McDonald CM. Change in life satisfaction of adults with pediatric-onset spinal cord injury. Arch Phys Med Rehabil 2008;89:2285-2292.

c) Qu H, Shewchuk RM, Chen Y, Richards JS. Evaluating the quality of acute rehabilitation care for patients with spinal cord injury: an extended Donabedian model. Q Manage Health Care 2010;19(1):47–61.
d) Pretz CR, Kozlowski AJ, Chen Y, Charlifue S, Heinemann AW. Trajectories of life satisfaction following spinal cord injury. Arch Phys Med Rehabil 2016;97(10):1706-1713.

2. Because of my deeply involvement with the National SCI Statistical Center project over the last 20 years, I am very much committed to promote rigorous SCI research using data from existing large datasets. There have been large amounts of health-related information that are collected and archived by federal and non-federal agencies for administrative or research purpose. Advances related to statistical methods, bioinformatics, information technology and the internet have permitted the creation of high quality databases, easier access to aggregated information, and consequently provided an unprecedentedly great opportunity for research using data from large datasets. I have innovatively linked data from several large datasets for studying environmental and community factors in relation to physical and psychosocial wellbeing of persons with SCI. At some occasions, I conducted medical chart reviews and telephone interviews to obtain further information to supplement information in the database, in attempt to address research questions in a comprehensive and in-depth manner.
a) Chen YY, Roseman JM, DeVivo MJ, Huang CT. Geographic variation and environmental risk factors for the incidence of initial kidney stones in patients with spinal cord injury. J Urol 2000;164:21-26.
b) Chen Y, Roseman JM, Funkhouser E, DeVivo MJ. Urine specific gravity and water hardness in relation to urolithiasis in persons with spinal cord injury. Spinal Cord 2001;39:571-576.
c) Botticello A, Boninger M, Charlifue S, Chen Y, Fyffe D, Heinemann A, Hoffman J, Jette A, Kalpakjian C. The Mediating Role of Community Economic Differences in Racial Disparities in Participation after Spinal Cord Injury. Arch Phys Med Rehabil 2016;97(10):1735-1744.
d) Herzer KR, Chen Y, Heinemann AW, Gonzalez-Fernandez M. Association between time-to-rehabilitation and outcomes following spinal cord injury. Arch Phys Med Rehabil 2016;97(10):1620-1627. PMC5096835

3. Among a long list of secondary health conditions after SCI, I am particularly interested in the risk and risk factors for obesity as well as development of weight management program for persons with SCI. Despite widespread concern about obesity in persons with disability, there was virtually not any interventional research ever conducted in the SCI population in 2000, and we had very limited knowledge of the health benefits of weight loss in the SCI population or the potential adverse effects on compromising lean body mass and nutritional status among these individuals, which could negatively impact their already-elevated risk of various medical complications. I have designed and conducted a series of research initiatives, funded by now NIDILRR, NIH, and Paralyzed Veterans of America-Research Foundation, to address this obesity issue in persons with SCI.
a) Chen Y, Henson S, Jackson AB, Richards JS. Obesity intervention in persons with spinal cord injury. Spinal Cord 2006;44:82–91.
b) Chen Y, Cao Y, Allen V, Richards JS. Weight matters: physical and psychosocial well being of persons with spinal cord injury in relation to body mass index. Arch Phys Med Rehabil 2011;92:391-398.
c) Yarar-Fisher C, Chen Y. Jackson A, Hunter G. Body mass index underestimates adiposity in women with spinal cord injury [corresponding author]. Obesity 2013;21:1223-1225.
d) Powell D, Affuso O, Chen Y. Weight change after spinal cord injury. J Spinal Cord Med. 2016 Feb 29:1-8.

4. Because of my public health background and realization that the prevention is the best solution for all physical, psychological, and economic consequences of SCI, I have been lately involved in various prevention initiatives through the participation in the Prevention Committees of the American Spinal Injury Association and the International Spinal Cord Society. I have presented in prevention symposia and published SCI statistics and trends to help inform the public and develop effective prevention strategies.
a) Chen Y, He Y, DeVivo MJ. Changing demographics and injury profile of new traumatic spinal cord injuries in the United States, 1972-2014. Arch Phys Med Rehabil. 2016;97(10):1610-1619.
b) DeVivo MJ, Chen Y. Mennemeyer ST, Deutsch A. Costs of care following spinal cord injury. Top Spinal Cord Inj Rehabil 2011;16(4):1-9. [corresponding author].
c) Chen Y, Tang Y, Vogel L, DeVivo MJ. Causes of spinal cord injury. Top Spinal Cord Inj Rehabil 2013;19:1-8.
d) Chen Y, Tang Y, Allen V, DeVivo MJ. Aging and spinal cord injury: External causes of injury and implications for prevention. Top Spinal Cord Inj Rehab 2015;21(3):218-226.

D. Research Support
Ongoing Research Support
90DP0083, NIDILRR Chen (PI) 10/01/16 – 09/30/21
National Spinal Cord Injury Statistical Center
To receive and store data from the SCI Model Systems, perform data management activities necessary for successful maintenance and further development of the National SCI Database, and disseminate research findings and outcomes.
Role: PI

Completed Research Support (recent 5 years)
U54MD008176, National Institute of Minority Health and Health Disparities
Mid-South Transciplinary Collaborative Center for Health Disparities Research - Secondary Data Analysis on Social Determinants of Obesity and Related Chronic Diseases
Project “Race, Neighborhood, and Obesity after Spinal Cord Injury” Chen (PI) 11/01/16 – 4/30/17
Linking data from NSCID with census and geographic data, this project aims to: 1) examine racial differences in the prevalence of obesity in persons with SCI; 2) assess racial differences in neighborhood characteristics; and 3) investigate the contribution of race and neighborhood to obesity, after accounting for personal characteristics.
Role: PI

MIC-WC-001, Oculus Innovative Sciences, Inc Chen (PI) 02/01/13 – 12/31/17
A Six Month Randomized Open-Label Trial of Pressure Ulcer Healing with Microcyn® Skin and Wound Care with Preservatives Versus Sterile Saline in Adult Spinal Cord Injury Subjects
To compare healing progress of pressure ulcers over 6 months in patients with at least one Stage III or IV pressure ulcer in subjects treated with Microcyn versus sterile saline.
Role: PI

90DP0011, NIDILRR Chen (PI) 10/01/11 – 09/30/17
National Spinal Cord Injury Statistical Center
To receive and store data from the SCI Model Systems, perform data management activities necessary for successful maintenance and further development of the National SCI Database, and disseminate research findings and outcomes.
Role: PI

Huacong Wen, MD, MS
University of Alabama at Birmingham

(no CV uploaded)

Michael DeVivo, DrPH
University of Alabama at Birmingham

(no CV uploaded)

Nerve injury resulting from a wheelchair fall in a person with chronic spinal cord injury: a case report

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Nathan Hitchman, BA, BSc
University of British Columbia

CV:
Nathan D Hitchman

Education
2011-2017, Trinity Western University, Langley, BC Bachelor of Science. Major in Biology.

2011-2017, Trinity Western University, Bachelor of Arts. Major in Psychology

2017-2021 (anticipated), University of British Columbia, Vancouver, BC, MD Undergraduate Program

Appointments
2015 - 2017, Psi Chi International, Chapter President (Trinity Western University)

2015 - 2017, Trinity Western University, Biology Club. Treasurer

2015 - 2017, Trinity Western University, Animal Care Committee. Student Representative

2015 - 2017, Trinity Western University, E. Stringham C. elegans Lab, Research Assistant

2015, Trinity Western University Undergraduate Teaching Assistant, Brain and Behavior

2014, 2017, Trinity Western University, Science in the Valley. Teaching Assistant

2013 - 2017, Langley Memorial Hospital, Emergency Department Volunteer

2013 - 2017, LitFit Homework Club Volunteer Tutor

2017-Present, ICORD, Vancouver BC, Student Researcher

Presentations
2016, Connecting Minds Conference
Interactions among mobile phone use, academic performance, sleep patterns, and affect

2015, Murdock College Science Research Conference
Analysis of the role of actin cytoskeleton regulator UNC-53/NAV2 in endosomal trafficking

Awards
2015, Murdock College Science Research Conference Poster Presentation Award. Best in Cell and Molecular Biology

2015, National Sciences and Engineering Research Council of Canada, Undergraduate Student Research Award

2011 - 2017, Trinity Western University, Deanâ€™s List

Heather Finlayson, MD
Gf Strong Rehabilitation Centre

(no CV uploaded)

Andrei Krassioukov, MD, PhD
University of British Columbia, Icord

(no CV uploaded)

Correlation between testosterone, thyroid function, and depression in women with SCI

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Benjamin Dirlikov, MA
Santa Clara Valley Medical Center

CV:
Education
Johns Hopkins University M.A., Psychological and Brain Sciences, Biopsychology May 2009
Master's Project: The Role of Sensory Information in Locomotor Control.
University of Michigan B.S., Brain, Behavior, and Cognitive Sciences, Biopsychology May 2007

Professional Experience
Clinical Research Program Director, Santa Clara Valley Medical Center
Rehabilitation Research Center, September 2017- present Supervisor: Mrs. McLarin
Clinical Research Program Manager, Santa Clara Valley Medical Center
Rehabilitation Research Center, January – September 2017 PI: Dr. Isaac
Research Coordinator II, Kennedy Krieger Institute
Center for Neurodevelopmental and Imaging Research, Fall 2011-Fall 2016 PI: Dr. Mostofsky

Publications
• Zakrasek, E.C., Yurkiewicz, S., Dirlikov, B., Pence, B.T., Crew, J.D. Use of Nonsteroidal Anti-inflammatory Drugs to Prevent Heterotopic Ossification after Spinal Cord Injury: a retrospective review. Spinal Cord. (In Press).
• Sechrist, S., Lavoie, S., Khong, C.-M., Dirlikov, B. & Shem, K. Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Ser. Cases 4, 71 (2018).
• Dirlikov, B., Younes, L., Nebel, M.B., Martinelli, M.K., Tiedemann, A.N., Koch, C.A., Fiorilli, D., Bastian, A., Denckla, M.B., Miller, M.I., Mostofsky, S. H."Novel Automated Morphometric and Kinematic Handwriting Assessment: A validity study in children with ASD and ADHD." J. Learn. Disabil. 2017; 10(2):185-201.
• Mahajan, R.*, Dirlikov, B.*, Crocetti, D., & Mostofsky, S.H. "Motor Circuit Anatomy in children with Autism Spectrum Disorder with or without Attention Deficit Hyperactivity Disorder." Autism Res. 2016; 9(1):67-81.
*authors contributed equally to the manuscript.
o Mostofsky, S.H., Dirlikov, B., Younes, L., & Miller, M.I. (2015). Kinematic and Morphometric Analysis of Digitized Handwriting Tracings. PCT/US15/30270. International Patent Filed 05/12/15.
• Dirlikov, B., Rosch, K.S., Crocetti, D., Denckla, M.B., Mahone, E.M., & Mostofsky, S.H. "Distinct frontal lobe morphology in girls and boys with ADHD." Neuroimage Clin. 2014; 7:222-9.
• Gaddis, A., Rosch, K.S., Dirlikov, B., Crocetti, D., MacNeil, L., Barber, A.D., Muschelli, J., Caffo, B., Pekar, J.J., & Mostofsky, S.H. "Motor overflow in children with attention-deficit/hyperactivity disorder is associated with decreased extent of neural activation in the motor cortex." Psychiatry Res. 2015; 233(3):488-95
• Rosch, K.S., Dirlikov, B., & Mostofsky, S.H. "Reduced intrasubject variability with reinforcement in boys, but not girls, with ADHD: Associations with prefrontal anatomy." Biol Psychol. 2015; 110:12-23.

Conference Presentations
• PI: Dr. Pape, site PI: Dr. Duong, presenter Dirlikov, B "rTMS: a Treatment to Restore Function after Severe TBI" Northern and Central California Hospital Council Annual Submit, September 28th, 2017, Lake Tahoe, California.
• PI: Dr. Shem, presenter Dirlikov, B "SCiPAD: Telemedicine Using iPads with Individuals with Spinal Cord Injuries" Northern and Central California Hospital Council Annual Submit, September 28th, 2017, Lake Tahoe, California.
o Dirlikov, B (2017). "Impact of Comorbid ADHD on Cortical Morphology in Children with Autism Spectrum Disorder." 14th Annual World Brain Mapping of SBMT, April 18-20th, Los Angeles, California.
o Dirlikov, B (2017). "rTMS: A Treatment to Restore Function after Severe TBI." 14th Annual World Brain

Mapping of SBMT, April 18-20th, Los Angeles, California.
• Dirlikov, B., Koch, C.A., Zakorchemny, T., Frauwirth, S., Younes, L., Miller, M.I., & Mostofsky, S.H. (2017). "A Novel Kinematic and Morphometric Tablet-based Method for Handwriting Assessment." 100th Annual meeting of the American Occupational Therapy Association, March 30- April 2, Philadelphia, Pennsylvania.
• Dirlikov, B., Zink, C.F., Huddleston, D.A., Gilbert, D.L., & Mostofsky, S.H. (2016). "Effects of Reward and Motivation on GABAergic Cortical Inhibition. A Pilot Study in Adults." 22nd Annual meeting of the Organization for Human Brain Mapping (OHBM), June 25-30th, Geneva, Switzerland.
• Rosch, K., Dirlikov, B., and Mostofsky, S.H. (2015). "Distinct neuranatomical correlates of delay discounting in ADHD and typically developing children." 21st Annual meeting of the OHBM, June 14-18th, Honolulu, Hawaii.
• Dirlikov, B., Nebel, M.B., Bastian, A.J., Younes, L., and Mostofsky, S.H. (2015). "Tablet-Based Method for Handwriting Assessment". Innovative Technology Demonstrations. 14th Annual International Meeting for Autism Research (IMFAR); 2015; May 14-16th; Salt Lake City, Utah.
• Mahone, E.M., Crocetti, D., Dirlikov, B., Slifer, K., Denckla, M.B., & Mostofsky, S.H. (2015) Early Cerebellar Anomalies Show Sexual Dimorphism in Preschool Children with ADHD. World Congress on ADHD. May 28-31st; Glasglow, Scotland.
• Dirlikov, B. Young Investigator Award Presentation. (2014). 43rd annual Neurobiology of Disease in Children, Columbus, Ohio. October 21-24th.
• Dirlikov, B., Nebel, M.B., Barber, A., Laue, C., Gilbert, D.L., Mostofsky, S.H. (2014). "A multimodal examination of interhemispheric connectivity and mirror overflow in ADHD." 20th Annual meeting of the OHBM, Hamburg, Germany.
• Crocetti, D., Dirlikov, B., Peterson, D., Laue, C., Gilbert, D.L., Mostofsky, S.H. (2014). "Transcallosal mediated motor inhibition in attention deficit hyperactivity disorder (ADHD)." 20th Annual meeting of the OHBM, Hamburg, Germany.
• Mahajan, R.*, Dirlikov, B.*, Crocetti, D., & Mostofsky, SH. (2014) "Frontal and Parietal Lobes' Structure Is Associated with Impairments in Motor and Social Skills in Children with Autism Spectrum Disorder." Poster session: Social Skills in Children with Autism Spectrum Disorder. 13th Annual IMFAR; 2014; May 15-17th; Atlanta Georgia.
• Dirlikov, B., Nebel, M.B., Fiorilli, D., Younes, L., Bastian, A., Mostofsky, S. (2014)."Analysis of Handwriting Fluency in Children with Autism." Poster session presented at: Cognition and Behavior V. 13th Annual IMFAR; 2014 May 15-17th; Atlanta, Georgia.

Certifications, Awards, & Honors
Epilepsy and Seizure Response for EMS 2017
Applied Suicide Intervention Skills Training 2017
SafeTalk Training 2017
Young Investigator, Neurobiology of Disease in Children Conference 2014

Sarah Lavoie, MPH, RD
Santa Clara Valley Medical Center

CV:
Publications
Sechrist S, Lavoie S, Khong CM, Dirlikov B, Shem K. (2018). Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Series and Cases. 4:71. doi: 10.1038/s41394-018-0105-4.

Lavoie S, Sechrist S, Quach N, Ehsanian R, Duong T, Gotlib IH, & Isaac L. (2017). Depression in Men and Women One Year Following Traumatic Brain Injury (TBI): TBI Model Systems Study. Front. Psychol. 8:634. doi: 10.3389/fpsyg.2017.00634.

Anders D, Ashley M.J, Bartlett S., Bellon K, Benoit N, Bergman A,...Wright J. (2016). The Essential Brain Injury Guide (5th Ed.). USA: Brain Injury Association of America. (Listed as a Technical Editor).

Presentations
Lavoie S, Sechrist S, Quach NT, Ehsanian R, Duong T, Gotlib IH, Isaac L. (2017). Prevalence and

Management of Depression in Persons with TBI: Longitudinal Perspectives. 14th Annual World Congress of the Society for Brain Mapping & Therapeutics. Los Angeles, CA. (Invited Guest Speaker)

Lavoie S, Sechrist S, Quach NT, Ehsanian R, Duong T, Gotlib IH, Isaac L. (2016). Depression in men and women one year following traumatic brain injury. PINK Concussions Symposium: Female Brain Injury, Neurobiology and Trauma. Palo Alto, CA. (Poster Presentation)

Kazuko Shem, MD
Santa Clara Valley Medical Center

CV:
PROFESSIONAL POSITION

Santa Clara Valley Medical Center, Department of Physical Medicine & Rehabilitation
Chief of PM&R Outpatient Clinics 9/11 - present
Acting Medical Director of Spinal Cord Injury Program 12/06 -11/09
Director of Electromyography Clinic, 7/98 – present.
Women with Disabilities Health Care Clinic Medical Director, 10/00 – present
Northern California Spinal Cord Injury Model System of Care Grant Principal Investigator, 10/00 – 9/06
"Back on Track" A Community-Based Mentoring Program Co-Principal Investigator, 11/06 – 7/10

Stanford University School of Medicine, Department of Orthopedic Surgery
Physical Medicine & Rehabilitation Assistant Residency Program Director, 5/99 – 5/10
Clinical Assistant Professor (Affiliated) July 1, 2006 – present

Fremont-Rideout Health Group Services, Active Ancillary Staff Member, 6/1/15-5/31/17

Doctors Medical Center, Affiliate Medical Staff Member, 10/31/08 – 5/31/13

Easter Seals Bay Area Timpany Center, Medical Director, 12/00 – 9-01

BOARD CERTIFICATION

American Board of Physical Medicine and Rehabilitation, 1999 – 2019
American Board of Electrodiagnostic Medicine, 2000 – 2020
American Board of Physical Medicine and Rehabilitation, Spinal Cord Injury Subspecialty, 2001 – 2021
American Board of Physical Medicine and Rehabilitation, Pain Subspecialty, 9/03 – 9/23

LICENSES

Medical Board of California, expires 5/31/2019

AWARDS

San Andreas Regional Center 18th Annual Service Above Self Award – Recognition of Merit (2016)
Craig Neilsen Foundation Quality of Life Grant (2015)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2015)
Dr. Robert Violante VMC Foundation Physicians and Philanthropy Award (2014)
Stanford University Physical Medicine and Rehabilitation James Thompson Humanitarian Award (2014)
Craig Neilsen Foundation Quality of Life Development Grant (2014)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2010)
Christopher and Dana Reeve Foundation Quality of Life grant (2009)
Jose C. Montero Excellence in Teaching Physical Medicine and Rehabilitation award (2004)
Sell Research Grant, American Spinal Injury Association (2004)
Sally Rynne National Association of Women's Health Quality Award (2002)

AAP Elan Pharmaceutical Award for Outstanding Paper Presentation (2002)
San Jose Mercury News “10 People to Watch” (4/1/01)
Robert Taylor California Society of PM&R Research Award (1998)
UCSF Student Summer Research Scholarship (1991)
Tau Beta Pi National Engineering Honor Society
UCLA Medical Auxiliary Scholarship (1990, 1986)
UC Regents Scholarship (1985-1989)
Rehabilitation Service Guild Scholarship (1988)

MEMBERSHIPS
American Academy of Physical Medicine and Rehabilitation
American Spinal Cord Injury Association
American Association of Electrodiagnostic Medicine

PUBLICATIONS

Elliott CS, Dallas KB, Zlatev D, Comiter CV, Crew J, Shem K. Volitional Voiding of the Bladder following Spinal Cord Injury: Validation of Bilateral Lower Extremity Motor Function as a Key Predictor. J Urol. 2018 Feb 17. pii: S0022-5347(18)32264-X. doi: 10.1016/j.juro.2018.02.064.

Shem K, Barncord S, Flavin K, Mohan M. Adverse cognitive effect of gabapentin in individuals with spinal cord injury: preliminary findings. Spinal Cord Series Cases 2018. 4:9. doi:10.1038/s41394-018-0038-y.

Elliot C, Shem K. Volitional Voiding After Spinal Cord Injury—Who Will and Who Will Not. Current Bladder Dysfunction Reports 2017. 12 (4): 337–342.

Shem K, Sechrist SJ, Loomis E. Isaac L. SCiPad: Effective Implementation of Telemedicine Using iPads with Individuals with Spinal Cord Injuries, a Case Series. Front. Med. 29 May 2017 |https://doi.org/10.3389/fmed.2017.00058

Zlatev DV, Shem K, Elliott C. Predictors of Long-Term Bladder Management in Spinal Cord Injury Patients - Upper Extremity Function May Matter Most. Neurourology and Urodynamics. Article DOI: 10.1002/nau.23430.

Shem K, Sechrist S. Solis L. SCiPAD: Telemedicine Program Using iPad's for Individuals with Spina Cord Injury. Topics in Spinal Cord Inj Rehab. 2017:23(Supplement 1):82.

Shem K, Karasik D, Carufel P, Kao M, Zheng P. Seated Tai Chi to Alleviate Pain and Improve Quality of Life in Individuals with Spinal Cord Disorder. J Spinal Cord Med. Feb 2016.
Williams TG, Ehsanian R, Shem KL, Wright J, Isaac L, Crew J. The effect of vitamin D supplementation on pain, mood, depression and strength in patients with spinal cord injury. PMR 2016:Suppl 98;S153.

Zlatev DV, Shem K, Elliott CS. How Many Spinal Cord Injury Patients Can Catheterize Their Own Bladder? The Epidemiology of Upper Extremity Function as it Affects Bladder Management. Spinal Cord advance online publication, January 19 2016. doi:10.1038/sc.2015.169

Timmerman MA, Crew J, Shem K, Kim M, Kolakowsky-Hayner SA, Wright JA. Low Vitamin D Levels in Persons with Spinal Cord Injury and Increased Incidence of Venous Thromboembolic Events During Acute Inpatient and Rehabilitation Stay. PM&R 2013; 5(9):S140.

Williams L, Ajay P, Shem K. Persistent Autonomic Dysreflexia Due to Bowel Care in Spinal Cord Injured Men: A Case Series . Am J Phys Med Rehabil: 2014;93 Suppl 2: a36

Utility of uNGAL as a marker of UTI in Patients with Neuropathic Bladders

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Catherine Forster, MD
Children's National Medical Center

CV:
Positions and Employment

2008-2009 Fellow, Doris Duke Clinical Research Foundation, Columbia University
2011-2014 Resident, Boston Combined Residency Program
2014-2017 Fellow, Pediatric Hospital Medicine, Cincinnati Children's Hospital Medical Center
2015-2017 Fellow, General Pediatrics Research, National Research Service Award (NRSA), Cincinnati Children's Hospital Medical Center
2017- Assistant Professor, Department of Pediatrics, The George Washington University

Other Experiences and Professional Memberships
2011- American Academy of Pediatrics, member
2013 -2015 Editorial Board Member, The Journal of Pediatrics
2014 - Academic Pediatric Association, member
2015 - Society for Pediatric Research, junior section member
President-Elect, Junior Section of SPR 9/2015-9/2016
President, Junior Section of SPR 9/2016-9/2017
Chair, Mentoring Committee 9/2016-9/2017
2016- American Society of Nephrology, fellow member
2017- American Society of Urology, affiliate member

Honors
2004 Graduated Cum Laude from Hamilton College with College Honors
2004 Faculty-Nominated Member Sigma Xi, Hamilton College
2009 Dr. Alfred Steiner Award, Research Award, Columbia University
2009 Osler Society Translational Medicine Award, National Student Research Forum
2009 Outstanding Clinical Sciences Oral Presentation, E. Atlantic Student Research Forum
2010 Hobart Amory Hare Medical Honors Society, Jefferson Medical College
2010 McClellan Surgical Honors Society, Jefferson Medical College
2011 First Place Poster Presentation, AOA of Jefferson Medical College
2012 Frederick Lovejoy Resident Research Award, Boston Children's Hospital
2013 Von L. Meyer Award, Boston Children's Hospital
2013 Paul Schliesman Memorial Fellowship, Boston Children's Hospital
2016 Senior Resident Division Teaching Award, Cincinnati Children's Hospital Medical Center (award to all members of the Division of Hospital Medicine)
2009 Outstanding Clinical Sciences Oral Presentation, E. Atlantic Student Research Forum
2010 Hobart Amory Hare Medical Honors Society, Jefferson Medical College
2010 McClellan Surgical Honors Society, Jefferson Medical College
2011 First Place Poster Presentation, AOA of Jefferson Medical College
2012 Frederick Lovejoy Resident Research Award, Boston Children's Hospital
2013 Von L. Meyer Award, Boston Children's Hospital
2013 Paul Schliesman Memorial Fellowship, Boston Children's Hospital
2016 Senior Resident Division Teaching Award, Cincinnati Children's Hospital Medical Center (award to all members of the Division of Hospital Medicine)
2018 Presidential Award for Innovative Research, Children's National Medical Center

Publications in Last Five Years:

1. Gerber DC, Forster CS, Hsieh M. The role of the genitourinary microbiome in pediatric urology: a review.

Current Urology Reports, 2018 Feb; 19(1):13-18. PMID 29468401

2. Forster CS, Elizabeth Jackson, Qing Ma, Michael Bennett, Samir Shah, and Stuart Goldstein. Predictive Ability of NGAL in Identifying Urinary Tract Infection in Children with Neurogenic Bladders. Pediatric Nephrology, epub March 12, 2018. PMID 29532235

3. Forster CS, Shaikh N, Hoberman A, Jackson E. Uropathogens and Pyuria in Children with Neurogenic Bladders. Pediatrics, 2018 May; 141(5). PMID: 29618582

4. Parikh A, Rizzo J, Chalfin D, Canetta P, Forster CS, Sise M, Marroug O, Singer E, Elger A, Elitok S, Schmidt-Ott K, Barasch J, Nickolas T. Does NGAL Reduce Cost? A Cost Analysis of Urine NGAL and Serum Creatinine for Acute Kidney Injury. PLOS One, 2017 September; 12(9). PMID:28953968

5. Forster CS, Haslam DB, Jackson E, Goldstein S. Utility of a Routine Urinalysis in Children Who Require on Clean Intermittent Catheterization. Journal of Pediatric Urology, 2017 October;13(5): 488.e1-488.e5. PMID 28284733

6. Forster CS, Johnson K, Patel V, Rodig N, Barasch J, Bachur R, Lee R. Urinary NGAL Deficiency in Recurrent Urinary Tract Infections. Pediatric Nephrology, 2017 June; 32(6): 1077-80. PMID 28210838

7. Xu K, Rosenthal P, Paragas N, Hinze C, Gao X, Merth M, Forster CS, Deng R, Bruck E, Boles RW, Tornato A, Jones M, Konig J, Gopal T, D'Agati V, Erdjument-Bromage H, Saggi S, Wagener G, Schmidt-Ott K, Tattonetti N, Tempst P, Oliver J, Guarnieri P, Barasch J. Unique Transcriptional Programs Identify Subtypes of "Acute Kidney Injury". Journal of the American Society of Nephrology, 2017 June; 28(6): 1729-40. PMID: 28028135

8. Forster CS, Courter J, Jackson E, Mortensen J, Haslam D. Rates of Antimicrobial Resistance in Urine from Children on Clean Intermittent Catheterization. Journal of the Pediatric Infectious Disease Society, 2017 Nov 24(4): 332-338. PMID 29186590

9. Forster CS, Herbst L, Jerardi KE, Brady P. Right Test, Wrong Patient: Biomarkers and Value. Hospital Pediatrics, 2016 May; 6(5):315-7. PMID 27052032.

10. Beinvogl B, Rosman N, Baumer F, Rodan L, Forster CS, Kwon A, Berry G. A 10-month-old with Intermittent Hypotonia and Paralysis. Pediatrics, 2016 Jul; 138(1). PMID 27252036

11. Khan A, Rogers JE, Forster CS, Furtak SL, Schuster MA, Landrigan CP. Communication and Shared Understanding between Parents and Resident-Physicians at Night. Hospital Pediatrics, 2016; 6(6): 319-329. PMID 27188189

12. Auger K, Mueller E, Weinberg S, Forster CS, Shah A, Wolski C, Mussman G, Ipsaro A, Davis M. A Validated Method for Identifying Unplanned Pediatric Readmission. Journal of Pediatrics, E-published December 30, 2015. PMID 26743495

13. Paragas N, Kulkarni R, Werth M, Schmidt-Ott K, Forster CS, Deng R, Zhang QY, Singer E, Klose AD, Shen TH, Francis KP, Ray S, Vijayakumar S, Seward S, Bovino M, Xu K, Takabe Y, Amaral FE, Mohan S, Wax R, Corbin K, Sanna-Cherchi S, Mori K, Johnson L, Nickolas T, Lin CS, D'Agati V, Qiu A, Al-Awqati Q, Ratner AJ, Barasch J. The alpha-Intercalated Cell Defends the Urinary System from Bacterial Infection by Excreting H+ and LCN2 in Mouse and Human Urine. Journal of Clinical Investigation, July 2014; 124(7): 2963-76. PMID 24937428

14. Verna EC, Brown RS, Farrand E, Pichardo M, Forster CS, Sola-Del Valle D, Adkins SH, Sise ME, Oliver JA, Barasch J, Nickolas TL. Urinary Neutrophil Gelatinase Associated Lipocalin Distinguishes Types of Kidney Failure and Predicts the Mortality of Patients with Cirrhosis. Dig Dis Sci, May 6, 2012. PMID 22562534

15. Nickolas TL, Forster CS, Sise ME, Sola-Del Valle D, Barasch N, Viltard M, Buchen C, Kupferman S, Fanti G, Bennett M, Argentiero L, Bovino A, Mattei S, Carnevali ML, Devarajan P, Mori K, Erdjument-Bromage H,

Tempst P, Allegri L, Barasch J. uNGAL (Lcn2) is Associated with Tubulointerstitial Damage in Chronic Kidney Disease. Kidney International, June 2012. PMID 22695331

16. Nickolas TL, Schmidt Ott KM, Canetta P, Forster CS, Singer E, Sise ME, Elger A, Maarouf O, Sola-Del Valle DA, O'Rourke M, Sherman E, Lee P, Gupta A, Polland A, Rahman W, Elitok S, Malik N, Giglio J, El-Sayegh S, Devarajan P, Hebbar S, Saggi S, Hahn B, Kettritz R, Luft FC, Barasch J. Diagnostic and Prognostic Stratification in the Emergency Department with Urinary Biomarkers of Nephron Damage: A Multicenter Prospective Cohort Study. J Am Coll Cardiol 2012;59:246-55. PMID 22240130

17. Sise ME, Forster CS, Singer E, Sola-Del Valle D, Hahn B, Schmidt Ott K, Barasch J, Nickolas TL. Urine Neutrophil Gelatinase Associated Lipocalin Identifies Unilateral and Bilateral Urinary Tract Obstruction. Nephrol Dial Transplant. 2011; 26(12): 4132-4135. PMID 22049182.

18. Paragas N, Qiu A, Zhang Q, Samstein B, Deng SX, Schmidt-Ott KM, Viltard M, Yu W, Forster CS, Gong G, Liu Y, Kulkarni R, Mori K, Kalandadze A, Ratner AJ, Devarajan P, Landry DW, D'Agati V, Lin CS, Barasch J. The NGAL Reporter Mouse Detects the Response of the Kidney to Injury in Real Time. Nature Medicine. 2011 Feb; 17(2): 216-222. PMID 2124026

19. Paragas N, Nickolas TL, Wyatt C, Forster CS, Sise ME, Morgello S, Jagla B, Buchen C, Stella P, Sanna-Cherchi S, Carnevali ML, Mattei S, Bovino A, Argentiero L, Magnano A, Devarajan P, Schmidt-Ott KM, Allegri L, Klotman P, D'Agati V, Gharavi AG, Barasch J. Urinary NGAL Marks Tubular Disease in HIV Associated Nephropathy. Journal of the American Society of Nephrology. 2009 Aug; 20(8):1687-92. PMID: 19628667

20. Topkara VK, Cheema FH, Kesavaramanujam S, Mercando ML, Forster CS, Argenziano M, Esrig BC, Oz MC, Naka Y. Effect of Donor Age on Long-Term Survival Following Cardiac Transplantation. Journal of Cardiac Surgery 2006; 21:1-5. PMID 16492267.

21. Bardakci H, Cheema FH, Topkara VK, Dang NC, Martens TP, Mercando ML, Forster CS, Benson AA, George I, Russo MJ, Oz MC, and Esrig BC. Discharge to Home Rates are Significantly Lower for Octogenarians Undergoing Coronary Artery Bypass Graft Surgery. Annals of Thoracic Surgery. 2007 Feb; 83(2):483-9. PMID: 17257973.

Papers in Refereed Journals (Group Authorship)

1. Christie JD, Robinson N, Ware LF, Plotnick M, DeAndrade J, Lama V, Milstone A, Orens J, Weinacker A, Demissie E, Bellamy S, Kawut SM for the Lung Transplant Outcomes Groups (Forster, CS*). Association of protein C and type 1 plasminogen activator inhibitor with primary graft dyfunction. Am J Resp Crit Care Med. 2007 Jan 1; 175(1); 69-74. PMID 17023732 (*member of investigative team cited in appendix)

Presentations in last 5 years:

1. Forster CS, Loechtenfeltd A, Shah S, Goldstein S. Unnecessary antibiotic prescribing in children evaluated for urinary tract infection. Pediatric Academic Societies, 2018.

2. Forster CS, Greis K, Goldstein S, Devarajan P. Identification of novel urinary proteins to distinguish urinary tract infection from colonization in catheterization-dependent children. American Society of Nephrology, 2017.

3. Forster CS, Jackson E, Shah S, Goldstein S. Urine NGAL Distinguishes Urinary Tract Infection from Colonization in Children on Clean Intermittent Catheterization. Platform Presentation, Pediatric Academic Societies, 2017.

4. Forster CS, Durling M, Shah S, Goldstein S. Urinary NGAL Has a Higher Diagnostic Accuracy than Pyuria for UTIs in Young Children. Pediatric Academic Societies, 2017.

5. Forster CS, Jackson E, Goldstein SL. Urine NGAL Distinguishes Urinary Tract Infection From Colonization in Children who Require Clean Intermittent Catheterization. American Society of Nephrology, 2016.

6. Forster CS, Jackson E, Goldstein SL. Variability in Physician Opinion on Urinary Tract Colonization and Urinary Tract Infection in Children Who Require Clean Intermittent Catheterization. Clinical and Scientific Advances in Urinary Tract Infections, 2016.

7. Umhoeffer T, Herschline D, Forster CS. The Worst Kind of Pies. Pediatric Hospital Medicine, 2016.

8. Forster CS, Jackson E, Goldstein SL. Urine Analysis and Culture Results in Children on Clean Intermittent Catheterization with Urinary Tract Colonization. Pediatric Academic Societies, 2016.

9. Forster CS, Courter J, Jackson E, Haslam D. Frequency of Multi-Drug Resistant Organisms Cultured from Urine in Children on Clean Intermittent Catheterization. Pediatric Academic Societies, 2016.

10. Auger KA, Mueller EL, Weinberg SH, Forster CS, Shah A, Wolski C, Mussman GA, Morys A and Davis MM. Using Hospital Designation to Identify Unplanned Pediatric Readmissions. Society for Hospital Medicine, 2015

11. Forster CS, Johnson K, Patel V, Wax R, Rodig N, Barasch J, Lee R, Bachur R. Urinary NGAL Deficiency in Children with Recurrent UTI.
Pediatric Academic Societies, Vancouver, May 2014
Moderated Poster Session, American Urological Association, Orlando, May 2014

12. Khan A, Rogers JE, Forster CS, Schuster MA, and Landrigan CP. Nighttime Miscommunication Between Physicians and Parents of Hospitalized Children.
Platform Presentation, Pediatric Academic Societies, Vancouver, May 2014

Inger Ljungberg, MPH
Medstar National Rehabilitation Hospital

(no CV uploaded)

Amanda Rounds, BA
Medstar National Rehabilitation Hospital

(no CV uploaded)

Bruce Sprague, BS
Children's National Medical Center

(no CV uploaded)

Crystal Stroud, MS
Children's National Medical Center

(no CV uploaded)

Ljubica Caldovic, PhD
Children's National Medical Center

(no CV uploaded)

Hans Pohl, MD
Children's National Medical Center

(no CV uploaded)

Michael Hsieh, MD, PhD
Children's National Medical Center

(no CV uploaded)

Suzanne Groah, MD
Medstar National Rehabilitation Hospital

(no CV uploaded)

The Epidemiologic Study of Spinal Cord Injury Etiology and Complications in Northwest Gyeonggido of South Korea

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Jeehyun Yoo, MD
Ilsanpaik Hospital, Inje University

CV:
A. Publications
1) Effects of low-frequency rTMS and NMES on subacute unilateral hemispheric stroke with dysphagia. Ann Rehabil Med 2014;38:592-602
2) Comparison of balance ability between patients with type 2 diabetes and with and without peripheral neuropathy. PM R 2014;6:209-214
3) Effect of custom-molded foot orthoses on foot pain and balance in children with symptomatic flexible flat feet. Ann Rehabil Med 2015;39:905-913
4) Cardiovascular response during submaximal underwater treadmill exercise in stroke patients. Ann Rehabil Med 2015;38:628-636
5) Efficacy of mirror therapy containing functional tasks in poststroke patients. Ann Rehabil Med 2016;40:629-636
6) Femoral Neuropathy Secondary to Autosomal Dominant Polycystic Kidney Disease: A Case Report. Ann Rehabil Med 2018;42:488-493
7) Correlation Between Montreal Cognitive Assessment and Functional Outcome in Subacute Stroke Patients With Cognitive Dysfunction. Ann Rehabil Med 2018;42:26-34

Kil Byung Lim, MD, PhD
Ilsanpaik Hospital, Inje University

(no CV uploaded)

Hong-Jae Lee, MD, PhD
Ilsanpaik Hospital, Inje University

(no CV uploaded)

Jiyong Kim, MD
Ilsanpaik Hospital, Inje University

(no CV uploaded)

Joongmo Kang, MD
Ilsanpaik Hospital, Inje University

(no CV uploaded)

Dong Goo Kim, MD
Seoul National Municipal Hospital

(no CV uploaded)

Joon Shik Yoon, MD, PhD
Department of Physical Medicine and Rehabilitation, Korea University Guro Hospital

(no CV uploaded)

ROBOTIC INTERVENTION FOR TREATMENT OF CONVERSION DISORDER, a novel approach {Case Report}

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Michael Rotko, MS
Utrgv School of Medicine

(no CV uploaded)

William Weinrauch, DPT, PT, CBIS
Mount Sinai Hospital

CV:
Dr. Weinrauch has been working at Mount Sinai Acute Inpatient Rehab since 2010. He has certifications in Ekso and ReWalk exoskeletons and is a Certified Brain Injury Specialist. He has presented at the annual SCI Model Systems Conference on multiple occasions on exoskeleton use in inpatient rehab.

Anthony Mazzola, MD
Mount Sinai Hospital

(no CV uploaded)

Miguel Escalon, MD
Mount Sinai Hospital

(no CV uploaded)

Effect of Arm Cycling on the Soleus H-reflex Modulation in Motor-Complete Thoracic SCI

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Dobrivoje Stokic, MD, DSc
Methodist Rehabilitation Center

CV:

1. Howard CL, Wallace C, Perry B, Stokic DS. Comparison of mobility and user satisfaction between a microprocessor knee and a standard prosthetic knee: a summary of seven single-subject trials. International Journal of Rehabilitation Research 41:63- 73, 2018.

2. Chow JW, Stokic DS: Improvements in force variability and structure from vision- to memory-guided submaximal isometric knee extension in subacute stroke. Journal of Applied Physiology 124: 592-603, 2018.

3. Howard CL, Perry B, Chow JW, Wallace C, Stokic DS. Increased alertness, better than posture prioritization, explains dual-task performance in prosthesis users and controls under increasing postural and cognitive challenge. Experimental Brain Research 235:3527-3539, 2017.

4. Paul AM, Acharya D, Duty L, Thompson EA, Le L, Stokic DS, Leis AA, Bai F. Osteopontin facilitates West Nile virus neuroinvasion via neutrophil "Trojan horse" transport. Scientific Reports 7(1):4722. 2017.

5. Shah S, Mohamadpour M, Askin G, Nakase-Richardson R, Stokic DS, Sherer M, Yablon SA, Schiff ND. Focal electroencephalographic changes index post-traumatic confusion and outcome. Journal of Neurotrauma 34:2691-2699 2017.

6. Chow JW, Yablon SA, Stokic DS. Intrathecal baclofen bolus reduces exaggerated extensor coactivation during pre-swing and early-swing of gait after acquired brain injury. Clinical Neurophysiology 128(5): 725-733, 2017.

7. Perry BE, Evans EK, Stokic DS. Weight compensation characteristics of ArmeoÂ®Spring exoskeleton: implications for clinical practice and research. Journal of Neuroengineering and Rehabilitation. 14(1):14, 2017.

8. Howard CL, Wallace, CT, Abbas JJ, Stokic DS. Residual Standard Deviation: Validation of a new measure of dual-task cost in below-knee prosthesis users. Gait & Posture 51: 91-96, 2017.

9. Acharya D, Wang P, Paul AM, Dai J, Gate D, Lowery JE, Stokic DS, Leis AA, Flavell RA, Town T, Fikrig E, Bai F. Interleukin-17A Promotes CD8+ T Cell Cytotoxicity To Facilitate West Nile Virus Clearance. Journal of Virology. 91(1), 2016.

10. Paul AM, Acharya D, Le L, Wang P, Stokic DS, Leis AA, Alexopoulou L, Town T, Flavell RA, Fikrig E, Bai F. TLR8 Couples SOCS-1 and Restrains TLR7-Mediated Antiviral Immunity, Exacerbating West Nile Virus Infection in Mice. Journal of Immunology 197(11):4425-4435, 2016.

11. Chow JW, Stokic DS. Variability, frequency composition, and temporal regularity of submaximal isometric elbow flexion force in subacute stroke. Experimental Brain Research 234 (11): 3145-3155, 2016.

12. Leis AA, Stokic DS. Zika Virus and Guillainâ€“Barre syndrome: Is there sufficient evidence for causality? Frontiers in Neurology 7:170, 2016.

13. Kuwar R, Stokic DS, Leis AA, Bai F, Paul A, Fratkin J, Vig PJS. Does astroglial protein S100B contribute to West Nile neuroinvasive syndrome? Journal of Neurological Sciences, 358 (1-2): 243-252, 2015.

14. Chow JW, Stokic DS. Intersegmental coordination scales with gait sped similarly in men and women. Experimental Brain Research 233 (11): 3175-3185, 2015.

15. Knezevic T, Konstantinovic LJ, Rodic S, Foti C, Drulovic J, Dackovic J, Nikolic D, Petronic I, Stokic DS. Validity and reliability of the Serbian version of Patient-Reported Impact of Spasticity Measure (PRISM) in multiple sclerosis. International Journal of Rehabilitation Research 38(3): 199-205, 2015.

16. Chow JW, Stokic DS. Intersegmental coordination of gait after hemorrhagic stroke. Experimental Brain Research 233(1): 125-135, 2015.

17. Chow JW, Yablon SA, Stokic DS Effect of intrathecal baclofen bolus injection on ankle muscle activation during gait in patients with acquired brain injury. Neurorehabilitation & Neural Repair 29(2): 163-173, 2015.

18. Chow JW, Stokic DS. Variability, frequency composition, and complexity of submaximal isometric knee extension force from subacute to chronic stroke. Neuroscience 273:189-98, 2014.

19. Leis AA, Szatmary G, Ross MA, Stokic DS: West Nile virus infection and myasthenia gravis. Muscle & Nerve 49(1):24-26, 2014.

Antonio Hayes, EPT., R. NCST.
Methodist Rehabilitation Center

(no CV uploaded)

John Chow, PhD
Methodist Rehabilitation Center

(no CV uploaded)

Complications associated with intermittent catheterization in athletes with SCI

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Matthias Walter, MD, PhD, FEBU
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

CV:
Personal Statement
Since November 2016, I am a postdoctoral research fellow at the International Collaboration on Repair Discoveries (ICORD), University of British Columbia (UBC), in Vancouver, Canada I am currently involved in numerous research studies and clinical trials focusing on amelioration of autonomic dysfunctions among individuals with spinal cord injury (SCI). In addition, I am one of three principal investigators (i.e. John Steeves and Brett Finlay) investigating gastrointestinal and urinary tract microbiome after spinal cord injury in an international multicenter trial.

Academic Positions
2017 - present Honorary Postdoctoral Fellow, ICORD, UBC, Vancouver, BC, Canada
2014 - 2016 Adjunct Postdoctoral Fellow, University of Zurich, Switzerland (CH)
2011 - 2014 Doctoral Candidate, Universities Zurich and Maastricht

Clinical Positions
2016 Consultant, Urology, Cantonal Hospital, Aarau, CH
2014 - 2015 Chief Resident, Urology, Cantonal Hospital, Aarau, CH
2013 - 2014 Resident, Neuro-Urology, SCI Centre, Balgrist University Hospital, Zurich, CH
2010 - 2011 Resident, Urology, University Hospital, Basel, CH
2009 - 2010 Resident, Pediatric Surgery, Children's University Hospital, Zurich, CH
2007 - 2008 Resident, Urology, Cantonal Hospital, Baden, CH
2006 - 2007 Resident, General Surgery, Cantonal Hospital, Frauenfeld, CH

Honors
2018 BEST POSTER PRESENTATION - annual meeting of the European Association of Urology (EAU)
2018 CONFERENCE TRAVEL AWARD - BC Regenerative Medicine (BCREGMED) Initiative
2018 CONFERENCE TRAVEL AWARD - Faculty of Medicine, UBC
2017 POSTDOCTORAL RESEARCH FELLOWSHIP - Michael Smith Foundation for Health Research and Rick Hansen Foundation
2017 INTERNATIONAL AUTONOMIC AWARD - Best overall presentation at 4th International Autonomic Symposium in Vancouver, Canada
2016 UROLOGIST - Swiss Board Examination in Urology
2016 FELLOW OF THE EUROPEAN BOARD OF UROLOGY (FEBU)
2015 CONFERENCE TRAVEL AWARD - annual meeting of the International Continence Society (ICS)
2014 BEST POSTER PRESENTATION - annual meeting of the EAU

Contribution to Science
1. West CR, Phillips AA, Squair JW, Williams AM, Walter M, Lam T, Krassioukov AV. Association of Epidural Stimulation With Cardiovascular Function in an Individual With Spinal Cord Injury. JAMA Neurol. 2018 May 1;75(5):630-632. PubMed PMID: 29459943
2. Walter M, Krassioukov AV. Autonomic Nervous System in Paralympic Athletes with Spinal Cord Injury. Phys Med Rehabil Clin N Am. 2018 May;29(2):245-266. PubMed PMID: 29627087.
3. Walter M, Knüpfer SC, Cragg JJ, Leitner L, Schneider MP, Mehnert U, Krassioukov AV, Schubert M, Curt A, Kessler TM. Prediction of autonomic dysreflexia during urodynamics: a prospective cohort study. BMC Med. 2018 Apr 13;16(1):53. doi: 10.1186/s12916-018-1040-8. PubMed PMID: 29650001
4. Christison K, Walter M, Wyndaele JJM, Kennelly M, Kessler TM, Noonan VK, Fallah N, Krassioukov AV. Intermittent Catheterization: The Devil Is in the Details. J Neurotrauma. 2018 Feb 1. doi: 10.1089/neu.2017.5413. PubMed PMID: 29108476
5. Leitner L, Walter M, Jarrahi B, Wanek J, Diefenbacher J, Michels L, Liechti MD, Kollias SS, Kessler TM,

Mehnert U. A novel infusion-drainage device to assess lower urinary tract function in neuro-imaging. BJU Int. 2017 Feb;119(2):305-316. PubMed PMID: 27617867.
6. Leitner L, Walter M, Sammer U, Knüpfer SC, Mehnert U, Kessler TM. Urodynamic Investigation: A Valid Tool to Define Normal Lower Urinary Tract Function? PLoS One. 2016 Oct 13;11(10):e0163847. PubMed PMID: 27736908.
7. Leitner L, Sammer U, Walter M, Knüpfer SC, Schneider MP, Seifert B, Tornic J, Mehnert U, Kessler TM. Antibiotic prophylaxis may not be necessary in patients with asymptomatic bacteriuria undergoing intradetrusor onabotulinumtoxinA injections for neurogenic detrusor overactivity. Sci Rep. 2016 Sep 12;6:33197. PubMed PMID: 27616488
8. Leitner L, Guggenbühl-Roy S, Knüpfer SC, Walter M, Schneider MP, Tornic J, Sammer U, Mehnert U, Kessler TM. More Than 15 Years of Experience with Intradetrusor OnabotulinumtoxinA Injections for Treating Refractory Neurogenic Detrusor Overactivity: Lessons to Be Learned. Eur Urol. 2016 Sep;70(3):522-8. PubMed PMID: 27106070.
9. Walter M, Wetterauer C, Bruder E, Obermann EC, Subotic S, Wyler S. Renal Cell Carcinoma in a Young Adult - Do We Need Further Investigations? Urol Case Rep. 2016 Mar 12;6:27-9. doi: 10.1016/j.eucr.2016.02.005. eCollection 2016 May. PubMed PMID: 27169022
10. Walter M, Knüpfer SC, Leitner L, Mehnert U, Schubert M, Curt A, Kessler TM. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat urodynamic investigation in women with spinal cord injury. World J Urol. 2016 Mar;34(3):391-7. PubMed PMID: 26055644.
11. Sammer U, Walter M, Knüpfer SC, Mehnert U, Bode-Lesniewska B, Kessler TM. Do We Need Surveillance Urethro-Cystoscopy in Patients with Neurogenic Lower Urinary Tract Dysfunction? PLoS One. 2015 Oct 29;10(10):e0140970. PubMed PMID: 26513149
12. Walter M, Altermatt S, Furrer C, Meyer-Heim A. Intrathecal baclofen therapy in children with acquired brain injuries after drowning: A case series. Brain Inj. 2015;29(1):98-103. PubMed PMID: 25264924.
13. Walter M, Altermatt S, Furrer C, Meyer-Heim A. Intrathecal baclofen therapy in children with severe spasticity: Outcome and complications. Dev Neurorehabil. 2014 Dec;17(6):368-74. PubMed PMID: 23977869.
14. Leitner L, Walter M, Freund P, Mehnert U, Michels L, Kollias S, Kessler TM. Protocol for a prospective magnetic resonance imaging study on supraspinal lower urinary tract control in healthy subjects and spinal cord injury patients undergoing intradetrusor onabotulinumtoxinA injections for treating neurogenic detrusor overactivity. BMC Urol. 2014 Aug 18;14:68. PubMed PMID: 25132340
15. Walter M, Michels L, Kollias S, van Kerrebroeck PE, Kessler TM, Mehnert U. Protocol for a prospective neuroimaging study investigating the supraspinal control of lower urinary tract function in healthy controls and patients with non-neurogenic lower urinary tract symptoms. BMJ Open. 2014 May 21;4(5):e004357. PubMed PMID: 24848086.
16. Walter M, Sammer U, Kessler TM. [Chronic pelvic pain syndrome: neurostimulation, neuromodulation and acupuncture]. Urologe A. 2012 Dec;51(12):1683-91. PubMed PMID:23224254.

Presentations (selected since 2013)
Previous ASIA workshop/course
1. Point/Counter Point: Opposing Views - Urology Re-use of Catheters: Yea or Nay (ASIA 2018 – Rochester, USA)

Podium presentations
1. OnabotulinumtoxinA for neurogenic detrusor overactivity reduces frequency and severity of autonomic dysreflexia and improves quality of life for individuals with spinal cord injury (AUA 2018 – San Francisco, USA)
2. Prediction of autonomic dysreflexia during urodynamics (AUA 2018 – San Francisco, USA)
3. Urethral injury and associated complications in individuals following spinal cord injury (ICS 2017 – Florence, Italy)
4. Reproducibility of supraspinal responses to automated, repetitive bladder filling – An fMRI study (AUA 2016 – San Diego, USA)
5. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (ICS 2016 – Tokyo, Japan)
6. Supraspinal responses to automated, repetitive bladder filling in healthy subjects - An fMRI study (ICS 2015 – Montreal)
7. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat

urodynamic investigation in women with suprasacral spinal cord injury (ASIA/ISCoS 2015 – Montreal)
8. Do we need surveillance cystoscopy in patients with a neurogenic lower urinary tract dysfuntion? (ASIA 2014 – San Antonio, USA)
9. Influence of spinal cord area and neuropathic pain on cardiovascular changes in patients with spinal cord injury during urodynamic investigation (ISCoS 2014 – Maastricht, The Netherlands)

Short oral presentations
1. OnabotulinumtoxinA ameliorates autonomic dysreflexia while improving lower urinary tract function and quality of life in individuals with spinal cord injury (ICS 2018 – Philadelphia, USA)
2. Epidural Spinal Cord Stimulation Affects Bladder And Bowel Function: A Case Report (ASIA 2018 – Rochester, USA)
3. OnabotulinumtoxinA for neurogenic detrusor overactivity not only reduces the frequency and severity of autonomic dysreflexia safely but significantly improves quality of life for individuals with spinal cord injury (EAU 2018 – Copenhagen, Denmark)
4. Prediction of autonomic dysreflexia during urodynamic investigation (EAU 2018 – Copenhagen, Denmark)
5. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (EAU 2016 – Munich, Germany)
6. Different supraspinal responses to automated, repetitive bladder filling in OAB patients compared to healthy subjects - An fMRI study (AUA 2016 – San Diego, USA)
7. Supraspinal responses to automated, repetitive bladder filling - An fMRI study (EAU 2015 – Madrid, Spain)
8. Supraspinal responses to automated, repetitive bladder filling - An fMRI study (AUA 2015 – New Orleans, USA)
9. Supraspinal response to bladder cold sensation in healthy subjects using fMRI (EAU 2015 – Madrid, Spain)
10. Supraspinal response to bladder cold sensation in healthy subjects using fMRI (AUA 2015 – New Orleans, USA)
11. Autonomic dysreflexia and repeatability of cardiovascular changes during same session repeat urodynamic investigation in women with suprasacral spinal cord injury (IUGA 2015 – Nice, France)
12. Pay attention to autonomic dysreflexia in patients with spinal cord injury during urodynamic investigation (EAU 2014 – Stockholm, Sweden)

Research Support
Principal investigator
1. Coloplast Project Grant (2018 – 2019) with Andrei V. Krassioukov
Title: The Burden of Intermittent Catheterization in Adult Individuals with Neurogenic Lower Urinary Tract Dysfunction (NLUTD) following Spinal Cord Injury (SCI)
Total Funding (Project grant) – C$ 30,355 (competitive)
2. Wellspect HealthCare (2017) with Andrei V. Krassioukov
Title: Urethral injury and bladder function assessment following SCI
Total Funding (Project grant) – C$ 14,900 (competitive)
3. Rick Hansen Institute (2016 – 2019) with John Steeves and Brett Finlay
Title: Gastrointestinal and Urinary Tract Microbiome after Spinal Cord Injury
Total Funding (Project grant) – C$ 74,200 (competitive)

Co-investigator
4. MSFHR Innovation to Commercialization Program (2017 – 2019)
Title: Servo-controlled Device to Maintain Physiological Functioning
Total Funding – C$ 300,000 (competitive)
5. Heart and Stroke Foundation of Canada (2016 – 2020)
Title: When are blood vessels “ready to rupture”? Cerebrovascular health following SCI
Total Funding – C$ 266,891 (competitive)
6. Rick Hansen Institute (2015 – 2019)
Title: Development of a mobile app (telephone/iPod application) for Emergency Medicine
Physician (EMP) on recognition and management of life threatening episodes of autonomic dysreflexia (AD): “ABC of AD for EMP”
Total Funding – C$ 35,000 (competitive)

7. Pfizer Canada Inc (2015 – 2019)
Title: A Phase II, Open-Label Exploratory Study Investigating the Efficacy of Toviaz for Treatment of Adult Patients with Spinal Cord Injury (SCI) with Neurogenic Detrusor Overactivity (NDO) for Amelioration of Autonomic Dysreflexia (AD
Total Funding – C$ 102,388 (competitive)
8. Rick Hansen Institute (2012 – 2017)
Title: BOTOX treatment for neurogenic detrusor hyperreflexia and prevention of autonomic dysreflexia following spinal cord injury
Total Funding – C$ 193,000 (competitive)

PhD Scholarship
Swiss National Science Foundation (2011 – 2014)

Ian Ruiz, BSc
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Jordan Squair, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Luis Rios, MD PhD
Department of Urology, Federal University of São Paulo, Paulista School of Medicine

(no CV uploaded)

Marcio Averbeck, MD, PhD, TiSBU
Department of Urology, Moinhos De Vento Hospital

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Therapeutic Effect of Transcutaneous Spinal Stimulation on locomotion in Incomplete Cervical Spinal Cord Injury: Case Report

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Soshi Samejima, DPT, MS
University of Washington

CV:
Positions and Honors
Positions and Employment
2005 - 2006 Physical Therapist, Kitade Hospital, Wakayama, Japan
2006 - 2007 Physical Therapist, Wakayama Medical University Hospital, Wakayama, Japan
2010 - 2012 Athletic Trainer, UB Orthopaedics & Sports Medicine, Buffalo, New York
2011 - 2012 Physical Therapist, UB Orthopaedics & Sports Medicine, Buffalo, New York
2012 - 2014 Physical Therapist, St John Neumann Nursing Home, Philadelphia, Pennsylvania
2014 - 2016 Physical Therapist, MossRehab Willowcrest, Philadelphia, Pennsylvania
2014 - 2016 Physical Therapist, PowerBack Center City, Philadelphia, Pennsylvania
2015 - 2016 Physical Therapist, Good Shepherd Penn Partners, Philadelphia, Pennsylvania

Other Experience and Professional
Memberships
2005 Japanese Physical Therapist, JPTA
2012 Pennsylvania State Physical Therapist, Pennsylvania
2012 Pennsylvania State Athletic Trainer, Pennsylvania
2013 APTA Credentialed Clinical Instructor, APTA
2015 Board Certified Geriatric Clinical Specialist, APTA
2018 Nominating Committee, Global Health for Aging Adults SIG, APTA

Honors
2010 Honor from Alpha Eta Society, Texas Tech University Health Science Center
2016 Top Scholar Awards, University of Washington
2017 WRF Innovation Graduate Fellow in Neuroengineering
2018 BCI Meeting Student Award

Contribution to Science
This section is organized to reflect the types of research experiences I had to date, through clinical research, during MS training, and in my current PhD training.

Transcutaneous spinal stimulation combined with physical therapy for upper extremity function and lower extremity

Peer-Reviewed Research paper
Inanici F, Samejima S, Gad P, Edgerton VR, Hofstetter C., Moritz CT. (2018). Transcutaneous electrical spinal stimulation promotes long-term recovery of upper extremity functions in chronic tetraplegia: a case study. IEEE Transactions on Neural Systems and Rehabilitation Engineering.
Clinical Research

Published abstracts
Samejima S, Kinoshita T, Tajima F. A case study: the effectiveness of a simple and portable tilting table (L board) for a seriously burned patient, The Journal of Japanese Society of Prosthetics and Orthotics, 22, 242-243, 2006.

Samejima S, Kinoshita T, Yamanaka M, Nakamura T, Tajima F. Regulation of cardiovascular responses and common carotid arterial blood flow to isometric exercise during lower body negative pressure in healthy male subjects. Poster presentation, The 4th World Congress of the International Society of Physical and Rehabilitation Medicine, 355, 2007.

Uenishi H, Yamamoto Y, Kinoshita T, Miyake T, Koike Y, Samejima S, Kouda K, Yamanaka M, Nakamura T, and Tajima F. The effect of abdominal compression on orthostatic intolerance in men with cervical spinal cord injury. Poster presentation, The 4th World Congress of the International Society of Physical and Rehabilitation Medicine, 293, 2007

MS Research: MS thesis research in the laboratory of Dr. Karen Moxon at Drexel University which was a joint program with Thomas Jefferson university was focused on investigating an association between kinematic parameters and single neuronal spikes in motor cortex in bipedal walking obstacle avoidance.

Ongoing research is focused on brain computer interface study in spinal cord injury. The approach of neuroengineering for physical impairments will provide an enormous opportunity to explore innovative interventions and the mechanisms.

Peer-Reviewed Research paper
Nimbalkar, S., Castagnola, E., Balasubramani, A., Scarpellini, A., Samejima, S., Khorasani, A., ... & Kassegne, S. (2018). Ultra-Capacitive Carbon Neural Probe Allows Simultaneous Long-Term Electrical Stimulations and High-Resolution Neurotransmitter Detection. Scientific reports, 8(1), 6958.

Published Abstract
Samejima S, Khorasani A, Boissenin A, Raganathan V, Smith JR, Moritz CT. (2018). Brain Controlled Epidural Spinal Interface Reanimating Forelimb Function in Spinal Cord Injury. The Seventh International BCI Meeting. Monterey CA, USA.

Research Support
WRF Innovation Graduate Fellowships in Neuroengineering
09/01/17-08/31/19
UWINâ€™s Washington Research Foundation (WRF) Innovation Graduate Fellowships in Neuroengineering provide support for Ph.D. students whose research relates to both neuroscience and quantitative approaches in math, computer science, or engineering. WRF Innovation Graduate Fellows in Neuroengineering are provided with an annual $30,000 stipend for two years, as well as full tuition coverage during that time.

Fatma Inanici, MD
University of Washington

(no CV uploaded)

Parag Gad, PhD
University of California, Los Angeles

(no CV uploaded)

Reggie Edgerton, PhD
University of California, Los Angeles

(no CV uploaded)

Nicholas Terrafranca, DPM
Neurorecovery Technologies, Inc.

(no CV uploaded)

Rajiv Saigal, MD, PhD
University of Washington

(no CV uploaded)

Chet Moritz, PhD
University of Washington

(no CV uploaded)

Long-Term Psychosocial and Medical Outcomes in Individuals with Pediatric-Onset Spinal Cord Injury: Comparing Violent and Non-Violent Etiology

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Kyle Deane, PhD
Shriners Hospitals for Children - Chicago

CV:

Kyle C. Deane, PhD
2211 N. Oak Park Avenue
Chicago, IL 60707
(773-385-5865)
kdeane@shrinenet.org

Position Title: Clinical Psychology Postdoctoral Fellow in Pediatric Rehabilitation, Shriners Hospitals for Children - Chicago.

EDUCATION

Clinical Psychology Postdoctoral Fellowship – Assistant Investigator & Fellow 2018 – Present
Shriners Hospitals for Children Chicago, Chicago, IL

Pre-doctoral Internship – Pediatric Health Psychology Resident 2017 – 2018
Alexian Brothers Behavioral Health Hospital, Hoffman Estates, IL (APA-accredited)

Ph.D. Doctoral Program, Clinical Psychology 2011 – 2018
Loyola University Chicago, Chicago, IL (APA-accredited)
Child/Family Subspecialty
Neuropsychology Subspecialty
Doctoral dissertation: Measuring Community Violence, Trauma, and Family Functioning Among Youth Living in Low-Income, Urban Environments
Dissertation chair: Maryse H. Richards, Ph.D.
Degree conferred: August 2018

Master of Arts, Clinical Psychology 2011 – 2013
Loyola University Chicago, Chicago, IL
Child/Family Subspecialty
Neuropsychology Subspecialty
Master's thesis: Posttraumatic Stress, Family Functioning, and Adjustment in Urban African American Youth Exposed to Violence: A Moderated Mediation Model
Thesis advisor: Maryse H. Richards, Ph.D.
Thesis defended: December 2013
Degree conferred: May 2014

Bachelor of Arts, magna cum laude, in Psychology 2006 – 2010
University of Dayton, Dayton, OH
Independent honors thesis: Comparisons of Face Recognition Among Children with Autism and Typically Developing Children
Defense: March 2010

PUBLICATIONS

Deane, K.C., Zakaryan, A., Romero, E., Richards, M., Bocanegra, K., Scott, D. (in press). Mexican American urban youth perspectives on neighborhood stressors, psychosocial difficulties, and coping: En sus proprias palabras. Journal of Child and Family Studies.

Quimby, D., Dusing, C., Deane, K.C., Diclemente, C., Morency, M., Miller, K., . . . Richards, M. (2018). Gun Exposure Among Black American Youth Residing in Low-Income Urban Environments. Journal of Black Psychology, 44(4), 322-346.

Richards, M., Tyson, M., Rice D.C., DiClemente, C., Deane, K.C., Quimby, D. (2017). Interim report for the evaluation of a cross-age peer mentoring program for youth in high violence Chicago communities. National Criminal Justice, Department of Justice, Office of Juvenile Justice & Delinquency Prevention, #2014-JU-FX-0003, Washington, DC.

Deane, K.C., Richards, M., Mozley, M., Scott, D., Rice, C., & Garbarino, J. (2016). Posttraumatic stress, family functioning, and externalizing in adolescents exposed to violence: A moderated mediation model. Journal of Clinical Child and Adolescent Psychology, 1-14. doi: 10.1080/15374416.2016.1197836

Richards, M., Lewis, G., Sanderson, R., Deane, K.C., & Quimby, D. (2016). Introduction to special issue: Resilience-based approaches to trauma intervention for children and adolescents. Journal of Child and Adolescent Trauma, 9 (1), 1-4. doi: 10.1007/s40653-016-0081-4

Richards, M., Romero, E., Deane, K.C., Carey, D., Zakaryan, A., Quimby, D., Gross, I., Thomas, A., Velsor-Friedrich, B.V., Burns, M., & Patel, N. (2015). Civic Engagement Curriculum: A strengths-based intervention serving African American youth in a context of toxic stress. Journal of Child & Adolescent Trauma, 9, 81-93. doi: 10.1007/s40653-015-0062-z

Velsor-Friedrich, B., Richards, M., Militello, L., Deane, K.C., Scott, D., Gross, I., Romero, E. (2015). The impact of community violence on school-based research. The Journal of School Nursing, 31, 397-401. doi:10.1177/1059840515605362

Richards, M., Romero, E., Zakaryan, A., Carey, D., Deane, K.C., Quimby, D., Patel, N., & Burns, M. (2015). Assessing urban African American youths' exposure to violence through a daily sampling method, Psychology of Violence, 5, 275-284. doi: 10.1037/a0038115

Richards, M., Sanderson, R.C., Celio, C.I., Choi, I., Grant, J., & Deane, K.C. (2013). Service-learning in early adolescence: Results of a school-based curriculum. Journal of Experiential Education, 36, 5-21. doi: 10.1177/1053825913481580

SELECTED PRESENTATIONS

Deane, K.C., Chlan, K.M., Vogel, L.C., Zebracki, K. (2018, September). Self-report of happiness in adults with pediatric-onset spinal cord injury. Poster presented at the Howard H. Steel Pre-Course to the International Spinal Cord Society Annual Scientific Meeting, Sydney, Australia.

Deane, K.C., Richards, M., Treering, D., Onyeka, C., & Rabadan, E. (2017, June). Using GIS Mapping to Measure Neighborhood Experiences, Community Violence Exposure, and Protective Community Assets Among Latino Youth. Paper symposium presented at the Society for Community Research and Action Biennial Conference, Ottawa, Canada.

Kirsch, A., Deane, K.C., Combs, T., Aywald, S., & Heideman, L. (2017, February). Correlates of Rey-Osterrieth performance across memory, attention, and visual-spatial functioning in a referred pediatric sample. Poster presented at the International Neuropsychology Society Annual Meeting, New Orleans, LA.

Kirsch, A., Deane, K.C., Combs, T., Aywald, S., & Heideman, L. (2017, February). Discriminative power of Rey-Osterrieth Complex Figure Test for attention-deficit/hyperactivity disorder compared to other attention measures. Poster presented at the International Neuropsychology Society Annual Meeting, New Orleans, LA.

Murphy, B., Torres, S., Deane, K.C., Escobar, C., Quimby, D., Richards, M., Santiago, C., Bocanegra, K. (2016, October). Systemic and cultural stressors among Mexican American youth: Immigration, inequality,

and acculturation. Poster presented at the Association for Behavioral and Cognitive Therapies Convention, New York, NY.

Deane, K.C., Mozley, M. Scott, D., Richards, M. (2015, August). Internalizing symptoms following violence exposure: The mediating role of posttraumatic stress. Poster presented at the 2015 American Psychological Association Biennial Meeting, Toronto, Canada.

Deane, K.C., Mozley, M. Richards, M. (2015, March). Violence exposure and aggression in African American youth: Moderation and mediation of family cohesion and posttraumatic stress. Poster presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Burns, M., Treering, D., Zakaryan, A., Deane, K.C., Bocanegra, K., Richards, M. (2015, March). Mexican American youth perceptions of community violence. Poster presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Romero, E., Carey, D., Deane, K.C., Quimby, D., Zakaryan, A., Richards, M. (2015, March). Daily exposure to community violence in urban African American youth: An analysis of violence type and severity. Poster presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Zakaryan, A., Romero, E., Deane, K.C., Mozley, M., Scott, D. Santiago, C., Bocanegra, K., Treering, D., Richards, M. (2015, March). The psychosocial needs and treatment of Latino youth with community-based participatory action research and qualitative data. Paper symposium presented at the 2015 Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Richards, M.H., Bocanegra, K., Treering, D., Santiago, C., Romero, E., Deane, K.C., Zakaryan, A., & Burns, M. (2014, April 4). How do Mexican American Youth See their Neighborhood? A Collaboration with Enlace, Using GIS Mapping and Focus Group Methods. Invited talk at Center for Urban Research and Learning (CURL), Loyola University Chicago.

Deane, K.C., Romero, E., Carey, C., Zakaryan, A., Richards, M., Burns, M. (2014, March). An analysis of daily exposure to community violence in urban African American youth. Paper presented at the 2014 Society for Research on Adolescence Biennial Meeting, Austin, TX.

Deane, K. C., Quimby, D., Burns, M., Hart, S., Richards, M. (2014, April). Family, posttraumatic stress, and adjustment in urban African American youth exposed to violence: A moderated mediation approach. Poster presented at the Society for Research in Child Development Special Topic Meeting: Strengthening Connections Among Child and Family Research, Policy and Practice, Alexandria, VA.

Richards, M.H. with Carey, D., Quimby, D., & Deane, K.C., (November, 2013). Exposure to community violence and urban youth mental health: A community-based participatory research perspective. Invited talk at Grand Rounds at Department of Psychiatry and Behavioral Neurosciences, Northwestern Feinberg School of Medicine.

Deane, K.C., Quimby, D., Hargrove, T., Chilson, J., Perrotte, A., Burrow, A., Richards, M.R. (2013, August). The effect of the Civic Engagement Curriculum on urban youth: The moderating role of ethnic identity. Poster presented at the 2013 Annual APA Convention, Honolulu, HI.

Deane, K.C., Richards, M.H., Bernard, D., Hargrove, T., Costello, R., Terry, J., Perrotte,A. (2013, April). Ethnic identity, coping, and self-esteem in low-income urban African American males: A longitudinal mediation model. Paper presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA.

SELECTED RESEARCH EXPERIENCE

Project: Understanding the Transition to Adulthood among Youth with Spinal Cord Injury (71010; $495,284)

Position: Assistant Investigator, Postdoctoral Clinical Psychology Fellow

Site: Shriners Hospitals for Children, Chicago, IL
Dates: 2018 – Present
Primary Investigator: Kathy Zebracki, Ph.D.

Project: Risk & Resilience Lab
Position: Graduate Student Research Assistant
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: 2011 – 2018
Primary Investigator: Maryse H. Richards, Ph.D.

Project: Dissertation: Measuring Community Violence, Trauma, and Family Functioning Among Youth Living in Low-Income, Urban Environments
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: August 2015 – April 2018
Committee: Maryse H. Richards, Ph.D. (Chair), James Garbarino, Ph.D., David Treering, M.S., Catherine Santiago, Ph.D.
Experience: Developed and proposed an original research project using a three-manuscript bundled approach to examining community violence, trauma, family functioning among youth living in low-income, high violence communities in Chicago. Dissertation was successfully defended in April 2018. Manuscript I: Posttraumatic Stress, Family Functioning, and Externalizing in Adolescents Exposed to Violence: A Moderated Mediation Model. Manuscript II: Violence Exposure, Posttraumatic Stress, Emotion Regulation, and Family Functioning Among African American Youth: A Time Sampling Approach. Manuscript III: Mapping Neighborhood Stressors and Resilience Using Geographic Information Systems: A Community Based Participatory Approach

Project: Cross-Age Peer Mentoring to Enhance Resilience Among Low-Income Urban Youth Living in High Violence Chicago Communities (funded by Department of Justice, Office of Juvenile Justice & Delinquency Prevention: #2014-JU-FX-0003, $1 million)
Position: Graduate Student Research Assistant
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: 2014 – 2017
Primary Investigator: Maryse H. Richards, PhD

Project: Little Village – Enlace Focus Group & GIS Mapping
Position: Graduate Student Research Assistant
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: August 2012 – 2018
Primary Investigator: Maryse H. Richards, Ph.D. & Kathryn Bocanegra, Ph.D.

Project: Civic Engagement Curriculum with CeaseFire Modifications (funded partially by Loyola University Chicago Internal Research Grant)
Position: Graduate Student Research Assistant
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: May 2012 – June 2015
Primary Investigator: Maryse H. Richards, Ph.D.

Project: A Multi-Center Group to Study Acute Liver Failure (PALF) in Children
Position: Graduate Student Research Technician
Site: Ann and Robert H. Lurie Children's Hospital, Chicago, IL
Dates: 2014 – 2015
Investigator: Lisa Sorensen, Ph.D., Frank Zelko, Ph.D.

Project: Master's Thesis: Posttraumatic Stress, Family Functioning, and Adjustment in Urban African American Youth Exposed to Violence: A Moderated Mediation Model
Site: Loyola University Chicago, Department of Psychology, Chicago, IL
Dates: 2013-2014
Committee: Maryse H. Richards, Ph.D. (chair), James Garbarino, Ph.D.

CLINICAL EXPERIENCE

Position: Clinical Pediatric Psychology Postdoctoral Fellow (Postdoctoral Fellowship)
Site: Shriners Hospitals for Children Chicago, Chicago, IL
Dates: July 2018 – Present
Supervisor: Kathy Zebracki, Ph.D.

Position: Pediatric Health Psychology Intern (Pre-doctoral Internship)
Site: Alexian Brothers Behavioral Health Hospital, Hoffman Estates, IL
Dates: July 2017 – June 2018
Supervisors: Rocco Domanico, Ph.D., Lacey Lemke, Psy.D., Cliff Saper, Ph.D.

Position: Advanced Clinical Child Neuropsychology Extern (Fifth Year Practicum)
Site: NorthShore University Healthsystem, Evanston, IL
Dates: July 2016 – June 2017
Supervisors: Elizabeth Heideman, Ph.D., Victoria Tuchscherer, Ph.D.

Position: Advanced Pediatric Consultation/Liaison Extern (Fourth Year Practicum)
Site: Shriners Hospitals for Children, Chicago, IL
Dates: July 2014 – June 2015
Supervisors: Kathy Zebracki, Ph.D., Kathleen Kapp-Simon, Ph.D., Meredith Albert, Ph.D.

Position: Pediatric Neuropsychology Assessment Extern (Third Year Practicum)
Site: University of Chicago Medical Center Department of Psychiatry & Behavioral Sciences, Chicago, IL
Dates: July 2013 – June 2014
Supervisor: Megan Scott, Ph.D., ABPP, Scott J. Hunter, Ph.D., ABPP

Position: Graduate Student Counselor (Second Year Practicum)
Site: Wellness Center, Loyola University Chicago, Chicago, IL
Dates: August 2012 – May 2013
Supervisors: Catherine DeCarlo Santiago, Ph.D., Jerome Wagner, Ph.D., Daniel Keller, Ph.D.

REVIEWER ACTIVITIES

Reviewer, Developmental Medicine & Child Neurology (August 2018)
Co-Reviewer, Journal of Child and Adolescent Trauma (February 2015)
Co-Reviewer, Journal of Child and Adolescent Trauma (December 2014)
Co-Reviewer, Developmental Psychology (August 2014)
Co-Reviewer, Journal of Research on Adolescence (November 2013)
Co-Reviewer, Journal of Research on Adolescence (March 2013)

SELECTED HONORS AND AWARDS

2017 Victor J. Heckler Research Fellowship, Loyola University Chicago
2013 – 2015 Graduate Research Assistantship, Loyola University Chicago
2013 – 2015 Graduate Teaching Assistantship, Loyola University Chicago
2012 – 2013 Assistantship with Achieving College Excellence (ACE) Program
2011 – 2012 Assistantship Position with Loyola University Graduate School

---

Kathy Chlan, BA
Shriners Hospitals for Children - Chicago

(no CV uploaded)

Shubhra Mukherjee, MD
Shriners Hospitals for Children - Chicago

(no CV uploaded)

Lawrence Vogel, MD
Shriners Hospitals for Children - Chicago

(no CV uploaded)

Kathy Zebracki, PhD
Shriners Hospitals for Children - Chicago

(no CV uploaded)

Pathologic role of cytosolic phospholipase A2 in neuropathic pain and motor function deficit in a rat model of lumbar spinal canal stenosis: implications for pharmacological interventions

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Mushfiquddin Khan, PhD
Medical Univ of South Carolina

CV:
Biographical Sketch
Name: Mushfiquddin Khan, Ph.D.
Position Title: Research Associate Professor, Darby Children's Research Institute, Department of Pediatrics, Medical University of South Carolina, Charleston, SC

A. Personal Statement
My major research interest is to investigate the neuropharmacology of CNS trauma with a focus on spinal cord injury (SCI), lumbar spinal stenosis (LSS), stroke and traumatic brain injury (TBI). The investigations have targeted both neuroprotection and neurorestoration for optimal functional recovery. My bioorganic background focused on neuropharmacology and drug discovery training prepared me to study design, prepare and administer drugs to animals and monitor their efficacy. These studies helped me to develop expertise in animal models (rat and mouse) of acute/chronic brain injury (SCI, IR, and TBI), evaluation of neurobehavioral and neurological functions, measurements of physiologic parameters as well as cerebral blood flow. To understand the neurorestoration mechanisms, I devoted my efforts to investigate the role of proteases and lipases in neuronal cell death. I remained focused on neurovascular protection and cross talk between neurons and glial cells, as evident from my peer reviewed high impact more than 95 publications. More than 17 years training with the assessment of neurobehavioral functions with rodent models of SCI, TBI and stroke prepares me well for evaluating functional recovery in both aged and young adult animals as proposed in the current proposal.
Previously, I have successfully administered NIH research (RO1, SBIR) projects (e.g. staffing, research protections, and budget), collaborated with other researchers and produced a respectable number of peer-reviewed publications from each project. As a result of these experiences, I am well aware of the importance of frequent and timely communication among project members and constructing a realistic research plan, timeline, and budget. My basic science experience as a neuro-pharmacologist positions me as an ideal candidate to undertake studies for understanding the disease processes and related mechanisms and development of targeted therapies for both acute and chronic SCI. Furthermore, my expertise in neuropharmacology is well suited for designing experiments to study neuroprotective therapy and to understand the functional recovery, cellular enzymology and thus function.
Currently, I am investigating the neuropharmacology of LSS. My recent publications showing the potential of GSNO, a natural component of human body, and cPLA2 inhibitor arachidonyl trifluoromethyl ketone (ATK) as neuroprotective/neurorestorative agentsin animal models of LSS and SCI (Khan et al., J Neuroinflammation 2015, Chou et al., Shunmugavel et al., Neurourol. Urodyn, 2015 and J. Magn Reson Imaging, 2011), TBI (Khan et al., Brain Research 2016) and stroke (Khan et al., BMC Neurosci 2015, 2018). Four of my most relevant publications to the grant proposal are listed below.

1. Chou PC, Shunmugavel A, Sayed HE, Desouki MK, Nguyen SA, Khan M, Singh I, Bilgen M. Preclinical use of longitudinal MRI for screening the efficacy of S-nitrosoglutathione in treating spinal cord injury. J. Magn Reson Imaging, 33, 1301-1311, 2011. PMCID pending.
2. Shunmugavel A, Khan M, Hughes FM, Purves JT, Singh A, Singh I. S-nitrosoglutathione protects the spinal bladder: novel therapeutic approach to post-spinal cord injury bladder remodeling. Neurourol. Urodyn. 34(6), 519-26, 2015. PMCID: PMC4285587.
3. Khan M, Dhammu TS, Singh I, Singh AK, Singh I. Amelioration of spinal cord injury in rats by blocking peroxynitrite/calpain activity. BMC Neurosci. 19(1):50, 2018. PMCID: PMC6090709.
4. Khan M, Shunmugavel A, Dhammu TS, Matsuda F, Singh AK, Singh I. Oral administration of cytosolic PLA2 inhibitor arachidonyl trifluoromethyl ketone ameliorates cauda equine compression injury in rats. J. nreuroinflammation. 12:94, 2015. PMCID: PMC:4436116.

B. Positions and Honors
Positions and Employment
1984-1986 Post-Doctoral Fellow, Ehime University, Matsuyama, Japan
1986-1987 Assistant Professor (Scientist's Pool), Department of Chemistry, AMU, Aligarh, India
1987-1989 Assistant Professor, Department of Chemistry, S.N. College, Azamgarh, India
1994-1998 Research Fellow, Pediatrics, Medical University of South Carolina, Charleston, SC
1998-1998 Scientist, HRA, Baltimore, MD
1999-2001 Senior Scientist, Arizona Institute for Biomedical Research, Scottsdale, Arizona
2001-June 2013 Research Assistant Prof, Pediatrics, Medical University South Carolina, Charleston, SC
2008-2013 IPA, Developmental Neurogenetics, Ralph H. Johnson VAMC, Charleston, SC
July 2013-Pre Research Associate Prof, Pediatrics, Medical University South Carolina, Charleston, SC
Awards and Fellowships
1979-1981 CSIR, Junior Research Fellowship, (Govt. of India), India
1982-1983 CSIR, Senior Research Fellowship, (Govt. of India), India
1984-1986 Monbusho Fellowship, (Govt. of Japan), Japan
2002 Mitchell I. Rubin Research Award (Children's Hospital, MUSC, Charleston, SC)
2004-2006 Member, NIH Study Section, BDCN A 11 (F 11)
2006 Member, (adhoc) NIH Study Section, BINPL 01
2008-2009 Member, (adhoc) NIH Study Section ZRG1ETTNC11
2011 Member, (adhoc) NIH Study Section FIRCA PAR
2011 Member, (adhoc) NIH Study Section ZRG1 BDCN-Y 04
2017 Member (Adhoc) Foundation Pour la Recherche, AVC, France
2005-Pres Member, American Stroke Association, USA (Membership # 000142301872)
2011-Pres Member, National Neurotrauma Society, USA

C. Contributions to Science
1. Stroke is the leading cause of disability in Americans including Veteran. Other than thrombolysis by recombinant tissue plasminogen activator (tPA), effective treatment for neuroprotection and rehabilitation is not available mainly because of limited understanding of the cellular pathways involved in different phases (acute and chronic) of stroke injury. Altered redox and neuroinflammation are essential components of stroke injury in both the acute and the chronic phases that hamper functional recovery. I was awarded an RO1 grant by the NIH to investigate the efficacy of N-acetylcysteine (NAC) in stroke and documented the efficacy in both pre-and post-stroke treatment in a rat model of experimental stroke. NAC is a precursor of glutathione (GSH) and increases the levels of GSH following stroke. Because NAC was effective only at higher doses (~150 mg/kg) and was toxic at 600 mg/kg dose, I used S-nitrosoglutathione (GSNO), a metabolite of NO and glutathione (GSH). GSNO is a natural component of human body and it was highly effective at much lower doses (0.25-1.0 mg/kg) in stroke providing neuroprotection and restoring neurological function in a rat model of experimental stroke (Khan et al., 2005). Later, we observed that such an efficacy was not associated with other free NO donors (Khan et al., 2006), indicating GSNO-based S-nitrosylating mechanisms are responsible for neuroprotection. GSNO is an S-nitrosylating agent and invokes its signaling through the mechanism of protein trans-S-nitrosylation, a secondary modification of proteins. Later, we also observed that GSNO stimulates the expression of neurotrophic molecules restoring functional recovery. GSNO-induced neurorestoration, regeneration and functional recovery are further supported by my recent stroke study indicating GSNO a drug candidate (Khan et al., 2015). Mechanistically, GSNO-mediated neuroprotection, at least in part, was dependent on GSNO's inhibition of the vicious nNOS/peroxynitrite/AMPK cycle as published (Khan et al., 2015).
a. Khan M, Sekhon B, Giri S, Jatana M, Gilg AG, Ayasola K, Elango C, Singh AK & Singh I. S-nitrosoglutathione inhibits inducible nitric oxide synthase expression and protects brain from focal cerebral ischemia in a rat model of experimental stroke. J. Cereb. Blood Flow & Metab. 25:177-192, 2005.
b. Khan M, Jatana M, Elango C, Paintlia AS, Singh AK and Singh I. Cerebrovascular protection by nitric oxide donors in rats after experimental stroke. Nitric Oxide. 15: 114-124, 2006.
c. Khan M, Dhammu TS, Matsuda F, Baarine M, Dhindsa TS, Singh I, Singh AK. Promoting endothelial function by S-nitrosoglutathione through the HIF-1α/VEGF pathway stimulates neurorepair and functional recovery following experimental stroke in rats. Drug design, development and therapy. 2015; 9:2233-47. PMCID: PMC4408969.
d. Khan M, Dhammu TS, Matsuda F, Singh AK, Singh I. Blocking a vicious cycle nNOS/peroxynitrite/AMPK by S-nitrosoglutathione: implication for stroke therapy. BMC Neurosci. 16, 42, 2015. PMCID: 4502912.

2. In addition to investigating the efficacy in experimental stroke, I observed that GSNO was also effective in other CNS trauma models including TBI and SCI. As an anti-inflammatory compound, GSNO reduced blood-brain barrier (BBB) leakage and decreased edema which are major injurious component of TBI (Khan et al., 2009). Mechanistically, BBB protection was conferred by GSNO by reducing the levels of peroxynitrite. BBB protective efficacy of GSNO was further supported by its blood-spinal cord barrier protection in a rat model of SCI determined by magnetic resonance imaging (Chou et al., 2011)). Like in stroke, GSNO also stimulated the expression of neurotrophic factors and aided in functional recovery (Khan et al., 2011). Additionally, GSNO was also found to be effective in relieving pain in a rat model lumbar spinal stenosis. Mechanistically, the vicious nNOS/peroxynitrite/calpain system was found to be involved in traumatic CNS injury and this system was significantly inhibited by GSNO. Conclusively, these studies support that GSNO is a potent neuroprotective and CNS repair agent following CNS trauma.
a. Khan M, Im Y, Shunmugavel A, Gilg AG, Dhindsa RK, Singh AK and Singh I. Administration of S-Nitrosoglutathione after traumatic brain injury protects the neurovascular unit and reduces secondary injury in rat model of controlled cortical impact. J. Neuroinflammation. 6:32, 2009. PMCID: PMC2777134.
b. Khan M, Sakakima H, Dhammu TS, Shunmugavel A, Im Y, Gilg AG, Singh AK and Singh I. S-nitrosoglutathione reduces oxidative injury and promotes mechanisms of neurorepair following traumatic brain injury in rats. J. Neuroinflammation. 8:78, 2011. PMCID: PMC3158546.
c. Chou PC, Shunmugavel A, Sayed HE, Desouki MK, Nguyen SA, Khan M, Singh I, Bilgen M. Preclinical use of longitudinal MRI for screening the efficacy of S-nitrosoglutathione in treating spinal cord injury. J. Magn Reson Imaging, 33, 1301-1311, 2011. PMCID pending.
d. Khan M, Dhammu T, Matsuda F, Annamalai B, Dhindsa T, Singh I, Singh AK. Targeting the nNOS/peroxynitrite/calpain system to confer neuroprotection and aid functional recovery in a mouse model of TBI. Brain Res. 1630, 159-170, 2016. PMCID: PMC:4684819.

3. After joining as a postdoctoral fellow, I was given a project to investigate neuropharmacology of X-linked adrenoleukodystrophy (X-ALD) disease. X-ALD is a demyelinating disease where the same mutation in ABCD1 gene can lead to childhood fatal neuroinflammatory form (cALD) or the adult form of adrenomyeloneuropathy (AMN). Presently, no therapy is available for cALD and children suffering from cALD die within the first decade of life. Gene defects in X-ALD results in excessive accumulation of very long chain fatty acids (VLCFA) especially in oligodendrocytes leading to profound demyelination. I have lipidology background from both chemistry and biology point of view; therefore, investigated different lipid fractions from different regions of human X-ALD brain and observed that phosphatidylcholine fraction of lipids accumulated the highest levels of VLCFA. During brain sample analysis, I was observed a gradient of reactive oxygen species parallel to cholesterol ester accumulation. I used NAC in an in vitro cell culture model showing that NAC reduces the levels of VLCFA via anti-inflammatory mechanisms (Khan et al., J. Neurochem 1998). Continuing in the same direction, I reported, for the first time, the deficiency of plasmalogens in cALD brain and ALD mice (Khan et al., J. Neurochem, 2008). Again, for the first time, I showed specific involvement of 5-lipoxygenase pathway in cALD (Khan et al., J. Lipid Res. 2010). From therapeutic aspects, we observed that naturally-occurring antioxidant caffeic acid phenethyl ester (CAPE) (Singh et al., BBA 2013) and HDAC inhibitor SAHA (Singh et al., J Lipid Res. 2011) induced ABCD2/3 genes and corrected the metabolic defect in in ABCD1 deficient cells as models of X-ALD. ABCD1 knockout mice develop only the metabolic disease of VLCFA without progression to neuroinflammatory disease of X-ALD. Therefore, we have generated cALD and AMN iPSC derived brain cells (astrocytes, oligodendrocytes and neurons) and I am currently using these cells to delineate the mechanisms governing the development of fatal cALD form and its adult variant of AMN. I have authored more than 12 articles and two book chapters in ALD research. X-ALD is one of my major research interests and I am confident making a difference in developing an X-ALD therapy.
a. Khan M, Singh J, Singh I. Plasmalogen deficiency in cerebral adrenoleukodystrophy and its modulation by lovastatin. J. Neurochem. 108: 1766-1779, 2008. PMCID: PMC2575097.
b. Khan M, Singh J, Gilg AG, Uto T, Singh I. Very long-chain fatty acid accumulation causes lipotoxic response via 5-lipoxygenase in cerebral adrenoleukodystrophy. J. Lipid Res. 51 (7): 1685-1695, 2010. PMCID: PMC2882744.
c. Singh J., Khan M, Singh I. HDAC inhibitor SAHA normalizes the levels of VLCFAs in human skin fibroblasts from X-ALD patients and down regulates the expression of proinflammatory cytokines in Abcd1/2-silenced mouse astrocytes. J Lipid Res. 52 (11), 2056-69, 2011. PMCID: PMC3196237.
d. Baarine M, Khan M, Singh A, Singh I. Functional characterization of iPSC-derived brain cells as a model

for X-adrenoleukodystrophy. Plos One 10 (11), 2015. PMCID: PMC4651558.

Complete List of Published Work in My Bibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/1jGJh9AMOVt5h/bibliography/47927574/public/?sort=date&direction=ascending

D. Additional Information: Research Support and/or Scholastic Performance

Active

1. SCIRF #2017 I-01
06/01/2018-05/31/2020:
State of South Carolina, Spinal Cord Injury Research Fund Board
Targeting neuronal nNOS/peroxynitrite/calpain system as a therapeutic strategy for the treatment of spinal cord injury
This study investigates the mechanism of S-nitrosylation in a mouse model of spinal cord injury using eNOS/nNOS and GSNOR KO mice.
Role: PI

2. VA, RX-002090
07/01/2016-06/30/2020
Neurorestorative Therapy for Stroke Injury
This study investigates that GSNO-mediated mechanisms will inhibit the deleterious neuronal nitric oxide synthase (nNOS)/peroxynitrite/calpain system, leading to reduced neurodegeneration and improved functional recovery in aged mouse models of stroke.
Role: Co-Investigator

3. VA, BX-003401
01/01/2017-12/31/2020
Mechanisms of Neuroprotective Therapy in TBI
This study investigates that the role of the aberrant activity of nNOS and its inhibition by GSNO for therapeutic purposes.
Role: Co-Investigator

Completed

1. NIH/NINDS, 1R01NS072511 05/01/2011-04/30/2017
Nitrosylation Mechanisms for Protection Against Neurovascular Inflammatory Injury
The proposed studies were to investigate whether GSNO treatment ameliorates TBI-induced neuroinflammatory damage to the neurovascular unit via S-nitrosylation. It was hypothesize that GSNO blocks the vicious AMPK/eNOS/peroxynitrite cycle, thus reducing the neurovascular injury and aiding functional recovery in TBI.
Role: Co-Investigator

2. NIH R01 NS-22576
09/01/1985-01/31/16
Fatty Acid Oxidation in X-Linked Adrenoleukodystrophy
Goals: The proposed studies were designed to investigate the mechanisms of very long chain fatty acid-induced neuroinflammatory demyelinating disease and to evaluate the efficacy of interventions of these signaling pathways as possible therapeutics for X-Adrenoleukodystrophy.
Role: Co-investigator

3. 01/01/2008-12/31/2011: Department of Veteran Affairs

Singh, AK (PI)
AMP Kinase Activity in Stroke Injury
Goals: This project investigated the role peroxynitrite in compromise of blood brain barrier following ischemic stroke injury.
Role: Co-Investigator

Avtar Singh, MD
Medical Univ of South Carolina

CV:

Inderjit Singh, PhD
Medical Univ of South Carolina

(no CV uploaded)

Experience of Robotic Exoskeleton Use at Four Spinal Cord Injury Model Systems Centers

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Allen Heinemann, PhD
Shirley Ryan Abilitylab

CV:

228. DeJong G, Tian W, Hsieh CH, et al. Rehospitalization in the first year of traumatic spinal cord injury after discharge from medical rehabilitation. Arch Phys Med Rehabil. 2013;94(4 Suppl):S87-97.
229. Heinemann AW, Chan L. From the editors' desk. Arch Phys Med Rehabil. 2013;94(7):1221-1222.
230. Heinemann AW, Magasi S, Bode RK, et al. Measuring enfranchisement: importance of and control over participation by people with disabilities. Arch Phys Med Rehabil. 2013;94(11):2157-2165.
231. Heinemann AW, Moore D, Lazowski LE, Huber M, Semik P. Benefits of Substance Use Disorder Screening on Employment Outcomes in State–Federal Vocational Rehabilitation Programs. Rehabilitation Counseling Bulletin. 2013;57(3):144-158.
232. Kozlowski AJ, Heinemann AW. Using individual growth curve models to predict recovery and activities of daily living after spinal cord injury: an SCIRehab project study. Arch Phys Med Rehabil. 2013;94(4 Suppl):S154-164 e151-154.
233. Papadimitriou C, Magasi S, Demark H, et al. Eliciting patient and caregiver perspectives to improve the public reporting of rehabilitation quality measures. Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses. 2013;38(1):24-31.
234. Pretz CR, Kozlowski AJ, Dams-O'Connor K, et al. Descriptive modeling of longitudinal outcome measures in traumatic brain injury: a National Institute on Disability and Rehabilitation Research Traumatic Brain Injury Model Systems study. Arch Phys Med Rehabil. 2013;94(3):579-588.
235. Salsman JM, Victorson D, Choi SW, et al. Development and validation of the positive affect and well-being scale for the neurology quality of life (Neuro-QOL) measurement system. Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation. 2013;22(9):2569-2580.
236. Zanca JM, Dijkers MP, Hsieh CH, et al. Group therapy utilization in inpatient spinal cord injury rehabilitation. Arch Phys Med Rehabil. 2013;94(4 Suppl):S145-153.
237. Bode RK, Heinemann AW, Kozlowski AJ, Pretz CR. Self-scoring templates for motor and cognitive subscales of the FIM instrument for persons with spinal cord injury. Arch Phys Med Rehabil. 2014;95(4):676-679 e675.
238. Bombardier CH, Fann JR, Wilson CS, et al. A randomized controlled trial of venlafaxine XR for major depressive disorder after spinal cord injury: Methods and lessons learned. The journal of spinal cord medicine. 2014;37(3):247-263.
239. Chan L, Heinemann AW, Roberts J. Elevating the quality of disability and rehabilitation research: mandatory use of the reporting guidelines. Man Ther. 2014;19(2):87-89.
240. Chan L, Heinemann AW, Roberts J. Hausser la qualité de la recherche sur l'incapacité et la réadaptation : l'usage obligatoire de lignes directrices sur les rapports. Physiother Can. 2014;66(2):115-118.

241. Chan L, Heinemann AW, Roberts J. Reprint of: Elevating the quality of disability and rehabilitation research: Mandatory use of the reporting guidelines. Physiotherapy. 2014;100(2):97-99.
242. Chan L, Heinemann W AW, Roberts J. Reprint of: Elevating the quality of disability and rehabilitation research: Mandatory use of the reporting guidelines. Int J Ostheopath Med. 2014;17(2):79-82.
243. Gauggel S, Lämmler G, Borchelt M, Steinhagen-Thiessen E, Böcker M, Heinemann A. Beurteilungsübereinstimmung beim Barthel-Index Eine Rasch-Analyse der Fremd- und Selbstbeurteilungen älterer Schlaganfall-Patienten. Zeitschrift fur Geron-tologie und Geriatrie. 2014;35(2):102-110.
244. Hart T, Kozlowski AJ, Whyte J, et al. Functional recovery after severe traumatic brain injury: an individual growth curve approach. Arch Phys Med Rehabil. 2014;95(11):2103-2110.
245. Heinemann AW, Connelly L, Ehrlich-Jones L, Fatone S. Outcome instruments for prosthetics: clinical applications. Phys Med Rehabil Clin N Am. 2014;25(1):179-198.
246. Heinemann AW, Dijkers MP, Ni P, Tulsky DS, Jette A. Measurement properties of the Spinal Cord Injury-Functional Index (SCI-FI) short forms. Arch Phys Med Rehabil. 2014;95(7):1289-1297 e1285.
247. Jensen SE, Butt Z, Heinemann AW, et al. Perceptions of the risks and benefits of upper limb transplantation among individ-uals with upper limb amputations. Plastic and reconstructive surgery.

2014;134(5):979-987.
248. Kalpakjian CZ, McCullumsmith CB, Fann JR, et al. Post-traumatic growth following spinal cord injury. The journal of spi-nal cord medicine. 2014;37(2):218-225.
249. Mallinson T, Deutsch A, Bateman J, et al. Comparison of discharge functional status after rehabilitation in skilled nursing, home health, and medical rehabilitation settings for patients after hip fracture repair. Arch Phys Med Rehabil. 2014;95(2):209-217.
250. Moore JL, Raad J, Ehrlich-Jones L, Heinemann AW. Development and use of a knowledge translation tool: the rehabilita-tion measures database. Arch Phys Med Rehabil. 2014;95(1):197-202.
251. Pretz CR, Kozlowski AJ, Charlifue S, Chen Y, Heinemann AW. Using Rasch motor FIM individual growth curves to inform clinical decisions for persons with paraplegia. Spinal Cord. 2014;52(9):671-676.
252. Williams RT, Wilson CS, Heinemann AW, et al. Identifying depression severity risk factors in persons with traumatic spinal cord injury. Rehabil Psychol. 2014;59(1):50-56.
253. Wong AW, Heinemann AW, Miskovic A, Semik P, Snyder TM. Feasibility of computerized adaptive testing for collection of patient-reported outcomes after inpatient rehabilitation. Arch Phys Med Rehabil. 2014;95(5):882-891.
254. Wong AW, Heinemann AW, Wilson CS, et al. Predictors of participation enfranchisement after spinal cord injury: the medi-ating role of depression and moderating role of demographic and injury characteristics. Arch Phys Med Rehabil. 2014;95(6):1106-1113.
255. Chan L, Heinemann AW. Clinical Trial Registration: The Time Has Come. Pm R. 2015;7(12):1203-1204.
256. Chan L, Heinemann AW, Roberts J. Republication of: Elevating the quality of disability and rehabilitation research: Manda-tory use of the reporting guidelines. J NeuroEng Rehabil. 2015;12(1):62.
257. Fann JR, Bombardier CH, Richards JS, et al. Venlafaxine extended-release for depression following spinal cord injury: a randomized clinical trial. JAMA Psychiatry. 2015;72(3):247-258.
258. Garcia SF, Hahn EA, Magasi S, et al. Development of self-report measures of social attitudes that act as environmental bar-riers and facilitators for people with disabilities. Arch Phys Med Rehabil. 2015;96(4):596-603.
259. Hammel J, Magasi S, Heinemann A, et al. Environmental barriers and supports to everyday participation: a qualitative in-sider perspective from people with disabilities. Arch Phys Med Rehabil. 2015;96(4):578-588.
260. Heinemann AW, Kisala PA, Hahn EA, Tulsky DS. Development and psychometric characteristics of the SCI-QOL Ability to Participate and Satisfaction with Social Roles and Activities item banks and short forms. The journal of spinal cord medi-cine. 2015;38(3):397-408.
261. Heinemann AW, Magasi S, Hammel J, et al. Environmental factors item development for persons with stroke, traumatic brain injury, and spinal cord injury. Arch Phys Med Rehabil. 2015;96(4):589-595.
262. Jarl G, Heinemann AW, Lindner HY, Norling Hermansson LM. Cross-Cultural Validity and Differential Item Functioning of the Orthotics and Prosthetics Users' Survey With Swedish and United States Users of Lower-Limb Prosthesis. Arch Phys Med Rehabil. 2015;96(9):1615-1626.
263. Jette AM, Slavin MD, Ni P, et al. Development and initial evaluation of the SCI-FI/AT. The journal of spinal cord medicine. 2015;38(3):409-418.
264. Kisala PA, Tulsky DS, Kalpakjian CZ, et al. Measuring anxiety after spinal cord injury: Development and psychometric characteristics of the SCI-QOL Anxiety item bank and linkage with GAD-7. The journal of spinal cord medicine. 2015;38(3):315-325.
265. Kisala PA, Tulsky DS, Pace N, Victorson D, Choi SW, Heinemann AW. Measuring stigma after spinal cord injury: Develop-ment and psychometric characteristics of the SCI-QOL Stigma item bank and short form. The journal of spinal cord medi-cine. 2015;38(3):386-396.
266. Kisala PA, Victorson D, Pace N, Heinemann AW, Choi SW, Tulsky DS. Measuring psychological trauma after spinal cord injury: Development and psychometric characteristics of the SCI-QOL Psychological Trauma item bank and short form. The journal of spinal cord medicine. 2015;38(3):326-334.
267. Kozlowski AJ, Singh R, Victorson D, et al. Agreement Between Responses From Community-Dwelling Persons With Stroke and Their Proxies on the NIH Neurological Quality of Life (Neuro-QoL) Short Forms. Arch Phys Med Rehabil. 2015;96(11):1986-1992 e1914.
268. Magasi S, Wong A, Gray DB, et al. Theoretical foundations for the measurement of environmental factors and their impact on participation among people with disabilities. Arch Phys Med Rehabil. 2015;96(4):569-577.
269. Magasi S, Wong A, Hammel J, Baum C, Wang CC, Heinemann A. The Authors Respond. Arch Phys Med Rehabil. 2015;96(9):1740-1741.
270. McCullumsmith CB, Kalpakjian CZ, Richards JS, et al. Novel risk factors associated with current suicidal

ideation and life-time suicide attempts in individuals with spinal cord injury. Arch Phys Med Rehabil. 2015;96(5):799-808.
271. Plow MA, Finlayson M, Gunzler D, Heinemann AW. Correlates of participation in meaningful activities among people with multiple sclerosis. Journal of rehabilitation medicine : official journal of the UEMS European Board of Physical and Reha-bilitation Medicine. 2015;47(6):538-545.
272. Richards JS, Bombardier CH, Wilson CS, et al. Efficacy of venlafaxine XR for the treatment of pain in patients with spinal cord injury and major depression: a randomized, controlled trial. Arch Phys Med Rehabil. 2015;96(4):680-689.
273. Tate DG, Forchheimer M, Bombardier CH, Heinemann AW, Neumann HD, Fann JR. Differences in quality of life outcomes among depressed spinal cord injury trial participants. Arch Phys Med Rehabil. 2015;96(2):340-348.
274. Tulsky DS, Kisala PA, Kalpakjian CZ, et al. Measuring depression after spinal cord injury: Development and psychometric characteristics of the SCI-QOL Depression item bank and linkage with PHQ-9. The journal of spinal cord medicine. 2015;38(3):335-346.
275. Tulsky DS, Kisala PA, Lai JS, Carlozzi N, Hammel J, Heinemann AW. Developing an item bank to measure economic quali-ty of life for individuals with disabilities. Arch Phys Med Rehabil. 2015;96(4):604-613.
276. Tulsky DS, Kisala PA, Victorson D, et al. Methodology for the development and calibration of the SCI-QOL item banks. The journal of spinal cord medicine. 2015;38(3):270-287.
277. Tulsky DS, Kisala PA, Victorson D, et al. Overview of the Spinal Cord Injury--Quality of Life (SCI-QOL) measurement sys-tem. The journal of spinal cord medicine. 2015;38(3):257-269.
278. Botticello AL, Boninger M, Charlifue S, et al. To What Extent Do Neighborhood Differences Mediate Racial Disparities in Participation After Spinal Cord Injury? Arch Phys Med Rehabil. 2016;97(10):1735-1744.
279. Chan L, Heinemann AW. Clinical trial registration: The time has come. Can J Occup Ther. 2016;83(1):4-6.
280. Hahn EA, Garcia SF, Lai JS, et al. Measuring Access to Information and Technology: Environmental Factors Affecting Per-sons With Neurologic Disorders. Arch Phys Med Rehabil. 2016;97(8):1284-1294.
281. Heinemann AW, Lai JS, Wong A, et al. Using the ICF's environmental factors framework to develop an item bank measur-ing built and natural environmental features affecting persons with disabilities. Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation. 2016;25(11):2775-2786.
282. Heinemann AW, LaVela SL, Etingen B, et al. Perceptions of Person-Centered Care Following Spinal Cord Injury. Arch Phys Med Rehabil. 2016;97(8):1338-1344.
283. Heinemann AW, Miskovic A, Semik P, et al. Measuring Environmental Factors: Unique and Overlapping International Clas-sification of Functioning, Disability and Health Coverage of 5 Instruments. Arch Phys Med Rehabil. 2016;97(12):2113-2122.
284. Herzer KR, Chen Y, Heinemann AW, Gonzalez-Fernandez M. Association Between Time to Rehabilitation and Outcomes After Traumatic Spinal Cord Injury. Arch Phys Med Rehabil. 2016;97(10):1620-1627 e1624.
285. Kirby RL, Worobey LA, Cowan R, et al. Wheelchair Skills Capacity and Performance of Manual Wheelchair Users With Spinal Cord Injury. Arch Phys Med Rehabil. 2016;97(10):1761-1769.
286. Kozlowski AJ, Cella D, Nitsch KP, Heinemann AW. Evaluating Individual Change With the Quality of Life in Neurological Disorders (Neuro-QoL) Short Forms. Arch Phys Med Rehabil. 2016;97(4):650-654 e658.
287. Lai JS, Hammel J, Jerousek S, et al. An Item Bank to Measure Systems, Services, and Policies: Environmental Factors Af-fecting People With Disabilities. Arch Phys Med Rehabil. 2016;97(12):2102-2112.
288. Locatelli SM, Etingen B, Heinemann A, et al. Perceptions of Shared Decision Making Among Patients with Spinal Cord Inju-ries/Disorders. Topics in Spinal Cord Injury Rehabilitation. 2016;22(3):192-202.
289. Pretz CR, Kean J, Heinemann AW, Kozlowski AJ, Bode RK, Gebhardt E. A Multidimensional Rasch Analysis of the Func-tional Independence Measure Based on the National Institute on Disability, Independent Living, and Rehabilitation Re-search Traumatic Brain Injury Model Systems National Database. J Neurotrauma. 2016;33(14):1358-1362.
290. Pretz CR, Kozlowski AJ, Chen Y, Charlifue S, Heinemann AW. Trajectories of Life Satisfaction After Spinal Cord Injury. Arch Phys Med Rehabil. 2016;97(10):1706-1713 e1701.
291. Seel RT, Macciocchi S, Velozo CA, et al. The Safety Assessment Measure for persons with traumatic brain injury: Item pool development and content validity. NeuroRehabilitation. 2016;39(3):371-387.
292. Slavin MD, Ni P, Tulsky DS, et al. Spinal Cord Injury-Functional Index/Assistive Technology Short Forms. Arch Phys Med Rehabil. 2016;97(10):1745-1752 e1747.

293. Tulsky DS, Kisala PA, Victorson D, et al. TBI-QOL: Development and Calibration of Item Banks to Measure Patient Re-ported Outcomes Following Traumatic Brain Injury. The Journal of head trauma rehabilitation. 2016;31(1):40-51.
294. Williams RT, Heinemann AW, Neumann HD, et al. Evaluating the Psychometric Properties and Responsiveness to Change of 3 Depression Measures in a Sample of Persons With Traumatic Spinal Cord Injury and Major Depressive Disorder. Arch Phys Med Rehabil. 2016;97(6):929-937.
295. Worobey LA, Kirby RL, Heinemann AW, et al. Effectiveness of Group Wheelchair Skills Training for People With Spinal Cord Injury: A Randomized Controlled Trial. Arch Phys Med Rehabil. 2016;97(10):1777-1784 e1773.
296. Amtmann D, McMullen K, Kim J, et al. Psychometric Properties of the Modified 5-D Itch Scale in a Burn Model System Sample of People With Burn Injury. Journal of Burn Care & Research. 2017;38(1):E402-E408.

297. Baum CM, Wolf TJ, Wong AWK, et al. Validation and clinical utility of the executive function performance test in persons with traumatic brain injury. Neuropsychol Rehabil. 2017;27(5):603-617.
298. Boninger ML, Field-Fote EC, Kirshblum SC, et al. Research progress from the SCI Model Systems (SCIMS): an interactive discussion on future directions. The journal of spinal cord medicine. Published online: 18 Apr 2017, 216-222. https://doi.org/10.1080/10790268.2017.1314879.c
299. Carlozzi N, Heaton RK, Goldsmith A, Heinemann AW, Wong A. Using the NIH Toolbox Cognition Battery (NIHTB-CB) in Individuals with Traumatic Brain Injury Rehabilitation Psychology. Rehabilitation Psychology. 2017.
300. Carlozzi NE, Goodnight S, Casaletto KB, et al. Validation of the NIH Toolbox in Individuals with Neurologic Disorders. Arch Clin Neuropsychol. 2017:1-19.
301. Hahn EA, Magasi SR, Carlozzi NE, et al. Health and Functional Literacy in Physical Rehabilitation Patients. HLRP: Health Literacy Research and Practice. 2017;1(2):e71-e85.
302. Heinemann A, Raad J, Akuthota V, et al. Scoping review to develop common data elements for lumbar spinal stenosis. Spine J. 2017;17(7):1045-1057.
303. Heinemann AW, Deutsch A, Cella D, et al. Feasibility of Collecting Patient-Reported Outcomes for Inpatient Rehabilitation Quality Reporting. Health Serv Res. 2017.
304. Heinemann AW, Ehrlich-Jones L, Connelly L, Semik P, Fatone S. Enhancing quality of prosthetic services with process and outcome information. Prosthet Orthot Int. 2017;41(2):164-170.
305. Holdnack JA, Tulsky DS, Brooks BL, et al. Interpreting Patterns of Low Scores on the NIH Toolbox Cognition Battery. Arch Clin Neuropsychol. 2017:1-11.
306. LaVela SL, Heinemann AW, Etingen B, Miskovic A, Locatelli SM, Chen D. Relational empathy and holistic care in persons with spinal cord injuries. Journal of Spinal Cord Medicine. 2017;40(1):30-42.
307. Magasi S, Harniss M, Heinemann AW. An interdisciplinary approach to the development of accessible computer-administered measurement instruments. Arch Phys Med Rehabil. 2017.
308. Mallinson T, Fitzgerald CM, Neville CE, et al. Impact of urinary incontinence on medical rehabilitation inpatients. Neurourol Urodyn. 2017;36(1):176-183.
309. Pinto D, Danilovich MK, Hansen P, et al. Qualitative Development of a Discrete Choice Experiment for Physical Activity Interventions to Improve Knee Osteoarthritis. Arch Phys Med Rehabil. 2017;98(6):1210-1216 e1211.
310. Wilson CS, Forchheimer M, Heinemann AW, Warren AM, McCullumsmith C. Assessment of the relationship of spiritual well-being to depression and quality of life for persons with spinal cord injury. Disabil Rehabil. 2017;39(5):491-496.
311. Wong AWK, Lau SCL, Cella D, et al. Linking of the quality of life in neurological disorders (Neuro-QoL) to the international classification of functioning, disability and health. Quality of life research : an international journal of quality of life as-pects of treatment, care and rehabilitation. 2017.
312. Wong AWK, Ng S, Dashner J, et al. Relationships between environmental factors and participation in adults with traumatic brain injury, stroke, and spinal cord injury: a cross-sectional multi-center study. Quality of life research : an international journal of quality of life aspects of treatment, care and rehabilitation. 2017.
313. Xiang X, An R, Heinemann A. Depression and Unmet Needs for Assistance With Daily Activities Among Community-Dwelling Older Adults. Gerontologist. 2017.
314. Johnson N, Marquine M, Flores I, et al. Racial Differences in Neurocognitive Outcomes Post-Stroke: The Impact of Healthcare Variables. J Int Neuropsychol Soc. in press.

Arun Jayaraman, PT PhD
Shirley Ryan Abilitylab

(no CV uploaded)

Chaithanya Mummidisetty, MS
Shirley Ryan Abilitylab

(no CV uploaded)

Dan Pinto, PT PhD
Marquette University

(no CV uploaded)

Susan Charlifue, PhD
Craig Hospital

(no CV uploaded)

Candy Tefertiller, MS
Craig Hospital

(no CV uploaded)

Heather Taylor, PhD
Tirr Memorial Hermann

(no CV uploaded)

Shuo-Hsiu Chang, PhD
Tirr Memorial Hermann

(no CV uploaded)

Argyrios Stampas, MD
Tirr Memorial Hermann

(no CV uploaded)

Catherine Furbish, PT
Shepherd Center

(no CV uploaded)

Edelle Field-Fote, PT PhD
Shepherd Center

(no CV uploaded)

Jamal Spraggins, BA
Shirley Ryan Abilitylab

(no CV uploaded)

Body Mass index and Mortality After Spinal Cord Injury

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Huacong Wen, MS
University of Alabama at Birmingham

CV:
Huacong Wen, MS
PhD Candidate
Department of Physical Therapy
School of Health Professions Building 360
University of Alabama at Birmingham
1720 2nd Avenue South Birmingham, AL 35294
Email: hcwen@uab.edu
Phone: 205-317-9065

Education
2011 Bachelor of Medicine, Chengdu University of Traditional Chinese Medicine
2014 Master of Medicine, Nanjing Medical University
2015-present PhD Program in Rehabilitation Science, University of Alabama at Birmingham

Research experience
2016 – present Graduate Research Assistant, National Spinal Cord Injury Statistical Center Role: use SAS procedures for data cleaning, reports, and analysis; assist institutional review board and data use agreement submission.

2017 Co-Principal Investigator
Title: Race, Neighborhood, and Obesity after Spinal Cord Injury Description: A cross-sectional analysis of survey data from National Spinal
Cord Injury Database linked with neighborhood data from
American Community Survey by census tract.
Funding: Mid-South Trandisciplinary Collaborative Center for Health Disparities Research

Clinical Experience
Chinese Physician Practice License: # 201432110510125198902123122
2012 – 2014 Physical Rehabilitation Medicine Intern, 1st Affiliated Hospital of Nanjing Medical University

Teaching Experience
2017 Teaching Assistant, University of Alabama at Birmingham Course: RHB 400 Introduction to Rehabilitation Science Lecture: Obesity after Spinal Cord Injury
Awards and Honors
2013 National Graduate Scholarship, Ministry of Education of the People's Republic of China
2016 Winner of the Spinal Cord Injury-ISIG Early Career Poster Award, American Congress of Rehabilitation Medicine, Chicago, Illinois, November 2016.

Publication
• Wen H, Reinhardt JD, Gosney JE, Baumberger M, Zhang X, Li J. Spinal cord injury-related chronic pain in victims of the 2008 Sichuan earthquake: a prospective cohort study. Spinal Cord 2013; 51(11): 857–62.
• Wen H, Chen Y, He Y, Bickel CS, Robinson-Whelen S, Heinemann AW. Racial Differences in Weight Gain: A 5-Year Longitudinal Study of Persons With Spinal Cord Injury. Arch Phys Med Rehabil 2017 Dec 14. pii: S0003-9993(17)31400-4.

• Chen Y, HY Lin, TS Tseng, Wen H, MJ DeVivo. Racial Differences in Data Quality and Completeness: Spinal Cord Injury Model Systems' Experiences. Top Spinal Cord Inj Rehabil 2018 Spring; 24(2): 110-120.
Presentation

• Wen H, Haig AJ, Verson J, Johnson L, Chen YC. A Comparison of Rehabilitation Management after Natural Disasters in Different Countries. Poster presentation at the 2013 World Congress of International Society of Physical and Rehabilitation Medicine, Beijing, June 16-20, 2013.
• Wen H, He Y, Bickel CS, Chen Y. Analysis of racial differences in weight change of individuals with spinal cord injury over 5 years. Poster presentation at the 2016 Annual Meeting of American Congress of Rehabilitation Medicine, Chicago, IL, November 2-4, 2016.
• Wen H, Chen Y. Racial/ethnic differences in prevalence of obesity after spinal cord injury. Poster presentation. UAB Health Disparities Research Symposium, May 03, 2017.
• Wen H, Chen Y. Obesity in persons with spinal cord injury: racial differences. Oral Presentation at the 2017Annual Meeting of American Congress of Rehabilitation Medicine, Atlanta, GA, October 26-28, 2017.
• Wen H, Chen Y, Botticello AL, Bae S. Racial/Ethnic difference in obesity in individuals with spinal cord injury: the impact of disadvantaged neighborhood. Poster presentation at the 2018 Annual Scientific Meeting of American Spinal Injury Association, Rochester, MN, May 2-4, 2018.
• Wen H, Chen Y, Botticello AL, Bae S. Racial/Ethnic difference in obesity in individuals with spinal cord injury: the impact of disadvantaged neighborhood. Poster presentation at the 2nd Annual Disability Health and Rehabilitation Science Symposium, Birmingham, Alabama, May 18, 2018.

Yuying Chen, PhD, MD
University of Alabama at Birmingham

(no CV uploaded)

Tapan Mehta, PhD
University of Alabama at Birmingham

(no CV uploaded)

Airway Management in Spinal Cord Injury: Preventing and Decreasing Tracheostomy Morbidity

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Raymond Onders, MD
University Hospitals Cleveland Medical Center

CV:
CURRICULUM VITAE
2017

Raymond P. Onders, M.D., F.A.C.S.
Margaret and Walter Remen Chair of Surgical Innovation
Chief of General and Gastrointestinal Surgery
Director of Minimally Invasive Surgery
University Hospitals Cleveland Medical Center
Professor of Surgery
Case Western Reserve University School of Medicine
11100 Euclid Avenue
Cleveland, Ohio 44106-5047
216-844-5797
FAX: 216-983-3069

PERSONAL:

Home Address: 2900 Courtland Blvd.
Shaker Heights, Ohio 44122

Cell 216-308-9136
E-mail raymond.onders@uhhospitals.org

EDUCATION:

General Surgery Residency:
Case Western Reserve University Surgical Residency Program 1988-1993
2074 Abington Road
Cleveland, Ohio 44106-5000
Residency Review Committee 1990-1993

Medical School:
Northeastern Ohio Universities College of Medicine 1984-1988
Rootstown, Ohio 44272
M.D. awarded 5/28/88
Alpha Omega Alpha
Biochemistry Teaching Fellow
Air Force Health Professions Scholarship

Undergraduate Education:
Kent State University 1982-1984
Kent, Ohio 44242
Bachelor of Science
Salutatorian
Summa Cum Laude
Varsity Track and Field

ACADEMIC APPOINTMENTS:

Case Western Reserve University
Assistant Professor of Surgery 1997-2004
Associate Professor of Surgery June 2004-2010
Professor of Surgery July 2010-
Interim Chair Department of Surgery 2015-2017

Uniformed Services University of the Health Sciences
F. Edward Hebert School of Medicine
Clinical Assistant Professor of Surgery 1997

Wright State University School of Medicine
Clinical Assistant Professor of Surgery 1997

University of North Dakota School of Medicine
Clinical Assistant Professor of Surgery 1994-1996
Clinical Instructor of Surgery 1993-1994
Residency Review Committee Member 1994-1996

MILITARY SERVICE:

United States Air Force 1984-1997
Promoted to Major in 1994
Military Assignments while on Active Duty
Wright-Patterson Air Force Base, Ohio, 1996-1997
Grand Forks Air Force Base, North Dakota, 1993-1996
Military Highlights
Air Force Commendation Medal- Awarded 5/15/97
Meritorious Service Medal- Awarded 7/11/96
Combat Medical Readiness Training- 9/96
Chemical Warfare- 12/95
Burn fellow at MetroHealth Burn Center from 8/95 to 9/95
Officership Course- 7/95 to 9/95
Trauma fellow at MetroHealth Medical Center from 8/94 to 9/94
Military Indoctrination for Medical Officers- 7/93
School of AeroSpace Medicine- 8/85
Health Professional Officer Indoctrination Course- 7/85
Commissioned as Second Lieutenant 3/8/84

LICENSURE AND CERTIFICATES:

American Board of Surgery # 39016 - awarded 2/15/94
Passed recertification 2001
Passed recertification 2012
Ohio License 35-05-9392 since 1/16/90
DEA # BO3962253
Certified American College of Surgeons Ultrasound Instructor
Advanced Trauma Life Support
Advanced Cardiac Life Support

PROFESSIONAL SOCIETIES:

Fellow of the American College of Surgeons 1992-
Certified National Ultrasound Faculty Member
Society of Surgical Chairs 2015-1016

Central Surgical Association 2002-
American Spinal Injury Association- 2006-
American Board of Surgery
Associate Examiner in the Certifying Examination in Cleveland, 1999
Associate Examiner in the Certifying Examination in Cincinnati, 2004
Alternate Examiner in Certifying Examination in Cleveland, 2006

Society of American Gastrointestinal Endoscopic Surgeons (SAGES) 1995-
Board Member 2010-2012
Business Development Advisory 2009
Membership Committee 2010-
Technology and Value Assessment Committee 2010-
Chair Resident Education Committee 2005-2009
Coordinator for the SAGES Educator's Lunch 2006
Co-Chair Resident Education Committee 2002-2005
Resident Education Committee Member 1998-2010
Legislative Committee 2002-2010
Fundamentals of Endoscopic Surgery 2005-2007
Public Information 2006-2007
Technology Assessment and Ergonomics Committee Member 1998-2002
Flexible Endoscopy Committee Member 2002-2004
Flexible Endoscopy Study Group 1999-2002
Coordinator of SAGES 2001 Educator's Program 2001
Ohio Chapter of American College of Surgeons 1998-
American Hernia Society 1999-
Cleveland Surgical Society 1999-
President 2005-2006
President Elect 2004-2005
Chairperson for Resident Research Forum 2002-2005
Society for Surgery of the Alimentary Tract 1999-
American Society for Gastrointestinal Endoscopy 1995- 2012
Midwest Surgical Association 1996-
President 2013-2014
President Elect 2012-1013
Secretary 2009-2012
Board Member 2005-2009
Editorial Committee 2004-2006
Program Committee 2000-2005
Chairman Program Committee 2004
Judge's Committee for Resident Competition 2001-2005
Society of Laparoendoscopic Surgeons 1995-
Society of Air Force Clinical Surgeons 1994-2000
Alpha Omega Alpha Honor Medical Society 1987-
North Dakota Chapter of the American College of Surgeons 1993-1996
American Medical Association 1988-1994,1998-2002

AWARDS:

1997: Awarded First Place in Clinical Category of the 1997 AORN Journal Writers Contest

June 2003: Runner up 2003 TIIME, Case Western Reserve University/Weatherhead Business School Business Launch Competition in the Bioscience Category for Synapse Biomedical Ltd.

September 2003: Received Northern Ohio Live Award of Achievement in Science and Technology

December 2003: Best in Show- 2003 Cleveland Growth Association/COSE Business Plan Challenge

December 2003: First Place- 2003 Cleveland Growth Association/COSE Business Plan Challenge: Startup Category

December 2003: Gold Electrode Award- Neurotech Reports

June 7, 2004: Maurice Saltzman Award is presented on behalf of the Mount Sinai Health Care Foundation for “a piece of work of signal value or merit to the health interests of the Greater Cleveland community.”

October 2005: Poster of Exceptional Merit from the American College of Surgeons during the 91st Annual Clinical Congress.

2003, 2004, 2005, 2006, 2007, 2008, 2009 and 2010, 2011, 2012, 2013: Castle-Connolly Medical Top Doctor: The Best in American Medicine. This has been published in the 3rd to the 9th Edition

December 2005: The ALS Association 2005 Vision Award

April 2006: Northern Ohio Live Top Doctors

June 2006: American Spinal Injury Association First Place as Best Paper Award at the 2006 Combined Scientific Meeting with ISCOA, Boston.

March 2008: Named one of Northeastern Ohio’s “Top Doctors” in Cleveland Magazine’s.

August 2008: Honored as Crain’s Cleveland Business 2008 Health Care Heroes for Advancement in Health- Individual

2007-2008: Elected as one of Best Doctors in America

August 2008: Honored with Crain’s Cleveland Business 2008 Health Care Heroes for Advancement in Health for Corporate Category for Founder of Synapse Biomedical

September 2008: Honored with Endowed Chair with the Margaret and Walter Remen Chair in Surgical Innovation

November 2008: Diaphragm Pacing was named the third most important Medical Innovation at the 6th Medical Innovation Summit at the Cleveland Clinic Foundation

2009, 2010 Recognized by Consumers Research Council of America As one of America’s Top Surgeon in the 2009 Edition and in the 2010 Edition

2010 Recognized Cleveland Magazine as one of the Best Doctors

2010 Distinguished Alumni Award from Northeastern Ohio Universities College of Medicine

2013 Best Doctors in America recognition again.

2013 ALS Bob Feller Legacy Award presented at the 2013 Strike Out ALS at Progressive Field, Cleveland Ohio, June 8th, 2013

2013 Cornerstone of Recovery Award presented by the Jon Michael Moore Trauma Center during the Trauma Night of Recognition, West Virginia University, Morgantown West Virginia, October 10th, 2013.
2013 The Rescuer of Humanity Award presented by Project Love- Values in Action Foundation for using leadership to positively change the course of humanity. This was given in conjunction with NFL star Steve Gleason for their work and commitment to helping people with ALS live productive inspired lives.

JOURNAL REVIEWER:
Surgical Laparoscopy, Endoscopy & Percutaneous Techniques 2010-2017
Surgery ad hoc
Surgical Endoscopy ad hoc

UNIVERSITY SERVICE:

Member of the Chair of Medicine Search Committee
Member of Surgery Chair Search Committee- 2014-16
Member of Master Clinicians Program 2005-2007
Member of the School of Medicine “Second Look Weekend”
April 2-3, 2005
Member of Faculty Council- Representing Surgery, Term 1998-2001
Preceptor for third year medical students 1997-2015
Core lecturer for third year medical student in surgery 1997-2016
Lectures on Gastroesophageal Reflux Disease, Adrenal Surgery, and endoscopy simulators.

COMMERCIAL ENDEAVERS:

Founding member Synapse Biomedical, Inc.- 2002
Board Member 2005-
Chief Medical Officer 2005-

PATENTS:

Patent Number US 7,206,641
Mapping Probe System for Neuromuscular Electrical stimulation Apparatus

Patent Number US 7,840,270
Diaphragm Conditioning for ALS

Patent Number US 7,962,215
Acute Electrod for Ventilatory Assist System and Method to Improve Respiratory Function

Patent Number US 8,406,885
Conditioning for Weaning

Patent Number US 8,428,412
Neuromodulation Effect Method

Patent Number US 8,478,412
Sleep Disordered Breathing

EU 598644-001
Probe Handel Design

Pending Patents

2008-0287820 Biomarker
2008-0188867 Intramuscular electrode
2008-0125828 Ventilatory Assist
2007-0049793 Transgastric NOTES DPS
13/850,235 Conditioning system
13/868,848 Neuromodulation Effect System

HOSPITAL SERVICE:

University Hospitals of Cleveland 1997-present
11100 Euclid Avenue
Cleveland, Ohio 44106-5047
Interim Chair Department of Surgery 2015-2016
UHMG Steering Committee 2015-
Division Chief General and Gastrointestinal Surgery 2014-
Surgical Safety Conference Committee 2016
UHCMC OR Governance Committee 2012-2016
Director of Minimally Invasive Surgery 1997
Credentialing Committee for QualChoice of University Hospitals Health System 2005-2007
Perioperative Medicine Service Line Committee 2003-2005
Clinical Operations Council Committee 2005-2007
UHHS Diamond Advisory Group 2005- 2007
Operative Services Value Analysis Committee Member 1998-2004
To review all new operative equipment for cost analysis
Referring Physician-UHHS Provider Partnership Committee 2004
To develop inpatient care physician communication standards
Outline barriers that can be overcome
UHC Navigant Operations Steering committee 2003
Focusing on the efficiency and productivity of the operations
Blueprint for Change-Operative Services Analysis-2003
Core Group Member for the Mather Pavilion Surgery Center 1998-99
Involved in the design and development of Minimally Invasive Surgery Suites
Member of Rapid Design Team to Decrease Hospital Expenses 1998-99 Abdominal Surgery Tumor Board Member 1997-2008
Thoracic Tumor Board Member 1998-2001
Quality Assurance Committee Member for Hospital 1997-1998

Wright-Patterson Medical Center/74th Medical Group 1996-97
Wright-Patterson Air Force Base, Ohio 45433
Chief of Minimally Invasive General Surgery
Director of General Surgery Quality Assurance

319th Medical Group 1993-96
Grand Forks AFB, ND 58205
Chairman of Medical and Surgical Services Quality Assurance 1996
Executive Committee of the Medical Staff 1995-1996
Chief of Surgical Services and Quality Assurance 1995
Chief of Surgical Clinic 1994-1996
Cancer Committee Chairman 1994-1996
Trauma Surgeon for 319th Air Transportable Hospital 1993-1996
Disaster Team Chief 319th Medical Group 1995-1996
Director of Anesthesia Services 1994-1996
Pharmacy Committee Member 1993-1994

Veteran Administration Medical Center 1993-1996
Fargo, ND

GRANTS:

1. 1995 “Helicobactor Pylori Detection Methods”, Remel Corporation, $500.00 Primary Investigator

2. 1999 “The effect of CO2 Pneumoperitoneum on Rats” Unrestricted grant $3,000.00, Stryker Corporation. Primary Investigator

3. 1999 “Role of Endothelium in the Oliguria Induced by Prolonged CO2 Pneumoperitoneum” Society of American Gastrointestinal Endoscopic Surgeons 1999 Research Grant, Award Accepted at SAGES annual meeting March 27, 1999 $15,000.00. Primary Investigator

4. 2000-2004 Elisabeth Severance Prentiss Foundation grant to improve patient care through minimally invasive surgery. January 3, 2000 for $1,100,000.00. Co-Recipient

5. 2000-2002 United States Surgical Corporation Center of Excellence Grant for research in Minimally Invasive Surgery $500,000 Primary Investigator

6. 2003-2007 The Elisabeth Severance Prentiss Foundation for the Further Research and Development of Diaphragm Pacing through Minimally Invasive Surgery $400,000 Primary Investigator

7. 2004 Winters Family Foundation for the Development of a Diaphragmatic Pacing System in ALS $20,000 Primary Investigator

8. 2004 Bailey Foundation for the Investigation of the Interactions between Cardiac Pacemakers and Diaphragmatic Pacing System $20,000 Primary Investigator

9. 2005 Meyerson Family Foundation to study the Diaphragm Pacing System in ALS $100,000
Primary Investigator

10. 2006-2010 The Mangelluzi Family to Support the expansion of Diaphragm Pacing to Pediatric Populations $250,000
Principal Investigator

11. 2006 SBIR Grant Binder Free Diaphragm Pacing Stimulation and Airway Clearance Assistance $111,554
Co-Investigator

12. 2007-2008 ALS Pivotal trial Diaphragm Pacing Sponsored by Synapse Biomedical $150,000
Principle Investigator

13. 2008 Margaret and Walter Remen Support for Diaphragm Pacing
$70,000

14. 2008 Diaphragm Pacing Donations to support research activities
$15,000

15. 2008 Opening of the Center for Diaphragm Pacing Funded by University Hospitals
$250,000

16. 2009-2010 Principle Investigator for SILS versus Standard Cholecystectomy
$100,000

17. 2015-2016 Principle Investigator Feasibility of Temporary Diaphragm Pacing Electrodes Synapse Biomedical. $150,000
Principle Investigator

BIBLIOGRAPHY- Published Peer Reviewed Manuscripts:

1. Clark JG, Onders RP, Knudson JD. Laparoscopic Distal Pancreatectomy Procedures in a Rural Hospital. AORN Journal 1997;65:334-43.

2. Onders RP. Detection Methods of Helicobacter Pylori: Accuracy and Costs. American Surgeon 1997;63:665-668.

3. Aiyer H, Stellato TA, Onders RP, Mortimer JJ. Laparoscopic implant instruments for the placement of intramuscular electrodes in the diaphragm. IEEE Transactions in Rehabilitation Engineering 1999;7:360-371.

4. Bennett AA, Gilkeson RC, Haaga JR, Makkar VK, Onders RP. Complications of “dropped” gallstones after laparoscopic cholecystectomy: technical considerations and imaging findings. Abdominal Imaging 2000;25:190-193.

5. Ambrose JA, Onders R, Stowe N, Simonson M, Robinson A, Wilhelm S, Schulak J. Pneumoperitoneum Upregulates Renal Preproendothelin-1 Messenger RNA. Surgical Endoscopy 2001;15:183-188.

6. Onders RP, Shuck JM. Repairing Adult Inguinal Hernias: Let Me Count the Ways. Curr Surg 2000 Surg;57:394-398

7. Dimarco AF, Onders RP, Kowalski KE, Miller ME, Ferek S, Mortimer JT. Phrenic Nerve Pacing in a Tetraplegic Patient via Intramuscular Diaphragm Electrodes. American Journal of Respiratory and Critical Care Medicine 2002:166:1604-1606.

8. Onders RP. The Utility of Flexible Endoscopy During Advanced Laparoscopy. Seminars in Laparoscopic Surgery 2003:10;43-48.

9. Onders RP, DiMarco AF, Ignagni AR, Mortimer JT. Laparoscopic Placement of Diaphragm Pacing Systems in Human Subjects. Laparoscopy and SLS report 2003:2;22-23.

10. Onders RP, Mittendorf E. Late Outcomes of Diagnostic Laparoscopy for Chronic Abdominal Pain. Surgery 2003:134;549-552.

11. Onders RP, Aiyar H, Mortimer JT. Characterization of the Human Diaphragm Muscle with respect to the Phrenic Nerve Motor Points for Diaphragmatic Pacing. American Surgeon 2004:70;241-247.

12. Onders RP, Ignagni AI, Aiyer H, Mortimer JT. Mapping the Phrenic nerve Motor Point: the Key to a Successful Laparoscopic Diaphragm Pacing System in the first human series. Surgery 2004:136;819-826.

13. Onders RP, Hallowel PT. The era of ultrasonography during laparoscopic cholecystectomy. The American Journal of Surgery 2005:189;348-351.

14. Onders RP, Ignagni AI, DeMarco AF, Mortimer JT. The learning Curve of investigational surgery: Lessons Learned from the first series of laparoscopic diaphragm pacing for chronic ventilator dependence. Surgical Endoscopy 2005:19; 633-7.

15. DiMarco AF, Onders RP, Ignangi AI, Kowalski KE,Stephan S, Mortimer JT. Phrenic Nerve Pacing via intramuscular diaphragm electrodes in tetraplegic subjects. Chest 2005:127;671-677.

16. Cosendai G, de Balthasar C, Ignagni A, Onders R, Bradley K, Purnell K, Mortimer J, Davis R, Zilberman Y, Schulman J. A Preliminary feasibility study of different implantable pulse generators technologies for diaphragm pacing system. Neuromodulation 2005:8;203-211.

17. Onders RP, Shenk RR, Stellato TA. Long-term central venous catheters: size and location do matter. American Journal of Surgery 2006:191;396-9.

18. Dimarco AF, Onders RP, Ignagni A, Kowolski KE. Inspiratory muscle pacing in spinal cord injury: case report and clinical commentary. J Spinal Cord Med 2006:29(2): 95-108.

19. McGee MF, Rosen MJ, Marks J, Onders RP, Chak A, Faulx A, Chen VK, Ponsky J. A Primer on Natural Orifice Translumenal Endoscopic Surgery: Building a New Paradigm. Surgical Innovation 2006: 13: 86-93.

20. Wilhelm SM, Prinz RA, Barbu AM, Onders RP, Solorzano CC. Analysis of large versus small

pheochromocytomas: operative approaches and patient outcomes. Surgery. 2006 Oct;140(4):553-9.

21. Onders R, McGee M, Marks J, Chak A, Schilz R, Rosen M, Ignagni A, Faulx A, Elmo MJ, Schmoisch S, Ponsky J. Diaphragm pacing with natural orifice tranluminal endoscopic surgery (NOTES): Potential for difficult to wean intensive care unit(ICU) patients. Surgical Endoscopy 2007:21;475-79.

22. Onders R, McGee, Marks J, Chak A, Rosen M, Ignagni A, Faulx A, Elmo MJ, Schmoisch S, Ponsky J. Natural Orifice Transluminal Endoscopic Surgery(NOTES): As a Diagnostic tool in the Intensive Care Unit (ICU). Surgical Endosc 2007;21:681-83.

23. McGee MF, Rosen MJ, Marks J, Chak A, Onders R, Faulx, Ignagni A, Schomish S, Ponsky J. A reliable method for monitoring intraabdominal pressure during natural orifice translumenal endoscopic surgery. Surg Endosc 2007;21:672-76.

24. Onders RP, Elmo MJ, Ignagni AR. Diaphragm Pacing Stimulation System for Tetraplegia in Individuals Injured During Childhood or Adolescence. Journal of Spinal Cord Medicine 2007;30: 25-29.

25. Bittner JG, Marks JM, Dunkin BJ, Richard WO, Onders RP, Mellinger JD. Resident training in flexible gastrointestinal endoscopy: a review of current issues and options. J Surg Educ 2007;64:399-409.

26. McGee MF, Marks JM, Onders RP, Chak A, Jin J, Williams CP, Schomischh SJ, Ponsky JL. Complete Endoscopic Closure of Gastrostomy After Natural Orifice Translumenal Endoscopic Surgery Using the NDO Plicator. Surg Endosc 2008;22:214-20.

27. McGee MF, Marks JM, Onders RP, Chak A, Rosen MJ, Williams SP, Jin J, Schomisch SJ, Ponsky JL. Infectious implications in the porcine model of naturual orifice transluminal endoscopic surgery (NOTES) with PEG-tube closure: a quantitative bacteriologic study. Gastrointest Endosc 2008;68: 310-318.

28. Alshekhlee A, Onders RP, Syed TU, Elmo M, Katirji B. Phrenic nerve conduction studies in spinal cord injury: Applications for diaphragmatic pacing. Muscle Nerve 2008;36:1546-52.

29. Katirji B, Onders R, Elmo MJ, Kernich C. Diaphragm pacing in Amyotrophic Lateral Sclerosis: Hope for a Devastating Disease. Neurological Institute Journal. 2008;1:9-15.

30. Poulose BK, Gosen C, Marks JM, Khaitan L, Rosen MJ Onders RP, Trunzo JA, Ponsky JL. Inpatient Mortality Analysis of Paraesophageal hernia repair in Octogenarians. J Gastrointest Surg 2008;12: 1888-92.

31. Onders RP, Calin AM, Elmo MJ, Sivashankaran S, Katirji B, Schilz R. Amyotrophic Lateral Sclerosis: The Midwestern Surgical experience with diaphragm pacing stimulation system shows that general anesthesia can be safely performed. American J Surgeon 2009;197:386-390.

32. Onders RP, Elmo M, Khansarinia S, Bowman B, Yee J, Road J, Bass B, Dunkin B, Ingvarsson PE, Oddsdottir M. Complete Worldwide Experience in laparoscopic diaphragm pacing: results and differences in spinal cord injured patients and amyotrophic lateral sclerosis patients. Surg Endosc 2009 23(7)1433-40 Epub 2008 Dec 6

33. Rosen MJ, Duperier T, Marks J, Onders R, Hardacre J, Ponsky J, Ermlich B, Laughninghouse M. Prospective randomized double-blind placebo-controlled trial of postoperative elastomeric pain pump devices used after laparoscopic ventral hernia repair. Surg Endosc 2009;23:2637-43.

34. Trunzo JA, Poulose BK, McGee MF, Nikfarjam M, Schomisch SJ, Onders RP, Jin J, Chak A, Ponsky JL, Marks JM. The Diagnostic Efficacy of natural orifice transluminal endoscopic surgery: is there a role in the intensive care unit? Surgery Endoscopy 2010;24:2485-91.

35. Onders RP, Khansarinia S, Weiser T, Chin C, Hungness E, Soper N, DeHoyos A, Cole T, Ducko C. Multi-Center Analysis of Diaphragm Pacing in Tetraplegic with Cardiac Pacemakers: Positive Implications for ventilator weaning in Intensive Care Units. Surgery 2010; 148: 893-7.

36. Story D, Mariampillai E, Nikfarjam M, Howard M, Nunn A, Onders R. Anaesthetic Aspects of Implanting Diaphragmatic Pacing in Patients with spinal cord Injury. Anaesth Intensive Care 2010; 38: 740-3.

37. Nikfarjam M, McGee MF, Trunzo JA, Onders RP, Pearl JP, Poulose BK, Chak A, Ponsky JL, Marks JM. Transgastric Natural Orifice Translumenal Endoscopic Surgery Peritonescopy in Humans: A Pilot Study in Efficacy and Gastrostomy Site Selection by using a hybrid technique Gastrointestinal Endosco 2010;72:279-83.

38. Lepore AC, Tolmie C, O'Donnell J, Wright MC, Dejea C, Rauck B, Hoke A, Ignagni AR, Onders RP, Maragakis NJ. Peripheral Hyperstimulation Alter Disease Course and Site of Onset in SOD1 G93a Rats. Neurobiol Dis 2010;39:252-64.

39. Onders RP, Ponsky TA, Elmo MJ, Lidsky K, Barksdale E. First Reported experience with intramuscular diaphragm pacing in replacing positive pressure mechanical ventilators in Children. J Pediatr Surg. 2011 Jan;46(1):72-6.

40. Marks J, Tacchino R, Roberts K, Onders R, Denoto G, Paraskeve P, Rivas H, Soper N, Rosemurgy A, Shah H. Prospective Randomized controlled trial of laparoscopic cholecystectomy versus single incision laparoscopic cholecystectomy: report of preliminary data. Am J Surg 2011;201:369-72

41. Gonzalez-Bermejo J, Morelot-Panzini C, Salachas, F, Redolfi S, Straus C, Becquemin M, Arnulf I, Pradat P, Bruneteau G, Ignagni A, Diop M, Onders R, Nelson T, Menegaux F, Meininger V, Similowski T. Diaphragm pacing improves sleep in patients with amyotrophic lateral sclerosis. Amyotrophic Lateral Sclerosis, 2012;13:44-54. Epub 2011 Oct 24

42. Phillips MS, Marks JM, Roberts K, Tchhino R, Onders R, Denoto G, Rivas H, Islam A, Soper N, Gecelter G, Rubach E, Paraskeva P, Shah S. Intermediate Results of a prospective randomized controlled trial of traditional four-port laparoscopic cholecystectomy versus single-incision laparoscopic cholecystectomy. Surg Endosco 2012;26:1296-303 Nov 15 Epub ahead of print PMID: 22083331.

43. Tedde ML, Onders RP, Teixeira MJ, Lage SG, Ballester G, Brotto MW, Okumura EMG Jatene FB. Electric Ventilation: Indications for and Technical Aspects of Diaphragm Pacing Stimulation Surgical Implantation. J Bras Pneumo, 2012;38:566-72. PMID: 23147048

44. Elmo MJ, Kaplan C, Onders R. Diaphragm Pacing: Helping Patients Breathe. AANLCP Journal of Nurse Life Care Planning, 2012;12:600-611.

45. Onders RP. Functional Electrical Stimulation: Restoration of Respiratory Function. Handbook Clinical Neurol. 2012;109:275-82. Doi: 10.1016/B978-0-444-52137-8.00017-6. PMID: 23098719

46. Perry KA, Linn JG, Eakin JL, Onders RP, Velanovich V, Melvin WS. Transoral incisionless fundoplication does not significantly increase morbidity of subsequent laparoscopic nissen fundoplication. J Laparoendoscopic Adv Surg Tech 2013;23:456-458. PMID: 23578416

47. Marks JM, Phillips MS, Tacchino R, Roberts K, Onders R, DeNoto G, S, Gecelter G, Rubach E, Rivas R, Islam A, Soper N, Paraskeva P, Rosemurgy A, Ross S, Shah S. Single-Incision Laparoscopic Cholecystectomy Is Associated with Improved Cosmesis Scoring at the Cost of Significantly Higher Hernia Rates: 1-Year Results of a Prospective Randomized, Multicenter, Single-Blinded Trial of Traditional Multiport Laparoscopic Cholecystectomy vs Single-Incision Laparoscopic Cholecystectomy. J Am Coll Surg 2013;16:1037-47 PMID: 23619321

48. Onders R, Elmo M, Kaplan C, Katirji B, Schilz R. Final Analysis of the Pilot Trial of Diaphragm Pacing in Amyotrophic Lateral Sclerosis with Long Term Follow-up: Diaphragm Pacing Positively Affects Diaphragm Respiration. Am J Surgery 2014;207:393-397.

49. Posluszny JA, Onders R, Kerwin AJ, Weinstein MS, Stein DM, Knight J, Lottenberg L, Cheatham ML,

Khansarinia S, Dayal S, Byeno PM. Multicenter Review of Diaphragm Pacing in Spinal Cord Injury: Successful not only in weaning from ventilators but also in bridging to independent respiration. J Trauma Acute Care Surg 2014;76:303-310.

50. Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Extended Use of Diaphragm Pacing in Patients with Unilateral of Bilateral Diaphragm Dysfunction: A New Therapeutic Option. Surgery 2014;156:772-86. PMID 25239317

51. Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Identification of Unexpected Respiratory Abnormalities in Patients with Amyotrophic Lateral Sclerosis through Electromyographic Analysis Using Intramuscular Electrodes Implanted for Therapeutic Diaphragmatic Pacing. Am J Surg 2015;209(3):451-6. PMID: 25648901

52. Onders R. The Diaphragm How it affect my life and my career. The search for stability when the problem is instability. Am J Surg 2015;209(3):431-5. doi: 10.1016/j.amjsurg.2014.12.003. Epub 2014 Dec 18. PMID: 25637310

53. Smith BK, Fuller DD, Martin AD, Lottenberg L, Islam S, Lawson LA, Onders RP, Byrne B. Diaphragm Pacing as a Rehabilitative Tool for Patients with Pompe Disease who are ventilator-dependent: Case Series. Physical Therapy 2016; 96: 696-703. PMID: 26893511

54. Ito H, Kamei T, Odake S, Nakano M, Okeda R, Kohriki S, Kawachi J, Onders R, Yoshii F. An Autopsy Case of Amyotrophic Lateral Sclerosis with Diaphragm Pacing. Internal Med 2016;55:3511-13. PMID 27904119

55. Onders RP, Markowitz A, Ho VP, Hardacre J, Novitsky Y, Towe C, Elmo M, Kaplan C, Schilz R. Completed FDA feasibility trial of surgically placed temporary diaphragm pacing electrodes: A promising option to prevent and treat respiratory failure.Am J Surg. 2018 Mar;215(3):518-521. doi: 10.1016/j.amjsurg.2017.10.054. Epub 2017 Nov 11. PMID: 29195690

56. Onders RP, Elmo MJ, Kaplan C, Schilz R, Katirji B, Tinkoff G. Long-term experience with diaphragm pacing for traumatic spinal cord injury: Early implantation should be considered. Accepted Surgery 2018.

BIBLIOGRAPHY- Book Chapters:

1. Onders RP, Stellato TA. Therapeutic Choledochoscopy and Its Complications. IN: Scott-Conner CEH, editor. The SAGES Manual: Fundamentals of Laparoscopy and GI Endoscopy. New York: Springer-Verlog:1999;529-533

2. Onders RP. Laparoscopic Inguinal Herniorrrhaphy. In: Cameron JL, editor. Current Surgical Therapy. 7th ed. Mosby, St. Louis, 2001;1389-94.

3. Onders RP. Spleen: Traumatic Injury and Hematologic/Oncologic Disease. In: Pappas TN, editor. Unbound Surgery. Online publication 2002.

4. Onders RP, Nakamoto D. The Spleen. In: Haaga JR, Lanzieri C(eds) Computed Tomography and MRI of the Whole Body, 4th Edition, Elsevier Science, Orlando, 2003, 1487-1510

5. Onders RP, Stellato TA. Therapeutic Choledochoscopy and Its Complications. IN: Scott-Conner CEH, editor. The SAGES Manual Second Edition: Fundamentals of Laparoscopy and GI Endoscopy. New York: Springer-Verlog; 2006: 699-703.

6. Onders RP. Ultrasound: The Basics for Laparoscopy. In: Talamini MA, editor. Advanced Therapy in Minimally Invasive Surgery. Hamilton, Ontario: BCDecker Inc. 2006, 53-59.

7. Onders RP. Diaphragmatic Pacing for Unilateral Phrenic Nerve Paralysis. In Ferguson MK, Difficult

Decisions In Thoracic Surgery: an Evidence-Based Approach. Springer Verlag, London, 2007, 365-371.

8. Pearl J, Rosen M, Onders RP. Laparoscopic Inguinal Herniorrrhaphy. In: Cameron JL, editor. Current Surgical Therapy. 9th ed. Mosby Elsevier, Philadelphia, 2007, 1285-1288.

9. Onders RP. Phrenic Nerve and Diaphragm Motor Pacing. In: Rice TW, editor. Pearson's Thoracic and Esophageal Surgery, Third Edition. Philadelphia, PA: Churchill Livingstone Elsevier, 2007, 1145-1457.

10. Onders RP. Diaphragm and Gastric Pacing. In Soper NJ, Swanstrom LL, Eubanks WS. Mastery of Endoscopic and Laparoscopic Surgery, Third Edition, Philadelphia PA: Lippincot Williams and Wilkins, 2009, 597-606.

11. Linden, P. Onders R. Diaphragm. Scientific American Textbook. 2010

12. Onders RP. Diaphragm Pacing for Acute Respiratory Failure. In Ferguson MK, Difficult Decisions in Thoracic Surgery 2nd Edition. Springer Verlag, London, 2011, 329-337.

13. Onders RP. NOTES (Natural Orifice Transluminal Endoscopic Surgery) in the Intensive Care Unit. In Cameron JL, Cameron A editors. Current Surgical Therapy 10th Edition. Mosby Elselvier, Philedelphia 2011, 1321-1323.

14. Onders RP. Gastric Dysmotility. In Murayama KM, Chand B editors. An Evidence-based approach to Minimally Invasive Surgery. Woodbury, CT: Cine-Med Publishing, Inc., 2012, 93-96.

15. Onders RP. Functional Electrical Stimulation: Restoration of Respiratory Function. In Verhaagen J, McDonald J. Handbook of Clinical Neurology 3rd Series, Volume 109 Spinal Cord Trauma. Amsterdam: Elselvier, 2012, 275-282.

16. Onders RP, Siegeal CT. Splenectomy. In Delaney CP, Netter's Surgical Anatomy and Approaches. Philadelphia, PA: Elsevier, 2013, 197-203.

17. Onders RP. Getting and Idea from Paper to Patient. In Stain, Prior, Shadduck. The SAGES Manual: Ethics of Surgical Innovation. Springer, 2015.

18. Onders RP. Recovery of Diaphragm Function through Functional Electrical Stimulation: Diaphragm Pacing. In AI Elkwood et al.(eds.) Rehabilitative Surgery, 2017 DOI 10.1007/978-3-319-41406-5_12

19. Onders RP. Stimulation for Inspiration. In Peckham et al.(editors) Neuromodulation, Comprehensive textbook of Principles, Technologies and Therapies, Elsevier 2017

MaryJo Elmo, ACNP
University Hospitals Cleveland Medical Center

(no CV uploaded)

A qualitative exploration of the perceived causes and impact of falls on the lives of wheelchair users with SCI using photo-elicitation

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Hardeep Singh, MScOT
University of Toronto

CV:
Name: Hardeep Singh, OT Reg. (Ont.), PhD Candidate
Position Title: PhD candidate, Rehabilitation Sciences Institute, University of Toronto

HONORS
2016 – 2019 TRI Student Scholarship, Toronto Rehabilitation Institute
2016 – 2019 CIHR Project Grant, CIHR, co-investigator
2017 – 2019 Craig H. Neilsen Psychosocial Research Grant, co-investigator
2016 – 2019 UHN OSOTF Unilever/Lipton Graduate Fellowship in Neuroscience
2017 – 2018 ORT Conference Travel Award, Toronto Rehabilitation Institute
2016 – 2017 Fellowship - Rehabilitation Science, University of Toronto
2016 School of Graduate Studies Conference Grant, University of Toronto
2014 – 2016 UTAPS, University of Toronto
2016 Medical Graduate Student Bursary Funds, University of Toronto
2016 Rehabilitation Institute of Toronto Bursary, University of Toronto
2013 Dean's Honor Roll, Magna Cum Laude, York University

TEXTBOOK CHAPTER
Singh, H., Unger, J., & Musselman, K. E. (2018, Accepted). Shaping rehabilitation after spinal cord injury: The impact of qualitative research. In Muller, D., & Hayre, C. (Eds.). Enhancing Healthcare and Rehabilitation: The Impact of Qualitative Research. Ipswich, England: CRC Press.

PEER REVIEWED PUBLICATIONS
Kilburn, C. M., Singh, H., Makowski, A., & Musselman, K. E. (2018, Submitted). Perspectives and experiences of physical therapists regarding use and value of screening assessments and preventative programs for elite-level dancers. Physical Therapy.
Singh, H., Craven, B. Flett, H., C., Kerry, C., Jaglal, S. B., Silver, M. P., & Musselman, K. E. (2018, Submitted). Factors influencing fall prevention for patients with spinal cord injury from the perspectives of administrators in Canadian rehabilitation hospitals. Qualitative Health Research.
Singh, H., Shah, M., Flett, H., Craven, B. C., Verrier, M., & Musselman, K. E. (2018). Life after Personalized Adaptive Locomotor Therapy: A qualitative follow-up study. Spinal Cord Series & Cases. doi: 10.1038/s41394-018-0037-z
Singh, H., Unger, J., Pakosh, M., Zariffa, J., Jaglal, S., Craven, B. C., & Musselman, K. E. (2018). Therapeutic use of robotics for upper extremity spinal cord injury rehabilitation: A systematic scoping review. Disability & Rehabilitation: Assistive Technology. doi: 10.1080/17483107.2018.1425747
Unger, J., Singh, H., Mansfield, A., Sander, H., Lenton, E., Musselman, K. E. (2018). The experiences of physical rehabilitation in individuals with spinal cord injuries: A qualitative thematic synthesis. Disability & Rehabilitation. doi: 10.1080/09638288.2018.1425745
Silver, M. P., McRoberts, S., & Singh, H. (2017). When working out works out: Community Program Administrators' Perspectives on Mature Adult Exercise Participation. Activities, Adaptation & Aging, 41(4), 1-22. DOI: 10.1080/01924788.2017.1376177
Singh, H., Shah, M., Flett, H., Craven, C. B., Verrier, M. C., & Musselman, K. E. (2017). Perspectives on Personalized Adapted Locomotor Training from Individuals with Sub-acute Spinal Cord Injury. Disability & Rehabilitation, 13, 1-9. doi: 10.1080/09638288.1277395

NON-PEER REVIEWED PUBLICATIONS
Singh, H., Gaya, A., Martin, L., Barker, D. (2017). Volunteer work as a foundation for private practice

fieldwork learning. OT Now, 19(2), 17-19.

Carol Scovil, OT, PhD
Toronto Rehabilitation Institute-University Health Network

CV:

Karen Yoshida, PT, PhD
University of Toronto

CV:

Sarah Oosman, PT, PhD
University of Saskatchewan

CV:

Anita Kaiser, MSc
Toronto Rehabilitation Institute-University Health Network

CV:

Beverly Craven, BA, MSc, MD, FRCPC
Toronto Rehabilitation Institute-University Health Network

CV:

Susan Jaglal, PhD
University of Toronto

CV:

Kristin Musselman, PT, PhD
Toronto Rehabilitation Institute-University Health Network

CV:

Hands-Free Technology Access: High Efficiency Technology Use for those with High Level Spinal Cord Injury

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

James Gardner, OTR
University of Utah Hospital

CV:
Presentations, Invited Lectures
I have had the honor of presenting around the country, promoting improved assistive technology access in hospitals and teaching professionals new ways to utilize technology for people with disabilities. Presentations have covered technology access for people throughout the recovery spectrum: from communication in acute stages, to high level access solutions in the hospital and at home and work, to the utilization of wearable technologies for those with disabilities.
2013 Utah Occupational Therapy Association
-Accessing Technology Across the Disability Spectrum
2013 American Occupational Therapy Association
-"Continue to Shopping Cart": an occupation-based intervention utilizing an online shopping simulation
2014 International Technology and Persons with Disability Conference CSUN
-The ACT Program: A Pilot Program for Bringing AAC to Acute Hospital Floors
2014 American Spinal Cord Injury Professionals Conference
-Assistive Communication Team Pilot Program: Bringing AAC to Acute Floors
2014 Rehab Engineering Society of North America
-Addressing the More Challenging Needs: Hands and Eyes-on With the Latest Accessibility Hardware and Software for Computer, Phones and Homes
2015 Rehab Engineering Society of North America
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2015 American Spinal Cord Injury Professionals Conference
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2015 Association of Academic Physiatrists
-Affective Assistive Technology Delivery Across the Recovery Spectrum
2015 Assistive Technology Industry Association
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2016 Rehab Engineering Society of North America
-Addressing the More Challenging Needs: Accessibility Options for High Level Users
2016 Assistive Technology Industry Association
-Addressing the More Challenging Needs: Accessibility Options for High Level Users
2016 American Spinal Cord Injury Professionals Conference
-The Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People with Spinal Cord Injury
2017 Rehab Engineering Society of North America
-Customizable Computer Control Schemes in Adaptive Recreation: From Screen to Sail and Snow
-The Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People of All Levels of Functioning "
2017 American Spinal Cord Injury Association Conference
-Hands on with Hands-free Technology Access, Solutions for those with High-level Injuries
2018 American Occupational Therapy Association
-Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People of All Levels of Functioning
-The ACT Program: An Interdisciplinary Program for Bringing Early Communication and Occupational Engagement to Acute Hospital Floors
2018 Rehab Engineering Society of North America
-Continuous Cloud-based Power Wheelchair Monitoring of Mobility and Seating
-Hands-free Technology Access from A to T: A Comprehensive Discussion of High-Level, High-Efficiency, Hands-

free Access

Publications
Household Task Participation of Children With and Without Physical Disability â€“ Dunn, L. Gardner, J. Am J Occup Ther. 2013; 67(5):e100-e105. doi: 10.5014/ajot.2013.008102
Analysis of household task participation patterns of 46 children and youth with and without physical disability supported the discriminant validity of the Children Helping Out: Responsibilities, Expectations, and Supports measure of household task participation.

Common neuromuscular effects of epidural and transcutaneous lumbar spinal stimulation

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Dimitry Sayenko, MD, PhD
Houston Methodist Research Institute

CV:
Biographical Sketch
Name: Dimitry G. Sayenko, MD, PhD

Position: Scientist, Assistant Professor, Center for Neuroregeneration, Department of Neurosurgery, Research Institute, Institute for Academic Medicine, Houston Methodist Hospital; Weil Cornell Medical College

A. Personal Statement
My overarching research interests are to promote non-invasive, activity-based treatments of mobility impairments and to improve motor function after paralysis. I focus my research on the inherent properties and potential for plasticity of the neuromuscular system in healthy and disabled populations. Currently, my research pursues the questions regarding the extent to which non-invasive electrical spinal cord stimulation can neuromodulate spinal circuitry to recover neuromuscular control after neurological injuries and disorders. I have been working in the area of regulation of motor control in human subjects for over 20 years. During this time, I worked as a research scientist in studies investigating the effects of spaceflight on postural control, realized jointly with various space agencies, including the Russian Space Agency (Roscosmos) and NASA. During my postdoctoral fellowship in Japan, I demonstrated the effects of balance training on postural control during standing and walking in individuals with incomplete spinal cord injury (SCI). During my work in Canada, I developed and implemented a training system integrating functional electrical neuromuscular stimulation and visual feedback as a means of regaining strength of paralyzed muscles. Further, I investigated the mechanisms of neuromodulation induced by epidural spinal cord stimulation after SCI at Frazier Rehab in Louisville, KY. Over last 4 years, I have established strong collaborative ties with Drs. V. Reggie Edgerton and Yury Gerasimenko at the UCLA, who have pioneered the clinical use of neuromodulatory techniques including epidural and transcutaneous spinal cord stimulation, and who provide additional expertise to my research. At the moment, I work at the Department of Neurosurgery and Center for Neuroregeneration at the Houston Methodist Research Institute. My current research builds on my prior work in neuromodulation and neuromuscular control.

B. Positions and Honors
Positions and Employment
1996-1999 Research Associate, Department of Sensory-Motor Physiology and Countermeasures, Institute for Bio-Medical Problems, Moscow, Russia
1999-2002 Scientist, Department of Sensory-Motor Physiology and Countermeasures, Institute for Bio-Medical Problems, Moscow, Russia
2002-2006 Senior Scientist, Chief Researcher, Laboratory of Physiological Evaluation of Countermeasures, Institute for Bio-Medical Problems, Moscow, Russia
2006-2008 Postdoctoral Fellow, Department of Rehabilitation for Movement Functions, National Rehabilitation Center for Persons with Disabilities, Tokorozawa, Japan
2008-2012 Postdoctoral Fellow, Toronto Rehabilitation Institute, Institute of Biomaterials and Biomedical Engineering, University of Toronto, Toronto, Canada
2012-2014 Research Assistant Professor, Department of Neurological Surgery, School of Medicine, University of Louisville, Louisville, KY, USA
2014-2018 Assistant Researcher (IV), Department of Integrative Biology and Physiology, University of California, Los Angeles, CA, USA
2015-present Research Affiliate, Mayo Clinic, Rochester, MN, USA
2018-present Scientist, Assistant Professor Department of Neurosurgery, Houston Methodist Research Institute, TX, USA
2018-present Assistant Professor of Neuroscience in Neurological Surgery, Weil Cornell Medical College, NY,

New York, USA

Honors
2000 Award for “Great Contribution in the Organization and Implementation of the International Project "240-days Confinement Study: Simulation of Flight of International Crew on Space Station", Institute for Bio-Medical Problems, Academy of Sciences, Russia
2001 Award for “Great Contribution in the Achievement of Bio-Medical Programs on the Orbital Complex MIR”, Institute for Bio-Medical Problems, Academy of Sciences, Russia
2003 Special Space Flight Achievement Award, NASA Johnson Space Center, USA
2004 Young Investigator Award, European Society of Biomechanics, Netherlands
2009 Institute Community Support, Institute of Musculoskeletal Health and Arthritis, Canadian Institutes of Health Research, Canada
2009 University of Toronto Neuroscience Program Award, Canada
2010 Best Presentation Award at the 9th Annual Tator-Turnbull Lectureship Series in SCI, University of Toronto Neuroscience Program, Canada
2014 Patriotic Employer, Office of the Secretary of Defense, USA
C. Contributions to Science
1. My early publications addressed the effects of spaceflight on human physiology. With a team of collaborators from the National Aeronautics and Space Administration (NASA), European Space Agency (ESA), German Aerospace Center (DLR), Canadian Space Agency (CSA), and Japan Aerospace Exploration Agency (JAXA), I investigated the effects of microgravity on motor control. The results of those experiments revealed neuromuscular mechanisms of post-flight motor impairments, and are instrumental in the design of countermeasure programs for use on board the International Space Station. In particular, my work has contributed to understanding that a reduction of weight-bearing and the deficit of load-related afferent inputs can be a primary cause of the decline in neuromuscular control. Similarities between astronauts and the clinical presentation of individuals with SCI are remarkable, and understanding the neurophysiological mechanisms of changes occurring in both conditions, as well as developing more efficacious rehabilitative strategies have shaped my subsequent research endeavors.

a. Saenko DG, Saenko IV, Shestakov MP, Ivanov AM, Kozlovskaia IB. [The effect of 120 day anti-orthostatic hypokinesia on the status of the posture regulation systems]. Aviakosm Ekolog Med. 2000;34(5):6-10. PMID: 11816412.
b. Kozlovskaya IB, Sayenko IV, Sayenko DG, Miller TF, Khusnutdinova DR, Melnik KA. Role of support afferentation in control of the tonic muscle activity. Acta Astronautica. 2007;60(4-7):285-94.
c. Sayenko DG, Miller TF, Melnik KA, Netreba AI, Khusnutdinova DR, Kitov VV, Tomilovskaya ES, Reschke MF, Gerasimenko YP, Kozlovskaya IB. Acute effects of Dry Immersion on kinematic characteristics of postural corrective responses. Acta Astronautica. 2016;121:110-5.
d. Gerasimenko YP, Gad P, Sayenko DG, McKinney Z, Gorodnichev R, Puhov A, Moshonkina T, Savochin A, Selionov VA, Shigueva T, Tomilovskaya E, Kozlovskaya IB, Edgerton VR. Integration of Sensory, Spinal, and Volitional Descending Inputs in Regulation of Human Locomotion. Journal of neurophysiology. 2016:jn 00146 2016. PMID: 27075538

2. In addition to the contributions described above, I systematically investigated the role of load-related afferents within the spinal networks: I demonstrated the location-dependent effects of plantar cutaneous afferent stimulation on spinal reflex pathways, and proposed the mechanisms underlying the neuromuscular effects of whole body vibration during passive standing on spinal motor neuronal excitability in subjects with and without spinal cord injury.

a. Sayenko DG, Vette AH, Kamibayashi K, Nakajima T, Akai M, Nakazawa K. Facilitation of the soleus stretch reflex induced by electrical excitation of plantar cutaneous afferents located around the heel. Neuroscience letters. 2007;415(3):294-8. PMID: 17276004.
b. Sayenko DG, Vette AH, Obata H, Alekhina MI, Akai M, Nakazawa K. Differential effects of plantar cutaneous afferent excitation on soleus stretch and H-reflex. Muscle & nerve. 2009;39(6):761-9. PMID: 19260052.
c. Sayenko DG, Masani K, Alizadeh-Meghrazi M, Popovic MR, Craven BC. Acute effects of whole body vibration during passive standing on soleus H-reflex in subjects with and without spinal cord injury.

Neuroscience letters. 2010;482(1):66-70. PMID: 20633603.
d. Alizadeh-Meghrazi M, Masani K, Zariffa J, Sayenko DG, Popovic MR, Craven BC. Effect of whole-body vibration on lower-limb EMG activity in subjects with and without spinal cord injury. J Spinal Cord Med. 2014;37(5):525-36. PMID: 24986541; PMCID 4166187.

3. I have a long-standing interest in exploring the strategies for regaining functionality during standing. Given what we know today and the potential of capitalizing on spinal circuitry in achieving significant recovery of function, this question is even more urgent today. I investigated the effects of balance training with visual feedback during standing in individuals with incomplete SCI. In order to overcome the strength and endurance deficits in paralyzed postural muscles, I developed and implemented training systems and protocols for use of neuromuscular electrical stimulation. These efforts have direct implications for the proposed project, as the recovery of postural control involves similar principles of task-specific training combined with neurostimulation.

a. Sayenko DG, Alekhina MI, Masani K, Vette A, Obata H, Popovic M, Nakazawa K. Positive effect of balance training with visual feedback on standing balance abilities in people with incomplete spinal cord injury. Spinal cord. 2010;48(12):886-93. PMID: 20404833
b. Sayenko DG, Masani K, Milosevic M, Robinson MF, Vette AH, McConville KMV, Popovic MR. Video game-based neuromuscular electrical stimulation system for calf muscle training: A case study. Medical engineering & physics. 2011;33(2):249-55. PMID: 21036093
c. Sayenko DG, Nguyen R, Hirabayashi T, Popovic MR, Masani K. Method to Reduce Muscle Fatigue During Transcutaneous Neuromuscular Electrical Stimulation in Major Knee and Ankle Muscle Groups. Neurorehabil Neural Repair. 2015;29(8):722-33. PMID: 25549655.
d. Vette AH, Sayenko DG, Jones M, Abe MO, Nakazawa K, Masani K. Ankle muscle co-contractions during quiet standing are associated with decreased postural steadiness in the elderly. Gait & posture. 2017;55:31-6. PMID: 28411442.

4. Epidural and transcutaneous electrical spinal cord stimulation techniques are becoming more valuable as electrophysiological and clinical tools. I investigated the level of neurophysiological and functional specificity that can be achieved in selective neuromodulation of spinal networks using both methods. These studies demonstrated the potential of transcutaneous electrical spinal cord stimulation, as a less expensive, non-invasive neuromodulatory option to an epidural implant, with sufficient specificity to selectively neuromodulate different combinations of spinal motor pools and circuitries, as well as the capability to regain motor and even autonomic functions not previously observed after complete paralysis.

a. Sayenko DG, Angeli C, Harkema SJ, Edgerton VR, Gerasimenko YP. Neuromodulation of evoked muscle potentials induced by epidural spinal-cord stimulation in paralyzed individuals. Journal of Neurophysiology. 2014;111(5):1088-99. PMID: 24335213; PMCID 3949232.
b. Sayenko DG, Atkinson DA, Dy CJ, Gurley KM, Smith VL, Angeli C, Harkema SJ, Edgerton VR, Gerasimenko YP. Spinal segment-specific transcutaneous stimulation differentially shapes activation pattern among motor pools in humans. J Appl Physiol (1985). 2015;118(11):1364-74. PMID: 25814642; PMCID 4451290.
c. Gerasimenko YP, Lu DC, Modaber M, Zdunowski S, Gad P, Sayenko DG, Morikawa E, Haakana P, Ferguson AR, Roy RR, Edgerton VR. Noninvasive Reactivation of Motor Descending Control after Paralysis. J Neurotrauma. 2015;32(24):1968-80. PMID: 26077679; PMCID PMC4677519.
d. Rath M, Vette AH, Ramasubramaniam S, Li K, Burdick J, Edgerton VR, Gerasimenko Y, Sayenko D. Trunk stability enabled by non-invasive spinal electrical stimulation after spinal cord injury. J Neurotrauma. 2018. PMID: 29786465.

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/dimitry.sayenko.1/bibliography/49524199/public/?sort=date&direction=descending
D. Research Support: Dmitry Saenko, PhD
Completed Research Support
Paralyzed Veterans of America (3068) Sayenko (PI) 01/01/16-01/01/17
Functional spasticity management in individuals with spinal cord injury
The goal of this study is to investigate acute and sub-acute effects of transcutaneous electrical spinal cord

stimulation and standing for spasticity management.
Role: PI

Canadian Institutes of Health Research (MOP111225) Masani (PI) 05/11-05/13
Novel methodology to reduce muscle fatigue during functional electrical stimulation
The goal of this study was to investigate the feasibility of reducing muscle fatigue by distributing the electric field over a wider area using multiple surface electrodes.
Role: Co-Investigator

Brian Dalm, MD
Houston Methodist Research Institute

(no CV uploaded)

Philip Horner, PhD
Houston Methodist Research Institute

(no CV uploaded)

Gavin Britz, MD
Houston Methodist Hospital

(no CV uploaded)

Urinary Symptom Questionnaire for Neuropathic Bladder: Preliminary results suggest a severity continuum

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Amanda Rounds, PhD
Medstar National Rehabilitation Hospital

CV:
Published Papers:
Rounds, A . Resiliency & Self-Efficacy: Keys to Participation and Quality of Life in Chronic Stroke Survivors and the Effects of Community-Based Exercise. ProQuest https://search-proquest-com.mutex.gmu.edu/docview/2071302983?accountid=14541 (Published March 27, 2018)
Tractenberg, R; Groah, S; Rounds, A ; Ljungberg, I; Schladen, M. Preliminary validation of a Urinary Symptom Questionnaire for individuals with Neuropathic Bladder using Intermittent Catheterization (USQNB-IC): A patient-centered patient reported outcome. PLOS ONE https://doi.org/10.1371/journal.pone.0197568 (Published July 10, 2018)

Published Abstracts:
Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A ; Guccione, A; Keyser, R; VO2 Off-Kinetics Following Exhaustive Upper Body Exercise Test in Spinal Cord Injury Med Sci Sports Exerc 2017; 49:629-630
Baattaiah, B; Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A ; Guccione, A; Keyser, R. Association of Six Minute Push Test Distance and Measures of Cardiorespiratory Fitness in Spinal Cord Injury Med Sci Sports Exerc 2017; 49(5S): 409
Lydick S, Rounds A , Bryson CA, Herrick JE, Collins JP, Groah SM, Short JL, Guccione AA. Group cohesion and participation in adaptive sport: spinal cord injury and other mobility limiting conditions. Arch Phys Med Rehabil 2016; 97:e101
Jo PY, Rounds A , Lichy AM, Gollie JM, Panza GS, Guccione AA. Gait adaptation following task-specific locomotor training in an individual with incomplete spinal cord injury. Med Sci Sports Exerc 2016; 48(5 Suppl 1):401-2.
Rounds, A ; Lydick SE, Lichy AM, Gollie JM, Panza GS, Jo PY, Guccione AA. Doing better but not feeling it: self-efficacy and ambulation ability in incomplete spinal cord injury. Med Sci Sports Exerc 2016; 48(5 Suppl 1):424.
Podium Presentation:
Rounds, A ; Schladen, M; Ljungberg, I; Nash, M; Groah, S. Cardiometabolic Syndrome Criteria and Their Application to with Spinal Cord Injury (Presented at ASIA, 2017).
Abstracts:
Rounds, A ; Woolstenhulme, J; Lydick, S; Weinstein, A; Chin, L; Chan, L; Keyser, R (FACSM); Relationship Between Physical Activity and 6-minute Walk Distance in Patients with Pulmonary Arterial Hypertension (Accepted ACSM Poster, 2015)
Gollie, J; Panza, G; Lydick, S; Puri,S; Jo, P; Lichy, A; Rounds, A ; Murray, D; Guccione, A; Muscle Oxygen Utilization Following Activity-Based Rehabilitation in a Person With Incomplete Spinal Cord Injury. ACRM Annual Conference Submission (Accepted ACRM Poster, 2015)
Harrington, R; Abraham, D; Chan, E; Harris-Love, M; Mohapatra, S; Rounds, A ; Wutzke, C; Comparing stimulation of bihemispheric motor sites on a reaching task in mild and severe arm impairment after stroke. ASNR Annual Conference Submission (Accepted ASNR Poster, 2015)
Rounds, A ; Wutzke, C; Harrington, R; Chan, E; Harris-Love, M; Relationship between Sub-Sections Of Upper Extremity Fugl-Meyer Scores and Reaching Performance in Chronic Stroke Survivors (Accepted WCNR Poster, 2016)
Lichy, A; Neville, B; Gollie, J; Rounds, A ; Panza, G; Jo, P; Guccione, A; Task-specific Performance Based Training: Effects on Gait and Balance in an Ambulatory Spinal Cord Injured Population (Accepted ASIA Poster, 2016)

Rounds, A ; Lydick, S; Lichy, A; Gollie, J; Panza, G; Jo, P; Guccione, A; Doing Better But Not Feeling it: Self-Efficacy and Ambulation in Incomplete Spinal Cord Injury (Accepted ACSM Poster, 2016)
Jo, P; Rounds, A ; Lichy, A; Guccione, A; Gait adaptation following 15 weeks of task-specific locomotor training (LT) in incomplete spinal cord injury (Accepted ACSM Poster, 2016)
Rounds, A ; Lichy, A; Gollie, J; Wutzke, C; Guccione, A; Task Specific Overground Locomotor Training Is Associated With Improved Gait And Balance in Incomplete Spinal Cord Injury: Case Report (Accepted, ASB, 2016)
Baattaiah, B; Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A ; Guccione, A; Keyser, R. Association of Six Minute Push Test Distance and Measures of Cardiorespiratory Fitness in Spinal Cord Injury (Accepted, ACSM, 2017)
Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A; Guccione, A; Keyser, R. VO2 Off-Kinetics following Exhaustive Upper Body Exercise Testing After Spinal Cord Injury (Accepted, ACSM, 2017).
Rounds, A ; Ljungberg, I; Groah, S. CASE STUDY: Do Urinary Symptoms, Inflammatory Biomarkers, and the Bacterial Ecosystem Change After Change in Bladder Management (Accepted, ASIA, 2018).

Inger Ljungberg, MPH
Medstar National Rehabilitation Hospital

(no CV uploaded)

Suzanne Groah, MSPH, MD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Rochelle Tractenberg, PhD, MPH, PhD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Manon Schladen, PhD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Elizabeth Davis, MPP
Medstar National Rehabilitation Hospital

(no CV uploaded)

A Retrospective Randomized Study Comparing the Effectiveness of using the Braden Scale to Predict Pressure Injuries (PrI) in Patients with Spinal Cord Injury (SCI)

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Marjorie Morgan, BS, PTA, CLT
Kennedy Krieger Institute

CV:
Certifications:

Fundamentals for the Research Coordinator (2014)

Certified Lymphedema Therapist (CLT), November 2017

Presentations:

1. Morgan M, Catania Q, Conroy L, Dean J, Salorio C, Martin R. Assessing patterns of pressure injury development in patients with Spinal Cord Injury (SCI) with Lower Motor Neuron (LMN) and Upper Motor Neuron (UMN) lesions: A Case Report. American Spinal Injury Association Scientific Meeting (2018)

2. Morgan M, Catania Q, Martin R. Activity Based Restorative Therapy (ABRT) and the risk of developing Skin Tears in patients with Spinal Cord Injury: A Case Report. Symposium on Advanced Wound Care (2017)

3. Catania Q, Morgan M, Martin R. The Risk of Developing Skin Tears in Patients with Spinal Cord Injury Participating in Activity Based Restorative Therapy (ABRT). American Spinal Injury Association Scientific Meeting (2017)

4. Catania Q, Morgan M. Wounds in Patients with Spinal Cord Injury: A Physical Therapistâ€™s Role. Seminar in Developmental Medicine: Spinal Cord Injury Medicine Core Curriculum Lecture (2016)

5. Catania Q, Morgan M, Recio A. Assessment and Treatment of Sacral Wounds in Patients with Spinal Cord Injury: Pressure Ulceration versus Moisture-Associated Skin Damage. Clinical Symposium on Advances in Skin and Wound Care (2015)

6. Selvarajah S, Hammond E, Catania Q, Morgan M, Inches S, Schneider E, Sadowsky C. The Burden of Pressure Ulcers in Acute Traumatic Spinal Cord Injury. Clinical Symposium on Advances in Skin and Wound Care (2015)

7. Morgan M, Catania Q, Recio A. Skin Tears Are Prevalent In Population with Spinal Cord Injury: A Case Report. Clinical Symposium on Advances in Skin and Wound Care (2014)

Peer reviewed Paper:
1. Catania Q, Morgan M, Martin R. Activity Based Restorative Therapy (ABRT) and the risk of developing Skin Tears in patients with Spinal Cord Injury: A Risk Management Case Report. Adv Skin Wound Care. 2018: 31(8): 371-373.

Quyen Catania, PT, DPT, CWS, CLT
Kennedy Krieger Institute

CV:
Certifications:
Certified Wound Specialist, May 2016

Certified Lymphedema Therapist, November 2017

Peer-reviewed paper:
1. Catania Q, Morgan M, Martin R. Activity Based Restorative Therapy (ABRT) and the risk of developing Skin Tears in patients with Spinal Cord Injury: A Risk Management Case Report. Adv Skin Wound Care. 2018: 31(8): 371-373.

Presentations:
1. Morgan M, Catania Q, Conroy L, Dean J, Salorio C, Martin R. Assessing patterns of pressure injury development in patients with Spinal Cord Injury (SCI) with Lower Motor Neuron (LMN) and Upper Motor Neuron (UMN) lesions: A Case Report. American Spinal Injury Association Scientific Meeting (2018)

2. Morgan M, Catania Q, Martin R. Activity Based Restorative Therapy (ABRT) and the risk of developing Skin Tears in patients with Spinal Cord Injury: A Case Report. Symposium on Advanced Wound Care (2017)

3. Catania Q, Morgan M, Martin R. The Risk of Developing Skin Tears in Patients with Spinal Cord Injury Participating in Activity Based Restorative Therapy (ABRT). American Spinal Injury Association Scientific Meeting (2017)

4. Gregory B, Catania Q, Martin R. Activity Based Restorative Therapy Interventions in a Patient with Spinal Cord Injury Secondary to Infection: A Case Report. Contemporary Trends in SCI Management (2016)

5. Catania Q, Morgan M. Wounds in Patients with Spinal Cord Injury: A Physical Therapistâ€™s Role. Seminar in Developmental Medicine: Spinal Cord Injury Medicine Core Curriculum Lecture (2016)

6. Catania Q, Morgan M, Recio A. Assessment and Treatment of Sacral Wounds in Patients with Spinal Cord Injury: Pressure Ulceration versus Moisture-Associated Skin Damage. Clinical Symposium on Advances in Skin and Wound Care (2015)

7. Selvarajah S, Hammond E, Catania Q, Morgan M, Inches S, Schneider E, Sadowsky C. The Burden of Pressure Ulcers in Acute Traumatic Spinal Cord Injury. Clinical Symposium on Advances in Skin and Wound Care (2015)

8. Morgan M, Catania Q, Recio A. Skin Tears Are Prevalent In Population with Spinal Cord Injury: A Case Report. Clinical Symposium on Advances in Skin and Wound Care (2014)

Honor/award:
2018
Leader in Spinal Cord Injury, Contemporary Trends in SCI Management Symposium

---

Rebecca Martin, OTR/L, OTD
Kennedy Krieger Institute

(no CV uploaded)

Comparison of Peak Oxygen Consumption Response to Aquatic and Robotic Therapy in Chronic Motor Incomplete SCI: Randomized Controlled Trial

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Peter Gorman, MD MS
University of Maryland School of Medicine

CV:
PETER H GORMAN, MD – Short CV

Positions and Employment
1989-1991 Instructor in Neurology
Case Western Reserve University
1991-1997 Assistant Professor of Neurology
University of Maryland School of Medicine
1997-present Associate Professor of Neurology
University of Maryland School of Medicine
1999-2000 Special Volunteer, Human Cortical Physiology Section, NINDS, National Institutes of Health (Sabbatical Year)
July 2000 - present Director, Spinal Cord Injury Service
Kernan Orthopaedics and Rehabilitation Hospital
July 2000 - present Attending Physician & Director of the SCI Support Team Clinic
Geriatrics and Long Term Care Service Line
VA Maryland Health Care System
July 2004 – June 2005 Acting Chief, Division of Rehabilitation Medicine
Department of Neurology, University of Maryland School of Medicine
July 2004 – present Chief, Division of Rehabilitation Medicine
Kernan Orthopaedics and Rehabilitation Hospital
July 2005 - present Chief, Division of Rehabilitation Medicine
Department of Neurology, University of Maryland School of Medicine
2008 - present Secondary Appointment
Associate Professor of Physical Therapy & Rehabilitation Science
University of Maryland School of Medicine
Honors
1991 Scientific Achievement Award, Second Place, Fellows Category, MetroHealth Medical Center, Case Western Reserve University.
1996 Golden Goniometer Award for Excellence and Dedication to Academic Instruction and Professional Mentorship, Sinai/Hopkins Residency Training Program in Physical Medicine and Rehabilitation
1998, 2002 VA Gold Pin Award for excellence in clinical care.
2002 Sidney and Elizabeth Licht Award for Excellence in Scientific Writing, American Congress of Rehabilitation Medicine
2004 Golden Goniometer Outstanding Teaching Award for Excellence and Dedication to Academic Instruction
and Professional Mentorship, Sinai/University of Maryland Residency Training Program in Physical Medicine and Rehabilitation
2005 Hero Award, University of Maryland Shock Trauma Gala
2007 Fellow, American Academy of Neurology
2009 Healthcare Hero Finalist, Advancements in Health Care Category, The Daily Record, Baltimore, MD
2009 20 year Service Award, Department of Veterans Affairs
2010 Voted one of Baltimore Magazine's 2010 "Top Docs"
2011 Voted Washington, DC – Baltimore – Northern Virginia "Super Doctor"
2012, 2013 Voted one of Baltimore Magazine's 2012 and 2013 "Top Docs"
2014 25 year Service Award, Department of Veterans Affairs

Selected Peer-reviewed publications (in chronological order).

1. Gorman PH and Mortimer JT. The effect of stimulus parameters on the recruitment characteristics of direct nerve stimulation. IEEE Transactions on Biomedical Engineering, Vol. BME-30: 407-414 (1983).
2. Gorman PH, Rigamonti D, and Joslyn JR. Intramedullary and Extramedullary Schwannoma of the Cervical Spinal Cord: Case Report. Surgical Neurology 32:459-62 (1989).
3. Carter RR, Crago PE, and Gorman PH. Nonlinear Stretch Reflex Interaction during Cocontraction. J. Neurophysiology, 69(3): 943-952 (1993).
4. Macko RF, DeSouza CA, Tretter LD, Silver KH, Smith GV, Anderson PA, Tomoyasu N, Gorman P, Dengel DR. Treadmill Aerobic Exercise Training Reduces the Energy Expenditure and Cardiovascular Demands of Hemiparetic Gait in Chronic Stroke Patients: A Preliminary Report. Stroke 28:326-330 (1997).
5. Gorman PH, Stroh-Woulle K, Peckham PH, Heydrick D. Patient Selection for an Upper Extremity Functional Electrical Stimulation Neuroprosthesis in Tetraplegia. Spinal Cord 35:569-573 (1997).
6. Gorman PH, Kikta DG, Peckham PH. Neurophysiologic Evaluation of Lower Motor Neuron Damage in Tetraplegia. Muscle & Nerve 21: 1321-1323 (1998).
7. Rodgers MM, Keyser RE, Gardner ER, Russell PR, Gorman PH: Influence of trunk flexion on biomechanics of wheelchair propulsion. J Rehabil Res Dev. 37:283-295 (2000).
8. Rodgers MM, Keyser RE, Rasch EK, Gorman PH, Russell PJ. Influence of training on biomechanics of wheelchair propulsion. J Rehabil Res Dev 38:505-511 (2001).
9. Peckham PH, Keith MW, Kilgore KL, Grill JH, Wuolle KS, Thrope JB, Gorman PH, Hobby J, Betz R, Carroll S, Hentz VR, Wiegner A, for the Implantable Neuroprosthesis Research Group. Efficacy of an Implanted Neuroprosthesis for Restoring Hand Grasp in Tetraplegia: A Multicenter Study. Arch PM&R 82:1380-1388 (2001).
10. Peckham, PH and Gorman PH. Functional Electrical Stimulation in the 21st Century. Topics in Spinal Cord Rehabilitation 10(2): 126-150 (2004).
11. Roghmann MC, Wallin MT, Gorman PH, Johnson, JA. Prevalence and Natural History of Colonization with Fluoroquinolone Resistant Gram-negative Bacilli in Community-dwelling People with Spinal Cord Dysfunction. Arch PM&R 87(10): 1305-1309 (2006).
12. Roghmann MC, Gorman PH, Wallin MT, Kreisel K, Shurland S. Johnson JA S. aureus Colonization in Community-dwelling People with Spinal Cord Dysfunction.. Arch PM&R. 88(8):979-983 (2007).
13. Gorman PH, Qadri SFA, Rao-Patel, A. Prophylactic Inferior Vena Cava (IVC) Filter Placement May Increase the Relative Risk of Deep Venous Thrombosis after Acute Spinal Cord Injury. J Trauma 66(3): 707-712 (2009).
14. Kortee KB, Gilbert M, Gorman PH, Wegener ST. Positive Psychological Variables in the Prediction of Life Satisfaction Following Spinal Cord Injury. Rehabilitation Psychology, 55(1): 40-47 (2010).
15. Gorman PH. Unilateral Hyperhidrosis From a Contralateral Source in a C4 Complete Tetraplegic Individual. J Spinal Cord Medicine. 33(4):428-430 (2010).
16. Gorman PH. The Review of Systems in Spinal Cord Injury and Dysfunction. Continuum: Lifelong Learning in Neurology, Volume 17(3) Neurorehabilitation; pp 630-634. (June 2011).
17. Geigle P, Frye S, Perreault J, Scott W, Gorman P. Atypical Autonomic Dysreflexia during Robotically Assisted Body Weight Supported Treadmill Training in an Individual with Motor Incomplete Spinal Cord Injury. J Spinal Cord Medicine. 36(2): 153-156 (2013).
18. Gorman PH, Geigle PR, Chen K, York H, Scott W. Reliability and Relatedness of Peak VO2 Assessments during Body Weight Supported Treadmill Training and Arm Cycle Ergometry in Individuals with Chronic Motor Incomplete Spinal Cord Injury. Spinal Cord, 52: 287-291 (2014).
19. Gorman PH, Scott W, York H, Theyagaraj M, Price-Miller N, McQuaid J, Eyvazzadeh M, Ivey FM, Macko RF. Robotically Assisted Treadmill Exercise Training for Improving Peak Fitness in Chronic Motor Incomplete Spinal Cord Injury: A Randomized Controlled Trial. J Spinal Cord Medicine. 39(1):32-44 (2016). PMID: 25520035
20. Perreault J, Geigle PR, Gorman PH, Scott WH. Improvement in Weight Loss and Ambulation Outcomes after Gastric Sleeve Surgery for a Person with Chronic Motor Incomplete Tetraplegia: Clinical Case Report. Spinal Cord. 54:750-753 (2016).
21. Estores I, Chen K, Jackson B, Lao L, Gorman PH. Auricular Acupuncture for Spinal Cord Injury Related Neuropathic Pain: A Pilot Controlled Clinical Trial. J Spinal Cord Medicine. 40(4): 432-438 (2017).
22. Goodrich C, York H, Shapiro A, Gorman PH. Focal Arm Weakness following Intradetrusor Botulinum Toxin Administration in Spinal Cord Injury: Report of Two Cases. J. Spinal Cord Medicine. Accepted for publication (2018).
23. Geigle P, Ogonowska-Slodownik A, Slodownik R, Gorman PH, Scott WH. Measuring peak volume of oxygen (peak VO2) in deep water for individuals with spinal cord injury: protocol development. J Aquatic

Phys Ther. 2018;26(1):30-35.

Research Support
1)CDMRP log # SC130234 Gorman, PH (co-PI: 5%) PI: Ann Spungen, Ph.D. 2014 - 2017
Department of Defense Congressionally Directed Medical Research Program – Spinal Cord Injury Research Program – Clinical Trial Award – Rehabilitation; A Randomized, Crossover Clinical Trial of Exoskeletal-assisted Walking to Improve Mobility, Bowel Function and Cardio-Metabolic Profiles in Persons with SCI.

2) Sub-Investigator, Local PI: Bizhan Aarabi, MD "A Multi-Center, Randomized, Placebo-Controlled, Double-Blinded, Trial of Efficacy and Safety of Riluzole in Acute Spinal Cord Injury"AOSpine North America Research Network SPN-12-001, 2014 -2016

3) Co-Investigator, Local PI: Bizhan Aarabi, MD "A Single-Blind, Randomized, Parallel Arm, Phase I Proof-of-Concept Study of the Safety and Efficacy of HuCNS-SC Transplantation in Cervical Spinal Cord Injury" StemCells, Inc. Protocol CL-SCI-201

4) 2010 - 2015 PI: 12% "Robotic Weight Support Treadmill Training and Aquatic Exercise Comparison in Chronic Motor Incomplete Spinal Cord Injury" Department of Defense Congressionally Directed Medical Research Program – Spinal Cord Injury Research Program – Clinical Trial Award – Rehabilitation, Contract No W81XWH-10-1-0981
First year direct costs: $ 467,164 Total direct costs $ 1,486,158

5) 2015 Co-Investigator; donated time, PI: Mary Claire Roghmann, MD "Antibiotic resistant Gram-negative bacteria and the Gut Microbiome in Adults with Spinal Cord Injury (SCI)" Funded by a Pilot Grant Award from VISN 5, Dept of Veterans Affairs.

6) 2012 - 2013 Co-PI 1.5% PI: Irene Estores, MD "Auricular Acupuncture for Spinal Cord Injury Related Neuropathic Pain" Paralyzed Veterans of America Research Foundation Grant #2806 Direct costs: $75,000

7) 2006 - 2010 PI, 20% "Cardiovascular Parameters for Lokomat Training in Chronic Incomplete Spinal Cord Injury" VA Merit Review Award, Rehabilitation Research and Development Service Annual direct costs: $150,000 Total direct costs: $450,000.

William Scott, MA
University of Maryland Rehabilitation and Orthopaedic Institute

(no CV uploaded)

Leslie VanHeil, PT, DScPT
Shepherd Center

(no CV uploaded)

Keith Tansey, MD PhD
Methodist Rehabilitation Center

(no CV uploaded)

W Sweatman, PhD
Shepherd Center

(no CV uploaded)

Paula Geigle, PT, MS, PhD
University of Maryland Rehabilitation and Orthopaedic Institute

(no CV uploaded)

Beyond the SLP's Role: Early Initiation of Pediatric Multidisciplinary Pathways for Comprehensive Care

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Kayla Maldonado, MS, CCC-SLP, CBIS
Children's Hospital Los Angeles

CV:

K. Tatiana Maldonado, MS, CCC-SLP, CBIS
1020 Doreen Place, #2, Venice CA, 90291
Tel: 213-422-9206 Ktm244@gmail.com

EXPERIENCE

Speech-Language Pathologist II, Children's Hospital Los Angeles, Los Angeles, CA (2014-Present)
Full-time employment in the acute care medical setting, focusing on the complex medical needs of patients ranging in age from high risk infants to young adults. Consistent coverage provided to pediatric rehabilitation unit and outpatient clinics. Certified bilingual employee (English and Spanish) with ability to interpret complicated medical information. Clinical roles and committee involvement listed in designated sections provided below.

Speech-Language Pathologist, Shady Grove Adventist Hospital, Shady Grove, MD (2013-2014)
Per-diem employment in the acute care medical setting, focusing on adults with dysphagia and acute cognitive-linguistic impairments following stroke and/or traumatic brain injury. Instrumental assessment and clinical bedside assessments of swallow completed.

Staff Speech-Language Pathologist , National Rehabilitation Hospital, Washington DC (2012-2014) Full-time employment in the racute rehabilitation setting focsing on the complex medical needs of pediatric and adult patients following acute Spinal Cord Injury and Traumatic Brain Injury. Clinician roles and mentorship listed in designated sections provided below.

EDUCATION

Master of Science Degree, Gallaudet University
Speech-Language Pathology

Bachelor of Arts Degree, University of California, Los Angeles (UCLA)
Linguistics; Psychology

CERTIFICATION AND MEMBERSHIPS

American Speech-Language-Hearing Association (ASHA), Certificate of Clinical Competency, 2012- present

American Spinal Injury Association, Pediatric Subcommittee Member, 2016-present

American Spinal Injury Association Member, 2015-present

California Speech and Language Pathology State Licensure, 2014-2016

California Children's Service (CCS Paneled), 2014-present

California Speech and Language Pathology State Licensure, 2014-2016

Maryland Speech and Language Pathology State Licensure, 2013-2014

Washington D.C. Speech and Language Pathology State Licensure, 2012-2014

National Student Speech-Language Hearing Association (NSSHLA), 2011-2012

COMMITTEE AFFILITIATION AND MENTORSHIP

Children's Hospital Los Angeles: Dysphagia Committee member; Systems Improvement Committee member; Competancy Working Group member

National Rehabilitation Hospital: Trainer and Mentor for Modified Barium Swallow Study (MBSS) candidacy and placement of Passy Muir Speaking Valve (PMSV).

PRESENTATIONS
Children with Spinal Cord Injury: A Complex Road to Management of Voice and Swallow Function (November 9, 2017). American Speech-Language-Hearing Association (ASHA) Annual Convention. Los Angeles, CA
Swallow Safety and Voice with SCI: The Pediatric Speech Pathologist's Role (April 26-29). American Spinal Injury Association (ASIA) 2017 Annual Scientific Meeting. Albuquerque, New Mexico

AWARDS/NOMINATIONS

Pediatric Aural Rehabilitation Emphasis (PARE) Grant, 2010

Clinician of the Year Award, Gallaudet University, 2011

PROFESSIONAL ORGANIZATIONAL AFFILIATION/ROLES

Gabriel House (Ensenada, Mexico): Biannually volunteer in collaboration with USC and the Pasadena Rotary Club to provide communication supports, education to house staff and therapists, and dysphagia assessment for high risk children and young adults in Mexico (2015-present).

AssistiveWare: Provided feedback on Spanish language AAC product (Proloquo2GOo) , including changes to vocabulary and grammar. These products assist patients that cannot communicate verbally. (2015-2016).

Katy Peck, MA, CCC-SLP, CBIS
Children's Hospital Los Angeles

CV:
Katy Peck, M.A., CCC-SLP, CBIS, CLC, BCS-S Master of Arts Degree, Eastern Michigan University
Speech and Language Pathology

Bachelor of Arts Degree, Michigan State University
Audiology and Speech Sciences

Postgraduate Credential, California State University
Physical and Health Impairments- Pending
321 12th St Apt #2, Huntington Beach, CA 92648
Tel: 949 382-5314 Kpeckfrost@yahoo.com

EXPERIENCE
Speech and Language Pathologist II, Hoag Hospital, Newport Beach, CA (December 2015-June 2016)
Per diem employment in the acute care medical setting, focusing on adults with dysphagia. Instrumental assessment and clinical bedside assessments of swallow completed.

Speech and Language Pathologist IV, Children's Hospital Los Angeles, Los Angeles, CA (2006-Present)
Full-time employment in the acute care medical setting, focusing on the complex medical needs of patients ranging in age from high risk infants to young adults. Clinical roles, mentorship responsibilities, and committee involvement listed in designated sections provided below.

Post Baccalaureate Instructor, Chapman University, Orange, CA (2014-Present)
Instructor for the Post Baccalaureate Program in Communication Sciences and Disorders Department, Anatomy and Physiology Course (Fall 2014) and Clinical Methods and Procedure (Spring 2015).

Pediatric Clinical Specialist, Passy Muir, Inc. (2010-Present)
Consultant providing education in multiple forums, including: In-services, special event webinars, exhibits, and poster sessions. Developed materials for the Passy Muir website, including: videos of treatment approaches and instrumental assessment, responses to frequently asked questions, and forms to track therapy data and wear-time.

Speech and Language Pathologist, May Center for NeuroRehabilitation, Brockton, MA (2005-2006)
Full-time employment in a nonpublic school for children with acquired brain injury in school, residential, and vocational settings. Participated in staffing and chart rounds; completed Individualized Education Plans (IEP); provided interdisciplinary collaboration with allied health, nursing, behavioral analyst, educational supervisors, teachers, family services, and vocational counselors. Participated in Modified Barium Swallow Studies (MBSS) and provided ongoing management of dysphagia. Physical and Psychological Management Training (PMT) used for crisis behavior management.

Speech and Language Pathologist, Children's Hospital of Orange County, Orange, CA (2004-2005)
Per diem employment in inpatient and outpatient medical settings. Performed diagnostic assessments and provided therapy for children who sustained brain injuries or suffered other serious medical conditions, which resulted in cognitive-communication deficits.

Speech and Language Pathologist, SeaStar School for NeuroEducation, Tustin, CA (2003-2005)
Full-time employment in a non-profit private school setting serving students (5-21 years old) who sustained acquired brain injuries. Lead therapist and supervisor for contracted service providers. Served on school-wide committees to address clinical issues and develop curriculum standards. Managed behaviors using principles of Applied Behavioral Analysis (ABA), including: Documentation of incidents, data collection, and application of Professional Assault Response Training (PART) principles in crisis management. In-services to staff and caregivers on topics relative to dysphagia management provided.

Speech and Language Pathologist, Alex Center, Tustin, CA (2000-2003)
Responsibilities consistent with those listed above for the SeaStar School for NeuroEducation. The Center was managed by Bancroft NeuroHealth, prior to transition in management to the Brain Injury Foundation.

Speech and Language Pathologist, Tustin Speech and Language Center, Tustin, CA (2000-2005)
Full-time therapist (transitioned to per diem employment) serving multiple populations in an outpatient setting. Populations included the following: craniofacial, aphasia, dysphagia, brain injury, early intervention, hearing impairment, voice, and sensory integration.

Speech and Language Pathologist, Orange Grove Rehabilitation Hospital, Orange Grove, CA (2000-2001)
Part-time therapist (contracted) in a subacute rehabilitation setting. Responsible for diet-texture analysis, clinical bedside swallow examinations, and treatment of cognitive linguistic deficits.

EDUCATION

Master of Arts Degree, Eastern Michigan University
Speech and Language Pathology

Bachelor of Arts Degree, Michigan State University
Audiology and Speech Sciences

Postgraduate Credential, California State University
Physical and Health Impairments- Pending

CERTIFICATION AND MEMBERSHIPS

American Speech-Language-Hearing Association (ASHA), Certificate of Clinical Competency, 1998- present

American Brain Injury Association, Certified Brain Injury Specialist (CBIS), 2005-present

California Speech and Language Pathology State Licensure, 2000-present

Massachusetts Speech and Language Pathology State Licensure, 2005-2008

California Children's Services (CCS Paneled), 2006-present

Certified Lactation Educator, UCSD Extension, 2011-present

Board Certified Specialist, Swallowing and Swallowing Disorders, April 2013-present

COMMITTEE AFFILITIATION AND MENTORSHIP
American Speech-Language-Hearing Association Program Planning Committee (2013-2014 Annual Convention)

Board Certified Specialist, Swallowing and Swallowing Disorders Mentor, May 2013-present

Children's Hospital Los Angeles: Dysphagia Committee Cochair, Patient Family Education Committee

Member (Hospital-wide and Department), Lactation Task Force Member, and Lead Trainer (Instrumental Assessment, Feeding/ Swallowing, and Tracheostomy and Mechanical Ventilation)

PRESENTATIONS
Children with Spinal Cord Injury: A Complex Road to Management of Voice and Swallow Function (November 9, 2017). American Speech-Language-Hearing Association (ASHA) Annual Convention. Los Angeles, CA
Deconstructing Inpatient Pediatric Dysphagia: Comparing Acute Care and Intensive Feeding Program Models (November 10, 2017). American Speech-Language-Hearing Association (ASHA) Annual Convention. Los Angeles, CA
Infant Swallowing Dysfunction and Feeding: It's a lot to Digest (August 28, 2017). Gateway to Reaching Optimal Weight through Healthy Feeding (GROW) Symposium. Los Angeles, CA.
Swallow Safety and Voice with SCI: The Pediatric Speech Pathologist's Role (April 26-29). American Spinal Injury Association (ASIA) 2017 Annual Scientific Meeting. Albuquerque, New Mexico
Tales of Children After Tracheotomy: Understanding the Breathing-Swallowing Dyad (November 18, 2016). American Speech-Language-Hearing Association (ASHA) Annual Convention. Philadelphia, PA
Aerodigestive and Developmental Benefits of Passy-Muir Valve Use (October 20, 2016). Invited speaker PCS Grand Round. Los Angeles, CA
Communication Vulnerability: Chronicle of Lost Voices, Misinterpretations, and Blurred Exchanges (April 28, 2016). Anaheim, CA
One Way Valve Use in Pediatrics: Developmental and Clinical Implications in Speech and Swallow Intervention (April 28, 2016). Anaheim, CA
The Team Approach to Evaluation and Management of the Tracheostomized and Mechanically Ventilated Patient (September 25, 2015). Los Angeles, CA
The Team Approach to Evaluation and Management of the Tracheostomized and Mechanically Ventilated Patient (August 29, 2015). Oakland, CA

CSHA Annual Convention, Long Beach, CA., (March 15, 2015). Children with Trach, Dysphagia, and a One Way Valve: It's a lot to Digest.
Passy-Muir Speaking Valve: Awakening a Child's Upper Airway to Unleash Speech and Swallow Potential (November 20, 2014). American Speech-Language-Hearing Association (ASHA) Annual Convention. Orlando, FL.
15th Annual Pediatric Nursing Conference "Touching the Future of Children", Hershey, PA, (October 28, 2014). Passy-Muir Speaking Valve: Awakening a Child's Upper Airway to Unleash Speech and Swallow Potential. Penn State Hershey Children's Hospital.
ANCC National Magnet Conference, Dallas, TX, (October 8-10, 2014). Cost Effective Inter-professional Patient Family Education Innovations that Improve Care Outcomes.
ArSHA Annual Convention, Tuscan, AZ, (April 11, 2014). Pediatric Communication and Dysphagia Management using the Passy-Muir Valve.

CSHA Annual Convention Oral Presentation, San Francisco, CA, (March 28, 2014). Optimizing Pediatric Communication and Dysphagia Management using the Passy-Muir Valve.
CSHA Annual Convention Poster, San Francisco, CA, (March 28, 2014). Passy-Muir Speaking Valve Use with Chronically Ventilated Children.
Passy-Muir Special Event Webinar (December 12, 2013). Declined Candidacy or Patient Refusal: Tales of Tribulations and Success.

Children's Hospital Los Angeles, Los Angeles, CA (November 12, 2013). Pediatric Dysphagia: Critical Thinking Related to Instrumental Assessment. Weingart Auditorium.
The 18th Annual Saban Research Institute 18th Annual Poster Session, Anita S. Watson Courtyard, The Saban Research Institute of Children's Hospital Los Angeles (6/3/13). Passy-Muir Speaking Valve Use with Chronically Ventilated Children.
The Patient Care Service Research Day, Los Angeles, CA (4/30/13). Passy-Muir Speaking Valve Use with Chronically Ventilated Children.

Navy Medical Center, San Diego, CA (11/30/12). Dysphagia Grand Rounds.

American-Speech-Language-Hearing Association Annual Convention, Atlanta, GA (11/17/12). PMV: Keeping it on and therapeutic steps to follow.

2012 Division of Pediatric Rehabilitation Medicine Research Fair Poster Presentation, Los Angeles, CA (9/19/12). Two Poster Presentations: Communication Vulnerability and Comparison of SIMV+PS and AC modes in chronically ventilated children.

Children's Hospital Los Angeles, Los Angeles, CA (August 20, 2012). G.R.O.W. Gateway for Reaching Optimal Weight through Healthy Feeding. Feeding/Swallowing Challenges: Insight from Speech-Language Pathology and Child Life Specialist. Katy Peck, M.A., CCC-SLP, CBIS, CLE and Carol Kim, M.S., CCLS

National Breastfeeding Awareness Week, Los Angeles, CA (8/6/12). Two Poster Presentations: Skin-to-Skin and Breastfeeding Across the World.

Passy-Muir Special Event Webinar (May 21, 2012). PMV: Keeping it on and therapeutic steps to follow.

Children's Hospital Los Angeles, Los Angeles, CA (May 14, 2012). Passy-Muir Valve: Multidisciplinary Implementation.

Rady Children's Hospital, San Diego, CA (April 11, 2012). Passy-Muir Valve: Pediatric Implementation.

PUBLICATIONS

Peck, K and Loffredo, K., Augmentative and Alternative Communication Needs and Patient Family Education in Marshall, L (2016) Mastering Patient and Family Education: A Handbook for Success. Sigma Theta Tau International, Indianapolis, IN., 235-264.
Goff, S, Peck, K, and Gorry, S., Interprofessional Education Strategies in Marshall, L (2016) Mastering

Patient and Family Education: A Handbook for Success. Sigma Theta Tau International, Indianapolis, IN., 81-103.
Peck, K. and Rappaport, K. (2013). Altered Consistencies of Liquid in the Treatment of Children with Dysphagia. Infant Child & Adolescent Nutrition (ICAN), 5(4), 215-220.

Children with Trachs: Facilitating Speech and Swallowing (December, 2010). Advance Magazine for Speech-Language Pathologists and Audiologists [Vol. 20, Issue 25, Pg. 5].

Assessment of Ventilation, Comfort, and Speech while using Different Ventilator Modes and/or a Passy-Muir Speaking Valve in Children Requiring Home Mechanical Ventilation (Sohn E, Peck K, Keens TG, and Davidson-Ward SL). Investigator in an Institutional Review Board (IRB) approved study with manuscript in the pre-submission stage of publication.

AWARDS/NOMINATIONS

Karen Livingston Research Award for Rehabilitation, recipient of the award for a poster submission entitled, Passy-Muir Speaking Valve Use with Chronically Ventilated Children (November 11, 2013).

Nominated for the Morris and Mary Press Humanism Award, Children's Hospital Los Angeles (March 2012).

PROFESSIONAL ORGANIZATIONAL AFFILIATION/ROLES

Mentor for candidates seeking Board Certified Swallowing Specialist (BCS-S) Certification, nominated position: Active role 2013-present.

ASHA Program Planning Committee (nominated position) for the annual convention 2014. Swallow and Swallowing Disorders Division (SIG 13) responsible for review of submissions. Designated invited speakers for the conference and participated in group planning meetings.

California Speech and Hearing Association (CSHA): District 8 Program Planning Committee. Responsible for CEU planning and convention content selection for the 2015 annual convention.

Gabriel House (Ensenada, Mexico): Volunteered in collaboration with USC and the Pasadena Rotary Club to provide communication supports, education to house staff and therapists, and dysphagia assessment for high risk children and young adults in Mexico (January 2-4,2015).

Establishing a high-throughput approach combined with advanced analytics for the discovery of peripheral RNA biomarkers in SCI

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Nikos Kyritsis, PhD
University of California San Francisco (Ucsf)

CV:
Positions and Honors

Positions and Employment

2009-2013 Graduate student, International Max Planck Research School, Dresden, Germany

2013-2014 Postdoctoral Research Associate, Center for Regenerative Therapies Dresden (CRTD), Dresden, Germany

2015- Postdoctoral Fellow, University of California San Francisco (UCSF), San Franscisco, CA

Other Experience and Professional Memberships

2006 Summer Internship, Clinical Microbiology Lab at the University Hospital of Patras, Greece

2007-2009 Diploma student, Laboratory of General Biology, University of Ioannina, Greece

2007- Member, Panhellenic Association of Bioscientists

2010- Member, Hellenic Society for Neurosciences

Honors

2009 Awarded a fellowship for studies abroad from the Charalambous-Kolokytha Foundation, Nafpaktos, Greece

2012 EMBO Travel Grant for participation in the EMBO Conference “The molecular and cellular basis of regeneration and tissue repair”, Oxford, UK

2013 DIGS – BB Travel Award for participation in the Abcam Meeting “New Avenues for Brain Repair: Programming and Reprogramming the Central Nervous System”, Cambridge, MA

2013 Award from the Berlin – Brandenburg School for Regenerative Therapies Ph.D. for the most outstanding publication for progress in Regenerative Medicine accepted by a peer review journal, Berlin, Germany

2014 CRTD e.V. award (friends and donors of CRTD) for the best Ph.D. thesis of the year 2013, Dresden, Germany

2014 Received the prestigious EMBO Long Term Fellowship for postdoctoral research at the Beattie & Bresnahan Laboratory

2018 Received a Wings for Life Fellowship for postdoctoral research at the Beattie & Bresnahan Laboratory

Contributions to Science

My first experience in laboratory research was in 2007 when I started working as a Diploma student in the

lab of Prof. Georgatos at the University of Ioannina in Greece. My project was to test whether a certain outer nuclear membrane protein, the Lamin B Receptor (LBR) was involved in the differentiation process of mouse embryonic stem cells. The project had a great success. I cloned the wild type form of LBR as well as two mutant versions that are the cause of the Pelger–Huët anomaly and Greenberg dysplasia and created mouse embryonic stable stem cell lines. Interestingly, the lines expressing the mutant versions of LBR appeared perfectly physiological while cells were pluripotent. After induction of differentiation cells carrying the mutant
versions of LBR failed to differentiate and died via apoptosis. This small project was a part of a much bigger one and unfortunately it has not been published yet due to the great lack of funds in Greece as a result of the financial crisis.

After obtaining my Diploma in Greece, I joined the International Max Planck Research School in Dresden, Germany and the laboratory of Prof. Michael Brand as a graduate student. This was the most fruitful collaboration I have ever made and resulted in great discoveries. The main purpose of my project was to discover the molecular mechanisms that underlying the tremendous regenerative ability of the zebrafish brain after a severe traumatic brain injury. After performing a hightroughput RNA-seq experiment we found many genes that alter significantly their gene expression. Further data analysis and functional studies revealed the
crucial roles of some of these genes and resulted in some nice publications:
1. Kizil C, Kyritsis N, Dudczig S, Kroehne V, Freudenreich D, Kaslin J, Brand M. Regenerative neurogenesis from neural progenitor cells requires injury-induced expression of Gata3. Dev Cell. 2012 Dec 11; 23(6):1230-7.

2. Kizil C, Dudczig S, Kyritsis N, Machate A, Blaesche J, Kroehne V, Brand M. The chemokine receptor cxcr5 regulates the regenerative neurogenesis response in the adult zebrafish brain. Neural Dev. 2012; 7:27. PMC3441421

Besides the great number of differentially expressed genes we identified in our RNA-seq, a pathway enrichment analysis which followed led us to the great discovery that the immune response is necessary for

the initiation of the regenerative upon traumatic brain injury. We also revealed the discovery of the leukotriene pathway in the same process and our efforts had a great impact to the scientific community after they were published in Science.
3. Kyritsis N, Kizil C, Zocher S, Kroehne V, Kaslin J, Freudenreich D, Iltzsche A, Brand M. Acute inflammation initiates the regenerative response in the adult zebrafish brain. Science. 2012 Dec 7; 338(6112):1353-6.

This novel finding led me to the idea that unraveling how the immune system is regulated upon traumatic CNS injury in regenerative organisms might be the key to really understand the neuroinflammatory response in mammalian models after injury and therefore to molecularly “tune” it towards a beneficial, restorative outcome.
This idea and several more were put in paper in two nice reviews that I co-authored:

4. Kyritsis N, Kizil C, Brand M. Neuroinflammation and central nervous system regeneration in vertebrates. Trends Cell Biol. 2014 Feb; 24(2):128-35.

5. Kizil C, Kyritsis N, Brand M. Effects of inflammation on stem cells: together they strive? EMBO Rep. 2015 Apr; 16(4):416-426.

This path and my contributions in science led me to my current position at the laboratory of Dr. Beattie and Dr. Bresnahan trying to use my expertise in molecular neurobiology and neuroimmunology and understand how the neuroinflammatory response as well as the systemic inflammatory response contributes to the outcome after traumatic spinal cord injury.

D. Research Support

On-going Research Support

Xuan Duong-Fernandez, BS
University of California San Francisco (Ucsf)

(no CV uploaded)

Leigh Thomas, BS
University of California San Francisco (Ucsf)

(no CV uploaded)

Debra Hemmerle, RN
University of California San Francisco (Ucsf)

(no CV uploaded)

William Whetstone, MD
University of California San Francisco (Ucsf)

(no CV uploaded)

Vineeta Singh, MD
University of California San Francisco (Ucsf)

(no CV uploaded)

Lisa Pascual, MD
University of California San Francisco (Ucsf)

(no CV uploaded)

Jason Talbott, MD, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Michael Oldham, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Geoffrey Manley, MD, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Sanjay Dhall, MD
University of California San Francisco (Ucsf)

(no CV uploaded)

Adam Ferguson, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Jacqueline Bresnahan, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Michael Beattie, PhD
University of California San Francisco (Ucsf)

(no CV uploaded)

Stakeholder Perceptions and Clinical Assessments of Cardiometabolic Disease after Spinal Cord Injuries and Disorders

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Ryan Solinsky, MD
Spaulding Rehabilitation Hospital

CV:
Name: Ryan J. Solinsky, MD

Faculty Academic Appointments:
10/2017 Instructor Physical Medicine & Rehabilitation Harvard University

Appointments at Hospitals/Affiliated Institutions:
10/2017 Active Staff Physical Medicine and Rehabilitation Spaulding Rehabilitation Hospital
10/2017 Trauma Rehabilitation Consultant Trauma Surgery Beth Israel Deaconess Medical Center

Honors and Prizes:
2013 House Officer of the Week Harborview Medical Center Clinical
2014 Interdisciplinary Champion Award Academy of Spinal Cord Injury Professionals Clinical
2014, 2015, 2016 Rehabilitation Medicine Scientist Training Program (RMSTP) Pre-applicant Scholar Association of Academic Physiatrists Research
2016 Visiting Spinal Fellow Burwood Hospital, Christchurch, New Zealand Clinical
2016 Ernest Bors Award for Scientific Development Academy of Spinal Cord Injury Professionals Research
2016 Outstanding Resident Award University of Washington, Department of Rehabilitation Medicine Clinical
2016 Outstanding Resident Research Award University of Washington, Department of Rehabilitation Medicine Research
2017 Golden Apple Teaching Award nominee Rutgers New Jersey Medical School Teaching
2017 Best Oral Presentation Award International Autonomic Symposium, Vancouver, BC, CAN Research
2017 Post-doctoral Fellow Research Award Kessler Institute for Rehabilitation Research
2018 Ruth L. Kirschstein National Research Service Award National Institute of Health Research

Report of Funded and Unfunded Projects
Funding Information:

Past

2015-2016 The Role of Bioelectric Signaling in Maintenance of CGRP Neurons Following Spinal Cord Injury
Walter C and Anita C Stolov Foundation, Institutional Research Grant
PI ($1,700)

2015-2016 Bidirectional Interface for Organ Nerve Integrated Control (Phase 1)
GlaxoSmithKline Innovation Challenge
Co-I, PI: Chet Moritz, PhD ($280,000) â€“ Investigator Initiated

2016-2017 Bidirectional Interface for Organ Nerve Integrated Control (Phase 2)
GlaxoSmithKline Innovation Challenge
Co-I, PI: Chet Moritz, PhD ($1,000,000) â€“ Investigator Initiated

Current

2013 - 2018 Hybrid-FES Exercise to Prevent Cardiovascular Declines in Acute and Chronic SCI

National Institute of Health, R01HL117037-04
Co-I, PI: J. Andrew Taylor, PhD

2016 - 2021 Understanding risks of cardiometabolic disease following (SCI)
National Institute of Health, Spinal Cord Injury Models Systems, 90SI5023
Co-I (site PI: Ross Zafonte, DO. National PI: Mark Nash, PhD)

2015-2020 Design and Development of a Soft Upper-Extremity Assistive Device for Individuals with Upper-Extremity Impairments
National Science Foundation, CBET1454472
Co-I, PI: Conor Walsh, PhD

2018-2020 Identifying key non-traditional risk factors for cardiovascular disease following spinal cord injury
Milbank Foundation
PI

2018-2020 Functional Imaging and Resting State Connectivity in Human Spinal Cord at 7 Tesla
NIH-NIBIB National Institute of Biomedical Imaging and Bioengineering, R00-EB016689-06
Co-I, PI: Robert Barry, PhD

Training Grants and Mentored Trainee Grants

2018-2020 Spinal Cord Neuromodulation through transcutaneous spinal cord stimulation
PI, co-mentors: Ross Zafonte, DO/ Felipe Fregni, MD, PhD
T32NS100663-01. Training Program in Recovery and Restoration of CNS Health and Function. Department of Neurology, Massachusetts General Hospital

Report of Local Teaching and Training
Teaching of Peers (e.g., CME and other continuing education courses):
No presentations below were sponsored by outside entities

2018 Updates on Autonomic Dysreflexia
NeuroRehabilitation Course, Harvard Medical School Waltham, MA

Local Invited Presentations:
No presentations below were sponsored by outside entities

2014 Neglected problems: Neurogenic bowel and skin in patients with spinal cord injuries (Invited presentation) - Inaugural practitioner roundtable
Center for Sensorimotor Neural Engineering- University of Washington
2015 Improving functional outcomes following SCI with aggressive primary prevention (Invited presentation)
VA Puget Sound- Spinal Cord Injury Division
2017 Detailed characteristics of autonomic dysreflexia (Invited presentation)
PM&R Department- Kessler Institute for Rehabilitation
2017 Rising above autonomic dysreflexia: one step at a time (Invited presentation) - Resident/Fellow Research Day
PM&R Department- Kessler Institute for Rehabilitation
2018 Variable Obstacles to Recovery: Minimizing Secondary Complications following Spinal Cord Injury (Invited presentation)
Spaulding Campaign Executive Committee
2018 Acute Spinal Cord Injury Management (Invited presentation)
Trauma Surgery Department - Beth Israel Deaconess Medical Center
2018 Starting the Conversation: Neuroethical considerations for Brain Computer Interfaces after SCI (Invited presentation)

Harvard Collaborative Spinal Cord Injury Work Group

Report of Regional, National and International Invited Teaching and Presentations
No presentations below were sponsored by outside entities

National

2016 A Retrospective Review of Safety Using a Nursing Driven Autonomic Dysreflexia Protocol for Patients with Spinal Cord Injuries (Invited presentation - Bors Award Lecture)
Academy of Spinal Cord Injury Professional Annual Assembly
Nashville, TN
2017 Introduction to the ISNCSCI exam (Invited presentation)
University of Washington
Seattle, WA
2017 Understanding the International Standards exam: historical insights for contemporary mastery (Selected Oral Abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
Denver, CO
2017 Autonomic Dysreflexia elaborated: New emerging details from statistical analysis (Selected Oral Abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
Denver, CO
2018 Intravesicular Lidocaine: Pharmacodynamics and Effects on Autonomic Dysreflexia Prevention (Selected Oral Abstract)
American Spinal Injury Association Annual Assembly
Rochester, MN
2018 Charcot Spine following Spinal Cord Injury: Lessons from Big Data (Selected from abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
New Orleans, LA
2018 Pearls from the Changing Landscape of Autonomic Dysreflexia (Selected oral abstract)
American Academy of Physical Medicine and Rehabilitation Annual Assembly
Orlando, FL

International

2016 The emerging evidence behind electrically modulated neural plasticity (Invited Visiting Fellow Lecture)
Burwood Hospital Spinal Rounds
Christchurch, New Zealand
2016 International Spinal Cord Injury Medicine Care Paradigms (Invited Visiting Fellow Lecture)
Burwood Hospital Spinal Rounds
Christchurch, New Zealand
2017 Foundational research for a next-generation, optogenetics based bladder neuroprosthesis for individuals with spinal cord injury (Selected Oral Abstract)
4th International Autonomic Symposium
Vancouver, BC, Canada
2018 Transcutaneous Spinal Cord Stimulation to Regulate Autonomic Signals after SCI (Invited Lecture)
Prof. Winfried Mayr Neuromodulation Lab Meeting, Medical University of Vienna
Vienna, Austria

Report of Clinical Activities and Innovations
Current Licensure and Certification:

2017 Certification, American Board of Physical Medicine and Rehabilitation
2017 Massachusetts Medical License

Report of Scholarship
Peer-Reviewed Scholarship in print or other media:

Research Investigations
1. Solinsky R, Beaupre GS, Fredericson M. Variable Criteria for Patellofemoral Bracing among Sports Medicine Professionals. PM&R 2014;6:498-505.
2. Solinsky R, Svircev JN, James JJ, Burns SP, Bunnell AE. A Retrospective Review of Safety Using a Nursing Driven Autonomic Dysreflexia Protocol for Patients with Spinal Cord Injuries. Journal of Spinal Cord Medicine 2016;39(6):713-9.
a. Winner of Ernest Bors award for best annual paper published in the Journal of Spinal Cord Medicine by a trainee, 2016
3. Solinsky R, Bunnell AE, Linsenmeyer TA, Svircev JN, Engle A, Burns SP. Pharmacodynamics and effectiveness of topical nitroglycerin at lowering blood pressure during autonomic dysreflexia. Spinal Cord 2017;55(10):911-4.
4. Solinsky R, Kirshblum SC, Burns SP. Exploring detailed characteristics of autonomic dysreflexia. Journal of Spinal Cord Medicine 2017. Advanced e-publication: DOI 10.1080/10790268.2017.1360434
5. Solinsky R, Kirshblum SC. Challenging questions regarding the International Standards. Journal of Spinal Cord Medicine 2017. Advanced e-publication: DOI 10.1080/10790268.2017.1362929
6. Solinsky R, Kirshblum SC. Quantifying and reducing retained botulinum toxin post-injection. PM&R (accepted)
7. Solinsky R, Specker-Sullivan L. Ethical issues surrounding a new generation of neuroprostheses for patients with spinal cord injuries. PM&R (accepted)
8. Brockbrader M, Francisco G, Olsen J, Solinsky R, Lee R, Boninger M. Brain Computer Interfaces in Rehabilitation Medicine. PM&R (accepted)

Other peer-reviewed scholarship
1. Solinsky R, Bunnell AE. Rehabilitation of a Patient with Overlap of Acute Transverse Myelitis and Bickerstaffâ €™s Brainstem Encephalitis: A Case Report. Spinal Cord Series and Cases 2016: 1, 15032

Non-peer reviewed scholarship in print or other media:

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings:
1. Solinsky R, Moritz CT. A Conceptual Neuroprosthetic Device to Detect and Ameliorate Autonomic Dysreflexia. Justus F. Lehmann Symposium, poster presentation, 2014
2. Solinsky R, Sunshine M, Richner T, Moritz CT. An emerging optogenetic neuroprosthesis to address lower urinary tract dysfunction in individuals with spinal cord injuries Justus F. Lehmann Symposium, poster presentation, 2015
3. Solinsky R, Bunnell AE. Autonomic Dysreflexia Treatment with Nitroglycerin Paste. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, 2015
4. Solinsky R, Sunshine M, Mondello S, Richner T, Moritz CT. Neuroprostheses Use in the Management of Neurogenic Bladder. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, 2015
5. Solinsky R, Bunnell AE. The Role of Chronicity of Spinal Cord Injury on Duration of Autonomic Dysreflexia. American Academy of Physical Medicine & Rehabilitation Annual Assembly, poster presentation, PM&R 2015 (7): 9S, S128
6. Solinsky R, Mondello S, Sunshine M, Moritz CT. Aberrant spinal CGRP afferent fiber arborization: A potential linchpin to target in limiting secondary complications from SCI. Justus F. Lehmann Symposium, poster presentation, 2016
7. Richner T, Boyer S, Smith J, Mahoney B, Ranganathan V, Solinsky R, Moore G, Horwitz G, Anikeeva P, Moritz CT. Development of a Wireless Neuromodulation System for the Bladder. North American Neuromodulation Society and Neural Interfaces joint Meeting, 2016
8. Solinsky R. Aberrant Calcitonin-Gene Related Peptide Afferent Arborization: Preventing Secondary Complications. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, Journal of Spinal Cord Medicine 2016 (39):5,584
9. Richner T, Mahoney B, Boyer S, Ranganatha V, Sunshine M, Moore G, Solinsky R, Horwitz G, Anikeeva P, Smith J, Fawcett J, Moritz CT. Closed-loop neural interfacing strategies for the bladder. Society for Neuroscience Annual Conference, poster presentation, 2016
10. Chiou M, Solinsky R, Nieves JD. Decompression sickness, an uncommon cause of spinal cord injury and

cerebrovascular accident: a case report. Association of Academic Physiatrists Annual Conference, poster presentation, 2017
11. Solinsky R, Linsenmeyer TA. Impact of intravesicular lidocaine to decrease blood pressure in those with SCI at risk for autonomic dysreflexia. 4th International Autonomic Symposium, 2017

Luisa Betancourt, MD, MS
University of Miami Miller School of Medicine

(no CV uploaded)

Ralph Marino, MD
Thomas Jefferson University Hospital and Magee Rehabilitation Hospital

(no CV uploaded)

Annie Kim, BS
Thomas Jefferson University Hospital and Magee Rehabilitation Hospital

(no CV uploaded)

Mary Schmidt Read, PT, DPT, MS
Thomas Jefferson University Hospital and Magee Rehabilitation Hospital

(no CV uploaded)

Jan Schwab, MD, PhD
The Ohio State University Wexner Medical Center

(no CV uploaded)

Aash Bhandari, BS
The Ohio State University Wexner Medical Center

(no CV uploaded)

J. Andrew Taylor, PhD
Spaulding Rehabilitation Hospital

(no CV uploaded)

Yaga Szlachcic, MD
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Linda Sutherland, BS
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Mark Nash, PhD
University of Miami Miller School of Medicine

(no CV uploaded)

Linking Behaviour Change Techniques (BCTs) and theory to existing community-based peer training program - Motivation

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Krista Best, PhD
Cirris

CV:
Peer-reviewed journal articles

Best KL, Miller WC, Eng JJ, Routhier F. Influence of peer-led wheelchair training on manual wheelchair skills and participation in older adults: A randomized controlled feasibility trial. APMR (accepted June 2018).

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF. Development of a Smartphone-delivered Peer Physical Activity Counselling (SPPAC) program for individuals with spinal cord injury: Protocol of a mixed-methods approach. Journal of Medical Internet Research (accepted, April 2018).

Beaudoin M, Best KL, Routhier F. Systematic review of peer-led rehabilitation interventions for improving mobility and participation outcomes among adults with mobility impairments. Disabil Rehabil (accepted June 2018).

Choukou M-A, Best KL, Burns A, Craven BC, Noreau L, Hitzig S. Identifying and classifying quality of life tools for assessing bowel dysfunction after spinal cord injury. Topics of J Spinal Cord Med (in press) 2018

Charette C, Best KL, Smith EM, Miller WC, Routhier F. Walking aids use in Canada: Prevalence and demographic characteristics among community-dwelling users. Phys Ther J, 2018 (in press).

Best KL, Sweet SN, Arbour-Nicitopoulos KP. Community-based physical activity and mobility interventions: Present reflections and future directions. Journal of Spinal Cord Medicine, September 2017;40(6):777-82.

Best KL, Miller WC, Routhier F, Eng JJ. Feasibility of the trial procedures for a randomized controlled trial of a community-based peer-led wheelchair training program for older adults. Pilot and Feasibility Studies 2017;4:18.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Feasibility of the Smartphone-delivered Peer Physical Activity Counselling (SPPAC) program for manual wheelchair users: study protocol of a randomized controlled trial. Journal of Medical Internet Research: Research Protocols 2017 Apr;6(4):e69.

Best KL, Hitzig S, Ethans K, Craven BC, Noreau, L. Identifying and classifying quality of life tools for assessing neurogenic bladder after spinal cord injury. Journal of Spinal Cord Medicine 2017;40(5):505-29.

Best KL, Miller WC, Routhier F, Eng JJ. Systematic review and meta-analysis of the effect of peer-led self-management programs on physical activity. International Journal of Behavioural Medicine 2016;23(5):527-38.

Torkia C, Best KL, Miller WC, Eng JJ. Balance confidence: A predictor of perceived physical function, perceived mobility, and perceived recovery one year following inpatient stroke rehabilitation. Archives of Physical Medicine and Rehabilitation 2016;97:1064-71.

Best KL, Miller WC, Huston G, Routhier F, Eng JJ. Pilot study of a peer-led wheelchair training program to improve self-efficacy using a manual wheelchair: A randomized controlled trial. Archives of Physical Medicine and Rehabilitation 2016 Jan;97(1):37-44.

Best KL, Routhier F, Miller WC. A description of manual wheelchair skills training in clinical practice in

Canadian rehabilitation centres. Disability and Rehabilitation: Assistive Technology, 2015;10(5):393-400.

Best KL, Miller WC, Routhier F. A description of manual wheelchair skills training curriculum in entry-to-practice occupational and physical therapy programs in Canada. Disability and Rehabilitation: Assistive Technology, 2015;10(5):401-6.

Giesbrecht E, Best KL, Miller WC. Pushing spokes for older folks: two novel approaches for improving manual wheelchair use among older adults. OT Now 2014,16(4), 1.

Best KL, Miller WC, Routhier F, Eng JJ, Goldsmith C. Feasibility of the Wheelchair Self-Efficacy Enhanced for Use (WheelSeeU) training program: study protocol for a randomized controlled trial. Canadian Journal of Occupation Therapy. 2014;81(5):308-19. DOI: 10.1177/0008417414546743

Sakakibara BM, Miller WC, Souza M, Nikolova V, Best KL. Wheelchair skills training to improve confidence with using a manual wheelchair among older adults: A pilot study. Archives of Physical Medicine and Rehabilitation, 2013;94(6):1031-7.

Mortenson WB, Hurd Clark L, Best KL. Caught in the middle: Prescribers' experiences with power mobility prescription. American Journal of Occupational Therapy 2013;67:1–8.

Best KL, Desharnais G, Boily J, Camp PG, Miller WC. The effect of a trunk release maneuver on peak pressure index, trunk displacement and perceived discomfort in older adults seated in a high Fowler's position: a randomized controlled trial. BMC Geriatrics 2012 16;12:72.

Best KL, Miller WC. Physical activity in older community-dwelling Canadians who use wheelchairs: A population study. Journal of Aging Research 2011, Article ID 147929, doi:10.4061/2011/147929

Kirby RL, Walker RA, Smith C, Best KL, Thompson KJ, MacLeod DA. Manual wheelchair-handling skills by caregivers using new and conventional rear anti-tip devices: Randomized controlled trial. Archives of Physical Medicine and Rehabilitation 2009;90:1680-4.

Best KL, Kirby RL, Smith C. Comparison of the pushrim-activated power-assisted wheelchair and a manual wheelchair on the wheelchair skills test. Disability and Rehabilitation 2006;28(4):213-20.

Best KL, Kirby RL, Smith C, MacLeod DA. Wheelchair Skills for Community-Based Manual Wheelchair Users: A Randomized Controlled Trial. Archives of Physical Medicine and Rehabilitation 2005;86(12):2316-23.

Kirby RL, Mifflen NJ, Thibault DL, Smith C, Best KL, Thompson KJ, MacLeod DA. The manual wheelchair-handling skills of caregivers and the effect of training. Archives of Physical Medicine and Rehabilitation 2004;85(12):2011-9.

Coolen AL, Kirby RL, Landry J, MacPhee AH, Dupuis D, Smith C, Best KL, Mackenzie DE, MacLeod DA. Wheelchair skills training program for clinicians: a randomized controlled trial with occupational therapy students. Archives of Physical Medicine and Rehabilitation 2004;85(7): 1160-7.

Kirby RL, Dupuis DJ, Macphee AH, Coolen AL, Smith C, Best KL, Newton AM, Mountain AD, Macleod DA, Bonaparte JP. The wheelchair skills test (version 2.4): measurement properties. Archives of Physical Medicine and Rehabilitation 2004;85(5):794-804.

Peer-reviewed conference abstracts

Best KL, Routhier F, Sweet SN. A case study exploring the satisfaction of psychological needs for physical activity a female who completed a Smartphone-delivered Peer Physical Activity Counselling (SPPAC) program. International Society for Physical Medicine and Rehabilitation (ISPRM), Paris, France, July 8-12, 2018

Beaudoin M, Best KL, Routhier F. Systematic review of peer-based rehabilitation interventions for improving mobility and participation among adults with mobility impairments. 12th World Congress of the International Society of Physical and Rehabilitation Medicine, Paris, France, July 8-12, 2018.

Beaudoin M, Best KL, Atack L, Hitzig S, F Routhier, Kairy D. USAbility of the Participation and Quality of Life (PAR-QoL) Outcomes Tool-kit Website for Spinal Cord Injury. International Society for Physical Medicine and Rehabilitation (ISPRM), Paris, France, July 8-12, 2018

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF. Smartphones and peers: a feasible approach to influencing leisure-time physical activity, wheelchair skills and satisfaction with participation among manual wheelchair users. Nordic Seating Symposium, Copenhagen, Denmark, September 5-6, 2018.

Beaudoin M, Best KL, Routhier F, Raymond E. Influence d'un programme d'entrainement à la conduite d'un fauteuil roulant manuel sur la participation des utilisateurs : Approche méthodologique. 9e Colloque étudiant du CIRRIS, Quebec, QC, February 13, 2018.

Rushton PW, Bouthilier L, Best KL. We can play a sport, even in a wheelchair': Exploration of wheelchair confidence in youth wheelchair sport participation. 6th European Seating Symposium, Dublin Ireland, June 12-15, 2018.

Best KL, Smith EM, Miller WC. A wheelchair skills training 'bootcamp' improves occupational therapy students' self-efficacy for assessing, training and spotting manual and power wheelchair skills. 6th European Seating Symposium, Dublin Ireland, June 12-15, 2018.

Degan R, Kirsten H, Borisoff JF, Miller WC, Best KL. Smartphone delivered peer physical activity program for spinal cord injury. Canadian Association of Occupational Therapists, Vancouver, BC, June 20-23, 2018.

Choukou MA, Best KL, Routhier F, Borisoff J, Gagnon D. Propulsion Aids for Manual Wheelchairs: A Scoping Review. The 34th International Seating Symposium, Vancouver, BC, Canada, March 6-9, 2018.

Best KL, Routhier F, Miller WC. Older adults perceptions and experiences with a peer-led wheelchair training program. The 34th International Seating Symposium, Vancouver, BC, Canada, March 6-9, 2018.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Preliminary exploration of change in leisure-time physical activity, wheelchair mobility and satisfaction with participation among manual wheelchair users who completed a Smartphone-delivered Peer Physical Activity Counselling (SPPAC) program. The 34th International Seating Symposium, Vancouver, BC, Canada, March 6-9, 2018.

Best KL. The Wheelchair Skills Program (WSP): An evidence-based program for the assessment and training of wheelchair skills. Proceedings of the 1st Oceania Seating Symposium, Mauriora: Empowerment, control, choice. Rotorua, NZ, Nov 20-22, 2017.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Development and evaluation of a 'Smartphone-delivered Peer Physical Activity Counselling' program for manual wheelchair users. Proceedings of the 1st Oceania Seating Symposium, Mauriora: Empowerment, control, choice. Rotorua, NZ, Nov 20-22, 2017.

Best KL, Miller WC, Routhier F, Eng J. Peer-led wheelchair training improves how older adults in the community use manual wheelchairs. Proceedings of the 1st Oceania Seating Symposium, Mauriora: Empowerment, control, choice. Rotorua, NZ, Nov 20-22, 2017.

Best KL, Gainforth H, Sweet S, Caron J, Flaro H. "[My life] would not have been the same without them": The role of peer mentorship among adults with a physical disability. Proceedings of the Canadian Society for Psychomotor Learning and Sport Psychology (SCAPPS) conference. October 12-14, 2017, St. John's, NL.

Harman K, MacKenzie D, Best K, Harris J, Tawashy A. Interprofessional approaches to adapted sport: Theory and Practice of 3 Para-Sports. 18th Annual Symposium on Medical/Health Professions Education

Research and Interprofessional Education. Halifax, CA, June 15-16, 2017.

Bourassa S, Best KL, Routhier F, Borisoff J, Martin Ginis KA. Use of Actigraphy to measure physical activity in manual wheelchair users in the real world. 2nd Quebec Congress in Rehabilitation-Adaptation Research (REPAR). Montreal, QC, Canada, May 18-19, 2017.

Choukou MA, Best KL, Routhier F, Borisoff JF, Gagnon D. Propelling Aids for Manual Wheelchairs: A Scoping Review. 2nd Quebec Congress in Rehabilitation-Adaptation Research (REPAR). Montreal, QC, Canada, May 18-19, 2017.

Best KL, Routhier F, Miller WC, Eng JJ. Peer-led wheelchair training is feasible for older adults and improves how the wheelchair is used in the community. 2nd Quebec Congress in Rehabilitation-Adaptation Research (REPAR). Montreal, QC, Canada, May 18-19, 2017.

Boutin J, Routhier F, Best KL, Noreau L, Martin Ginis KA. Developpment et evaluation d'un prototype d'outil de transfert de connaisance pour les utilisateurs d'aides techniques aà la mobilité: Approche méthodologique. 2nd Quebec Congress in Rehabilitation-Adaptation Research (REPAR). Montreal, QC, Canada, May 18-19, 2017.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Refinement of a Smartphone-delivered Peer Physical Activity Counselling (SPPAC) program for manual wheelchair users. Proceedings of the International Society for Prosthetics and Orthotics World Congress, Cape Town, South Africa, May 8 -11, 2017.

Best KL, Miller WC, Routhier F, Eng JJ. Feasibility of a self-efficacy enhanced peer-led wheelchair training program for older adults. Proceedings of the International Society for Prosthetics and Orthotics World Congress, Cape Town, South Africa, May 8 -11, 2017.

Miller WC, Smith EM, Best KL, Giesbrecht EM, Imam B. Crafting blueprints for disruptive rehabilitation innovations. Proceedings of the International Society for Prosthetics and Orthotics World Congress, Cape Town, South Africa, May 8 -11, 2017.

Best KL, Giesbrecht EM, Rushton, PW, Sakakibara, BM, Miller WC. With a confident mind and hands on the wheels, you can steer yourself in any direction you feel. Proceedings of the International Society for Prosthetics and Orthotics World Congress, Cape Town, South Africa, May 8 -11, 2017.

Bourassa S, Best KL, Routhier F, Borisoff J, Martin Ginis KA. Actigraphy: a valid 'real-world' measure of physical activity for manual wheelchair users with SCI. Crossroads Interdisciplinary Health Research Conference, Halifax, CA, March 10-11, 2017.

Best KL, Noreau L, Hitzig S, Routhier F. Identifying and classifying quality of life tools for assessing living environment after spinal cord injury. Proceedings of the American Congress of Rehabilitation Medicine, Progress in Rehabilitation Research, Chicago, IL, US Nov 2-4, 2016.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Development of a Smartphone-delivered Peer Physical Activity Counselling Program for Manual Wheelchair Users: A Mixed-methods Approach. Proceedings of the American Congress of Rehabilitation Medicine, Progress in Rehabilitation Research, Chicago, IL, US Nov 2-4, 2016.

Best KL, Miller WC, Huston G, Routhier F, Eng JJ. Peer-led wheelchair training improves wheelchair use self-efficacy and wheelchair skills: A pilot randomized controlled trial. Proceedings of the American Congress of Rehabilitation Medicine, Progress in Rehabilitation Research, Chicago, IL, US, Nov 2-4, 2016.

Best KL, Miller WC, Routhier F, Eng JJ. Peer-led self-management programs effectively increase physical activity: A systematic review and meta-analysis. Proceeding of the What Works Global Summit: Putting Evidence to Work. London, Eng, UK Sept 26-28, 2016.

Best KL, Routhier F, Sweet SN, Arbour-Nicitopoulos KP, Borisoff JF, Noreau L, Martin Ginis KA. Développement d'un programme de consultation en activité physique par les pairs via téléphone intelleigent destiné à des utilisateurs de fauteuil roulant manuel. Les journées de la Recherché en Santé, de la Faculté de médecine et de ses centres affiliés. May 25-26, 2016 Québec, QC.

Best KL, Miller WC, Routhier F, Eng JJ. Peer-led wheelchair training improves wheelchair use self-efficacy and wheelchair skills in community-living manual wheelchair users. REPAR/ INTER Journée Scientifique et Assemblée annuelle La recherche intersectorielle en réadaptation : une valeur essentielle pour stimuler le développement d'une société québécoise inclusive. Quebec City, QC, May 17, 2016.

Best KL, Smith C, Giesbrecht EM, Archambault P, Rushton PW, Smith E, Kirby KL, Miller WC. The evolution of wheelchair skills training in Canada – From gold to bold! Proceedings of the 5th European Seating Symposium, Dublin Ireland, June 13-15, 2016.

Casey J, Gowran RJ, Rushton PW, McDonald R, Giesbrecht E, Best KL, Smith C. Appropriate wheelchair provision is primary for living: Reflecting on Education for Professional Practice. Proceedings of the 5th European Seating Symposium, Dublin Ireland, June 13-15, 2016.

Best KL, Noreau L, Hitzig SL, Routhier F. Identifying and classifying quality of life tools for assessing living environment after spinal cord injury. Praxis Bridging the Gaps: From SCI Research to Improved Outcomes. Vancouver, BC. April 25-27, 2016.

Best KL, Hitzig SL, Kairy D, Noreau L, Routhier F. Theoretical Considerations on Quality of Life Outcome Tool Selection for Spinal Cord Injury. Praxis Bridging the Gaps: From SCI Research to Improved Outcomes. Vancouver, BC. April 25-27, 2016.

Best KL, Miller WC, Eng JJ, Routhier F, Goldsmith C. Feasibility of a Peer-led, Self-Efficacy Enhanced Wheelchair Training Program for older adults: Study protocol of a randomized controlled trial. The 32nd International Seating Symposium: Imagine the Possibilities. Vancouver, BC, Mar 2-4, 2016.

Best KL, Noreau L, Routhier F, Kairy D, Hitzig SL. Theoretical considerations on quality of life outcome tool selection for spinal cord injury. Proceedings of the Paralyzed Veterans of America's Summit 2015, Jacksonville, FL, September 1-3, 2015.

Best KL, Noreau L, Routhier F, Kairy D, Hitzig SL. Theoretical considerations on quality of life outcome tool selection for spinal cord injury. Proceedings of the 4th ISCoS and ASIA joint scientific meeting. Montreal, QC, May 14-16 2015.

Hitzig SL, Best KL, Burns AS, Craven BC, Noreau L. Identifying and classifying quality of life tools for assessing bowel dysfunction after spinal cord injury. Proceedings of the 4th ISCoS and ASIA joint scientific meeting. Montreal, QC, May 14-16 2015.

Best KL, Hitzig SL, Ethans K, Craven BC, Noreau L. Identifying and classifying quality of life tools for assessing bladder dysfunction after spinal cord injury. Proceedings of the 4th ISCoS and ASIA joint scientific meeting. Montreal, QC, May 14-16 2015.

Best KL, Miller WC, Huston G, Routhier F, Eng JJ. Self-efficacy enhanced wheelchair training for manual wheelchair users: A pilot randomized controlled trial of a peer-led approach. International Society for Prosthetics and Orthotics World Congress, Lyon, FR, June 22-25, 2015 (accepted, presentation declined).

Best KL, Miller WC, Eng JJ, Routhier F, Goldsmith C. Wheelchair training Self-efficacy enhanced for Use (WheelSeeU): Peer-led wheelchair training for older adults. 13e Carrefour des Connaissances. Montreal, QC, April 14, 2015.

Best KL, Johnson MP, Miller WC, Eng JJ, Routhier F, Goldsmith C. Wheelchair training Self-efficacy enhanced for Use (WheelSeeU): Peer-led wheelchair training for older adults. Quebec Congress in Adaptation-Rehabilitation Research. Boucherville, QC, May 20-22, 2015.

Best KL, Miller WC, Huston G, Routhier F, Eng JJ. Self-efficacy enhanced wheelchair training for manual wheelchair users: A pilot randomized controlled trial. The 43rd Annual Scientific and Educational Meeting of the Canadian Association on Gerontology, Niagara Falls, ON, October 16-18, 2014.

Best KL, Miller WC, Routhier F. A description of manual wheelchair skills training curriculum and clinical practice in Canadian institutions. Proceedings of the 42th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology, Halifax, NS, October 17-19, 2013.

Lucy Norris, BA (Honours)
Motivation Charitable Trust

(no CV uploaded)

Utilizing a Phenomenological Approach to Examine the Psychological and Emotional Experience of Sexuality for Men after Spinal Cord Injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Jacqueline Kathnelson, PhD (c)
York University

CV:
Name: Jacqueline Kathnelson
Position Title: PhD Candidate, Kinesiology and Health Science, York University
A. Personal Statement
I began my research in spinal cord injury (SCI) in the area of exercise and the central pattern generator. During this time, I had an opportunity to travel to Montreal to assist with a study on sexual function after SCI. I immediately became interested in this topic as it was evident to me through my communications with patients and participants of the study that sexuality and sexual function were a top priority for this population, yet it had been greatly ignored in the eyes of these individuals. I completed a Master's degree which investigated the impact of urinary incontinence as a result of SCI on sexuality for women with SCI, and then moved to Vancouver to begin PhD studies that would investigate existing tools and resources to support sexual readjustment post-injury. I am currently a PhD (c) at York University where I am researching the psychological, emotional and psychosocial aspects of sexuality for men after SCI. I am highly passionate about this area of research, and I am hopeful that further investigation into this topic will lead to improvements in quality of life for this population.
B. Publications and Presentations
(a) Journal Articles
Cramp, J., Courtois, F., & Ditor, D. (2014). Sexuality for women with spinal cord injury. Journal of Sex and Marital Therapy. 11;41(3):238-53.
Cramp, J., Courtois, F., Connolly, M., Cosby, J., & Ditor, D. (2014). The impact of urinary incontinence on sexual function and sexual satisfaction in women with spinal cord injury. Sexuality and Disability. 32(3): 397-412.
(b) Published Abstracts
Cramp, J., Courtois, F., Connolly, M., Cosby, J., & Ditor, D. (2013). The lived experience of sexuality for women with spinal cord injury: The impact of urinary incontinence. Topics in Spinal Cord Injury Rehabilitation, 19(1), 28-29.
(c) Conference Proceedings
Factors Maternity Care Providers Counsider When Counselling Women About A Trial of Labour (TOL) After Cesarean Section (CS): Findings From A Discrete Choice Conjoint Experiment.
Kurtz Landy, C., Sword, W., McDonald, S., Biringer, A., Cramp, J., Dawdy, J., Angle, P., Cunningham, C., Heaman, M., Morris, M., Shannon, H., Blake, J. Vancouver, British Columbia, 2017.
Factors Obstetricians, Family Physicians and Midwives Consider When Counselling Pregnant Women with a Previous Cesarean Section on Delivery Method. 72nd SOGC Annual Conference, Vancouver, British Columbia, June 14th-17th 2016.
Marsielle, France- Courtois, F., Cramp, J., Charvier, K., & Ditor, D. Fear of urinary incontinence during sexual activities in women with spinal cord injury. 19th European Congress of Physical and Rehabilitation Medicine, Marsielle, France, May 26th-31st 2014.
Chicago, Illinois- Cramp, J., Courtois, F., Connolly, M., Cosby, J., & Ditor, D. The lived experience of sexuality for women with spinal cord injury: The impact of urinary incontinence. ASIA 60th annual meeting, Chicago, Illinois, May 5th-8th 2013.
Nice, France- Cramp, J., Courtois, F., Connolly, M., Cosby, J., & Ditor, D. The lived experience of sexuality for women with spinal cord injury: The impact of urinary incontinence. SIFUD-PP (Société Interdisciplinaire Francophone d'UroDynamique et de Pelvi-Périnéologie) 36th annual meeting, Nice, France, June 14-16th 2013.
Istanbul, Turkey- Cramp, J., Courtois, F., Connolly, M., Cosby, J., & Ditor, D. The lived experience of sexuality for women with spinal cord injury: The impact of urinary incontinence. ISCoS 52nd annual meeting, Istanbul, Turkey, October 28th- 30th 2013.
(d) Poster Presentations

Counselling women about a trial of labour (TOL) versus a planned repeat Caesarean section(CS): Providers' attitudes and motivational factors Montreal, Quebec- Kurtz Landy, C ., Sword, W., Cunningham, C., Cramp, J., Dawdy, J., Angle, P., Birringer, A.,Heaman, M., McDonald, S., McDonald, H., Shannon, H., Morris, M., & Blake, J. (Submitted)
Banff, Alberta- Kurtz Landy, C., Sword, W., Cramp, J., Dawdy, J., McDonald, S., Biringer, A., Cunningham,C., Angle,P., Heaman, M., McDonald, H., Shannon, H., Morris, M., & Blake, J. Factors maternity care providers consider when counselling pregnant women with a previous Cesarean section on delivery method. Canadian National Perinatal Research Meeting, Banff, Alberta, February 10th-13th 2016.
Banff, Alberta- Lee, M., Belagamage, L., Cochrane, D., Suto, M., Cramp, J., & Wada, M. Student Perceptions of mental health stigma through participatory action research. Canadian Association of Occupational Therapists Annual Conference, Banff, Alberta, April 19th-22nd 2016.
Health systems and other factors maternity care providers consider when counselling pregnant women with a previous Cesarean section on delivery method. 12th Annual Canadian Association of Health Services and Policy Research Conference, Montreal, Quebec, May 26th-28th 2015.
(e) Invited Presentations
Vancouver, British Columbia- Cramp, J. The lived experience of sexuality for women with spinal cord injury: The impact of urinary incontinence. ICORD Trainee Research Symposium, Vancouver, British Columbia; International Collaboration on Repair Discoveries (ICORD); May 30th 2013
c. Community Involvement
Blusson Spinal Cord Centre- Perinatal Care for Women with Spinal Cord Injury meeting, Vancouver, BC, 2013
International Collaboration on Repair Discoveries (ICORD)- Spinal Chord Gala, Vancouver, BC, 2013
Neuromuscular and Motor Skills Acquisition Laboratory- Lab Coordinator, St. Catharines, ON, 2010-2012
Canadian Paraplegic Association- Wheels in Motion & Niagara Wheelchair Relay, St. Catharines, ON, 2009/2011

Christine Kurtz Landy, RN, PhD
York University

(no CV uploaded)

David Ditor, PhD
Brock University

(no CV uploaded)

Hala Tamim, PhD
York University

(no CV uploaded)

William Gage, PhD
York University

(no CV uploaded)

The relationship between breathing and seated balance and its impact on functionality in individuals with chronic spinal cord injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Anne Palermo, PT, DPT
University of Miami Miller School of Medicine

CV:
1) Date: September 2018
I. Personal
2) Name: Anne E Palermo, PT, DPT
3) Home Phone: 585-813-2634
4) Office Phone: NA
5) Home Address: 2550 SW 27th Ave Apt 601, Miami, FL 33133
6) Current Academic Rank: Graduate Student pursuing PhD
Current Track: Clinical and Research Physical Therapist
7) Primary Department: Department of Physical Therapy
8) Secondary or Joint Appointments: The Miami Project to Cure Paralysis
9) Citizenship: USA
10) Visa Type: NA
II. Higher Education
11) Institutional
University of Miami Miller School of Medicine
Department of Physical Therapy
Physical Therapy Clinical Doctorate (DPT)
May 2015

Niagara University
Department of Biochemistry, Chemistry & Physics
Bachelors of Science in Biochemistry, Biology Minor
May 2012

12) Non Institutional

American Spinal Injury Association Annual Scientific Meeting
Rochester, MN 2018

American Physical Therapy Association Combined Sections Meeting:
Indianapolis, ID 2015 (three poster presentations)
Annapolis, CA 2016
San Antonio, TX 2017
New Orleans, LA 2018

AM-PAC Day Conference, Boston, MA, April 2017

World Confederation of Physical Therapy Annual Conference
Singapore 2015 (poster presentation)

National Student Conclave: American Physical Therapy Association
Arlington, VA 2012
Salt Lake City, UT 2013
Louisville, KY 2014

13) Certification, licensure:
Physical Therapy License# 30571, Florida Board of Physical Therapy: (August 2015-Present)

Level II Ekso Certification 2015

AIS Exam Certification: 2015 - 2018

Physiotherapy Management of Spinal Cord Injuries Course, Physiopedia and the International Spinal Cord Society: 2014

OTAGO Certification: 2014

Polestar Mat Pilates Instructor: 2014

III. Experience
14) Academic (current bolded)

Undergraduate Research Assistant Organic Chemistry Lab
Department of Biochemistry, Chemistry & Physics
Niagara University, Niagara University, NY
Dr. Ronny Priefer, PhD
September 2009 – May 2012

Undergraduate Tutor/Recitation Leader in General Chemistry
Department of Biochemistry, Chemistry & Physics
Niagara University, Niagara University, NY
Dr. Christopher Stoj, PhD
September 2009 – May 2010

Graduate Teaching Assistant in Musculoskeletal I, Department of Physical Therapy
University of Miami, Coral Gables, FL
Dr. Michele Raya, PT, PhD
January 2014 – May 2014

Physical Therapy Student Intern, Outpatient Ortho/Sport Physical Therapy
Baptist Kendall and West Kendall, Kendall, FL
Carlos Falcon, PT
August 2013 – October 2013

Physical Therapy Student Intern, Outpatient Ortho/Sport Physical Therapy
Nova South Eastern University, Davie, FL
Dr. Peter Sprague, PT, DPT
October 2014 – December 2014

Physical Therapy Student Intern, Outpatient Ortho/Neuro Physical Therapy
Physical Therapy and Wellness Center, Miami, FL
Dr. Anna Tischenko, PT, PhD
January 2015 – March 2015

Physical Therapy Student Intern, Inpatient Acute Neruo Physical Therapy
Memorial Hermann Hospital, Houston, TX
Annie Tran, PT
March 2015 – May 2015

Research Physical Therapist, The Miami Project to Cure Paralysis
University of Miami, Miami, FL
September 2015 - present

Teaching Assistant in Neurological Evaluation, Department of Physical Therapy

University of Miami, Coral Gables, FL
Dr. Martha Bloyer, PT, DPT
October 2017 –December 2017

Course Master in Neurological Evaluation, Department of Physical Therapy
University of Miami, Coral Gables, FL
June 2018-Present

15) Hospital Appointments: None

16) Non-Academic

University of Miami, Miami, FL
Staff PT, Acute Care
Research PT, The Miami Project to Cure Paralysis
(August 2015-Present)

17) Military- none
IV. Publications
18) Books and monographs published:

1) Palermo AE, Maher JM, Baunsgaard CB, Nash MS. A Clinician-Focused Overview of Bionic Exoskeleton Use After Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. 2017. 23(3):234-244

19) Juried or refereed journal articles or exhibitions:

1) Eric Stoutenburg, Anne Palermo, Ronny Priefer. Thermochemical properties of dibenzyloxy disulfides. Thermochimica Acta. 551 (2013): 99-103.

20) Other works, publications and abstracts:

10) Maher JM, Baunsgaard CB, van Gerven JJ, Palermo A, Irwin R, Nash MS, (2017) Acute Effects of Bionic Ambulation on Metabolism and Substrate Utilization in Persons with Spinal Cord Injuries (SCI). (American Spinal Injury Association Annual Scientific Meeting)
9) Baunsgaard CB, Maher JM, van Gerven JJ, Palermo A, Irwin R, Nash MS, (2016) Energy Expenditure and Cardiovascular Drift Effect during an Extended Session of Bionic Walking. (American Spinal Injury Association Annual Scientific Meeting)
8) Baunsgaard CB, Maher JM, van Gerven JJ, Palermo A, Irwin R, Nash MS. (2016). Effects of Bionic Ambulation on Heart Rate Variability during Head Up Tilt in Persons with Spinal Cord Injury. (International Spinal Cord Society Annual Scientific Meeting)
7) Maher JM, Palermo A, Nash MS. (2016) Acute Effects of Bionic Ambulation on Metabolism and Substrate Utilization in Persons with Spinal Cord Injury. (University of Miami Neural Engineering Research Symposium)

6) Palermo A, Ingle JM, Moore LB, Willow BJ, Cohen M, Cahalin LP. Comparison of Inspiratory Performance in Division 1 Collegiate Athletes Using the Test of Incremental Respiratory Endurance (TIRE). Physiotherapy J May, 2015. (Poster Presentation WCPT Conference 2015, Singapore)
5) Ingle JM, Palermo A, Willow BJ, Moore LB, Feigenbaum LA, Raya M, Johnson K, Kaplan LD, Cohen M, Cahalin LP. Inspiratory Performance of Division 1 Collegiate Baseball Players is Related to Hip and Glenohumeral Motion. J Ortho Sports Phys Ther 45(1):A116-A117, 2015.(Poster Presentation CSM 2015, Indianapolis, Indiana)
4) Moore LB, Willow BJ, Ingle JM, Palermo A, Cohen M, Cahalin LP. Inspiratory performance of Division 1 Collegiate athletes compared to college wind, brass, and vocal musicians using the Test of Incremental Respiratory Endurance (TIRE). Cardiopulmonary Physical Therapy Journal 25(4):131, 2014. (Poster Presentation CSM 2015, Indianapolis, Indiana)
3) Willow BJ, Ingle JM, Palermo A, Moore LB, Cohen M, Cahalin LP. Inspiratory performance of wind, brass, and vocal musicians compared to string musicians. Cardiopulmonary Physical Therapy Journal 25(4):130, 2014. (Poster Presentation CSM 2015, Indianapolis, Indiana)

2) Palermo A, Rudzinski D, Priefer R. Thermolytic decomposition of di-Benzylic-di-alkoxy-di-sulfides. Eastern Colleges Sciences Conference. April 2010.
1) Palermo A, Rudzinski D, Priefer R. Thermolytic characteristics of di-Benzyloxy-di-sulfides. Rochester Academy of Science. November 2010.
21) Other works accepted for publication: None
V. Professional
22) Grants

Cahalin, L. (PI) May 2018 – May 2019
Seated Trunk Stability and Orthostatic Tolerance in SCI: Targeting the Diaphragm
Sponsor: Neilsen Foundation Allied Health Professional Research Award of ASIA
The goal of this project is to determine relationships between diaphragm volitional control, seated functional balance, and orthostatic tolerance in persons with a chronic spinal cord injury.
Role: Student Awardee

23) Editorial responsibilities: None

24) Professional and Honorary Organizations

2015-Present: Member of The Academy of Neurologic Physical Therapy

2012-Present: Member of the Florida Physical Therapy Association

2012-Present: Member of the American Physical Therapy Association

25) Honors and Awards
5. Neilsen Foundation Allied Health Professional Research Award of ASIA (2018- 2019)
4. Promotion of Doctoral Studies (PODS I) Award (2017-2018)
3. Florence P. Knedall Scholarship Award (2016-2017)
2. Mary McMillan Scholarship Award (2015)
1. University of Miami Department of Physical Therapy Chair's Award (2015)

26) Post-Doctoral Fellowships: None

27) Other Professional Activities:

Invited Participant of Foundation for Physical Therapy New Professionals Forum APTA
Combined Sections Meeting, New Orleans, LA (2018)

Invited Lecture: Use and Application of the AM-PAC Outcome Measure in Multiple Settings
Department of Physical Therapy, Clinical Doctorate Program
Course: Complex Patient
Course Master: Dr. Gregory Hartley, PT, DPT
2017, 2018

Creator: "Acute Care Pocket Guide"
Department of Physical Therapy, University of Miami Hospital
Clinical Outcome Measures, precautions, and applicable lab values to be used on a daily basis for more informed evidence based clinical practice in Acute Care
VI. Teaching
28) Teaching Awards Received: None

29) Teaching Specialization (courses taught): None

30) Thesis and Dissertation Advising/Post-doctoral student supervision: None

VII. Service

31) University Committee and Administrative Responsibilities:

Graduate Assistant: University of Miami Department of Physical Therapy Admissions, Reporting to Jhelane Vega and Dr. Michele Raya (May 2013-October 2014)

32) Community Activities

6) Volunteer Clinical Instructor for the University of Miami LAGO Pro-Bono Clinic (2015- Present)

5) Student Co-Founder of the University of Miami LAGO Pro-Bono Clinic (2013-2015)

4) Chair of Fundraising for Hurricane Challenge- a field day put on annually by the second year UMDPT class for children in the Miami-Dade community with disabilities (Nov 2013- May 2014)

3) Student Co-Chair of Physical Therapy Service trip to Costa Rica (Nov 2013- Nov 2014)

2) Student Co-Chair of Marquette Challenge fundraising efforts and Foundation for Physical Therapy national campaign at multiple conferences (June 2012- May 2015)

1) Ricky Palermo Spinal Injury Tournament and Fundraiser Volunteer (1996-Present)

Kelsey Garcia, PT, DPT
Jackson Memorial Hospital

(no CV uploaded)

Lawrence Cahalin, PT, PhD
University of Miami Miller School of Medicine

(no CV uploaded)

Mark Nash, PH.D., FACSM
The Miami Project to Cure Paralysis

(no CV uploaded)

Ontario Community Care Access Centre personal support services are woefully inadequate for individuals with spinal cord injury.

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Brian Chan, PhD
Toronto Rehabilitation Institute

CV:
Brian Chun-Fai Chan
brian.chan@uhn.ca

Academic Information

Current Post-doctoral fellowship
Toronto Rehabilitation Institute/Institute for Clinical Evaluative Sciences
Area of Focus: Spinal cord injury, health economics
Supervisors: Dr. B.C. Craven, Dr. W. Wodchis

2017 Doctor of Philosophy, University of Toronto
Pharmaceutical Sciences
Area of Focus: Chronic ulcers, spinal cord injury, administrative data
Supervisors: Dr. M. Krahn, Toronto General Hospital, Dr. N. Mittmann, Sunnybrook Health Sciences Centre

2003 Master of Science, University of Toronto
Pharmacology and Collaborative Program in Addiction Studies
Area of Focus: Smoking and Mental Illness, Smoking and Pregnancy
Supervisor: Dr. G. Koren, Hospital for Sick Children

2001 Honours B.Sc. Pharmacology, University of Toronto

Awards

Oct 2013, Ontario Graduate Scholarship
Oct 2014

Teaching experience

2017 Project tutor
Economic Evaluation Methods for Health Services Research, Institute for Health Policy, Management and Evaluation, University of Toronto

2017 Health Economics workshop
Canadian Acute and Ontario Spinal Cord Injury Research Network Meeting. May 13th 2017

Ad-hoc mentoring

2017-2018 Jawad Chishtie
PhD student, University of Toronto.

2017 Siya Khanna.
Undergraduate student, University of Toronto. Abstract and poster development

Administrative experience

2017-2018 Executive Board member
Canadian Association of Population Therapeutics. Scientific Program committee member and Marketing/Membership/Studentship committee member

2013-2014 Executive Board member â€“ student representative
Canadian Association of Population Therapeutics

Professional experience

2015-2017 Health Economist
Health Quality Ontario

2013-2015 Health Economist
Toronto Health Economic and Technology Assessment Collaborative/ Health Quality Ontario

Peer-Reviewed Journal Publications

2018 Chan BCF, Cadarette SM, Wodchis WP, Krahn MD, Mittmann N. The lifetime cost of spinal cord injury in Ontario, Canada: a population-based study from the perspective of the public health care payer. (The Journal of Spinal Cord Medicine: in press)

2018 Chan BCF, Craven BC, Furlan JC. A scoping review on health economics in neurosurgery for acute spine trauma. Neurosurgical Focus 2018; 44: E15

2018 Chan BCF, Cadarette SM, Wodchis WP, Mittmann N, Krahn MD. Lifetime cost of chronic ulcers requiring hospitalization in Ontario, Canada: a population-based study. Wound Medicine 2018; 20: 21-34

2017 Chan B, Cadarette S, Wodchis W, Wong J, Mittmann N, Krahn M. Cost-of-illness studies in chronic ulcers: a systematic review. Journal of Wound Care 2017; suppl 4: s4-s14

2016 Xie X, Lambrinos A, Chan B, et al. Mechanical thrombectomy in patients with acute ischemic stroke: a cost-utility analysis. CMAJ Open 2016; 4(2):E316-25

2014 Fowler RA, Mittmann N, Geerts W, Chan B et al. Cost-effectiveness of Dalteparin vs Unfractionated Heparin for the Prevention of Venous Thromboembolism in Critically Ill Patients. JAMA 2014; 312(20):2135-45

2013 Chan BC, Ieraci L, Mitsakakis N, Pham B, Krahn MD. Net costs of hospital-acquired and pre-admission pressure ulcers among older people hospitalized in Ontario. Journal of Wound Care 2013; 22(7): 341-2, 344-6

2013 Chan BC, Nanwa N, Mittmann N, Bryant D, Coyte PC, Houghton PE. The average cost of pressure ulcer management in a community dwelling spinal cord injury population. International Wound Journal 2013; 10(4): 431-40

Report Chapter

2014 Chan B, McIntyre A, Mittmann N, Teasell RW, Wolfe DL (2014). Economic evaluation of spinal cord injury. In Eng JJ, Teasell RW, Miller WC, Wolfe DL, Townson AF, Hsieh JTC, Connolly SJ, Noonan VK, Loh E, McIntyre A, editors. Spinal Cord Injury Rehabilitation Evidence. Version 5.0: p 1-21.

Peer-Reviewed Works in Progress

Non-Peer-Reviewed Works

Online Magazine (Acknowledge in Publication â€“ Not author)

2018 Rosenberg, E. Virtual care for spinal cord patients.
Published in UHN News, Feb. 2nd 2018
(http://www.uhn.ca/corporate/News/Pages/Virtual_care_for_spinal_cord_patients.aspx)

2018 Zeidenberg, J. Virtual care network to help patients with spinal cord injuries.
Published in Canadian Healthcare Technology, Jan. 31st 2018 (http://www.canhealth.com/blog/virtual-care-network-to-help-patients-with-spinal-cord-injuries.)

Health Quality Ontario Economic Reports

2016 Skin Testing for Allergic Rhinitis: A Health Technology Assessment
Ontario Health Technology Assessment Series; Vol. 16: No. 10, pp. 1-45, May 2016

2016 Intrathecal Drug Delivery Systems for Cancer Pain: A Health Technology Assessment
Ontario Health Technology Assessment Series; Vol. 16: No. 1, pp. 1-51, January 2016

2016 Intrathecal Drug Delivery Systems for Noncancer Pain: A Health Technology Assessment
Ontario Health Technology Assessment Series; Vol. 16: No. 1, pp. 1-77, January 2016

2015 Paclitaxel Drug-Eluting Stents in Peripheral Arterial Disease:
A Health Technology Assessment
Ontario Health Technology Assessment Series; Vol. 15: No. 20, pp. 1-62, November 2015

2015 Effect of Increased Intensity of Physiotherapy on Patient Outcomes After Stroke: An Economic Literature Review and Cost-Effectiveness Analysis
For stroke standalone project
Ontario Health Technology Assessment Series; Vol. 15: No. 7, pp. 1-43, March 2015

2014 Open versus arthroscopic versus mini-open rotator cuff repair surgery: An Economic Rapid review
For Quality Based Procedure: degenerative disorders of the shoulder project

2014 Cost-Effectiveness of Urgent Care for Transient Ischemic Attack: An Economic Rapid Review
For Stroke-TIA standalone project

2014 Care Coordination for Post-Acute Stroke/Chronic Obstructive Pulmonary Disease/Congestive Health Failure Clients: An Economic Rapid Review

For Quality Based Procedures: Community Stroke population project

2014 Home-based versus Centre-based Rehabilitation for Community Dwelling Post-Acute Stroke Patients: An Economic Rapid Review
For Quality Based Procedures: Community Stroke population project

2013 Optimizing Chronic Disease Management Mega-Analysis: Economic Evaluation (contributor)
Ontario Health Technology Assessment Series; Vol. 13: No. 13,
pp. 1-148, Sept 2013

Conference Presentations

Nov 2017 Care at Home for Individuals with Spinal Cord Injury. Presented at the 10 x 10 University of Toronto, Institute for Clinical Evaluative Sciences Research Day. Toronto, Ontario

Seminar presentations

Jun 2018 Applied Cost Analysis for Policy Decisions. Co-presented with Walter Wodchis at Institute for Clinical Evaluative Sciences Research and Analysis Rounds. Toronto, Ontario.

Dec 2017 Care at Home for Individuals with Spinal Cord Injury. Presented at Division of Physical Medicine and Rehabilitation, University of Toronto Research Day. Toronto, Ontario

Nov 2017 A Brief Introduction to Economic Evaluations in Health Care. Presented to the Clinical, Social and Administrative Pharmaceutical Sciences Department, Graduate Department of Pharmaceutical Sciences, University of Toronto. Toronto Ontario

Poster presentations

Jan 2018 Chan BC, Wiest MJ, Howe S, Craven BC. Virtual support platform for individuals with spinal cord injury requires an evaluation framework re-think. Presented at 2018 Toronto Rehabilitation Institute Research Day. Toronto, Ontario

Nov 2017 Chan BC, Craven BC, Cadarette S, Wodchis W, Mittmann N, Krahn M. Expanded Cohort Identification algorithm identifies greater population service need and potential health care costs. Presented at 7th National Spinal Cord Injury Conference. Niagara Falls, Ontario

Oct 2017 Chan BC, Wodchis W, Craven BC. The Importance of Economic Evaluations in Spinal Cord Injury Research. Presented at the International Spinal Cord Society Annual Conference. Dublin, Ireland

Oct 2017 Chan BC, Wodchis W, Craven BC. Higher drug cost for pregabalin and gabapentin should not dissuade clinicians from prescribing this intervention in spinal cord injured individuals with neuropathic pain. Presented at the International Spinal Cord Society Annual Conference. Dublin, Ireland

June 2017 Chan BC, BC, Craven, Wodchis W. The Importance of Economic Evaulations in Rehabilitation Research. Presented at GTA Rehab Network Best Practices Day. Toronto, Ontario

May 2017 Chan BC, BC, Craven, Cadarette S, Wodchis W, Mittmann N, Krahn M. Public Health Care Payer Costs for Traumatic Spinal Cord Injury. Presented at Canadian Acute and Ontario Spinal Cord Injury Research Network Meeting. Toronto, Ontario

Dec 2015 Chan BC, Cadarette S, Wodchis W, Mittmann N, Krahn M. The Lifetime Cost of Spinal Cord Injury in an Ontario Cohort. Presented at Clinical, Social and Administrative Pharmacy Seminars. Faculty of Pharmacy, University of Toronto. Toronto, Ontario

Nov 2014 Chan BC, Cadarette S, Wodchis W, Mittmann N, Krahn M. The Health Care Cost of Spinal Cord Injury in an Ontario Cohort. Presented at Canadian Association of Population Therapeutics Annual Conference 2014. Toronto, Ontario

Nov 2013 Chan BC, Cadarette S, Wodchis W, Mittmann N, Krahn M. Health Care Resource Utilization of Recently Spinal Cord Injured Individuals: Preliminary Results. Presented at Canadian Association of Population Therapeutics Annual Conference 2013. Toronto, Ontario

Nov 2013 Chan BC, Cadarette S, Wodchis W, Mittmann N, Krahn M. Systematic Review of Cost-of-Illness Studies in Chronic Ulcer Population. Presented at Canadian Association of Population Therapeutics Annual Conference 2013. Toronto, Ontario

Administrative activities

2017 Journal peer-review
Journal of Neurotrauma (2017), Journal of Health Services Research & Policy (2017)

2013-2015 Conference abstract reviewer
CADTH Symposium (2013, 2015), Canadian Association for Population Therapeutics conference (2013-2014)

Catharine Craven, MD
Toronto Rehabilitation Institute

(no CV uploaded)

Susan Jaglal, PhD
Department of Physical Therapy

(no CV uploaded)

Diffusion Tensor Imaging as a Biomarker to Identify Spinal Cord Integrity in Pediatric Spinal Cord Injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Laura Krisa, PhD
Thomas Jefferson University

CV:
Address: 901 Walnut Street, Room 514, Philadelphia, PA 19107
Telephone: 215-503-1645
Name of Educational Program and Institution: Department of Physical Therapy, Department of Occupational Therapy, Jefferson School of Health Professions, Thomas Jefferson University

Education:
08/2005 – 09/2010 Drexel University College of Medicine
Neuroscience, PhD
Philadelphia, PA

09/2000 – 05/2004 Millersville University
Biology, BS
Millersville, PA

Employment and Positions Held:

7/2018-Present Associate Professor
Department of Physical Therapy
Department of Occupational Therapy
Jefferson College of Health Professions
Thomas Jefferson University
Philadelphia, PA

7/2013 – 6/2018 Assistant Professor
Department of Physical Therapy
Department of Occupational Therapy
Jefferson College of Health Professions
Thomas Jefferson University
Philadelphia, PA

09/ 2010 - Present Scientific Staff
Shriners Hospitals for Children
Philadelphia, PA

03/2013 – 07/2013 Project Manager
Globus Medical Inc.
Clinical Research
Audubon, PA

09/2010 – 03/2013 Postdoctoral Fellow
Shriners Hospitals for Children
Clinical Research Department
Philadelphia, PA

10/2010 - 03/2013 Adjunct Assistant Professor
Temple University School of Medicine
Center for Neural Repair and Rehabilitation
Philadelphia, PA

09/2004 – 08/2005 Project Manager
Lancaster Laboratories
Lancaster, PA

Peer Reviewed Publications:

1. Krisa L, Runyen M., Detloff M.R. Translational Challenges of Rat Models of Upper Extremity Dysfunction After Spinal Cord Injury.Top Spinal Cord Inj Rehabil 2018;24(2):195-205. [Epub ahead of print]

2. Alizadeh M, Shah P, Conklin CJ, Middleton DM, Saksena S, Flanders AE, Krisa L, Mulcahey MJ, Faro SH, Mohamed FB. Application of Color Transformation Techniques in Pediatric Spinal Cord MR Images: Typically, Developing and Spinal Cord Injury Population Journal of Digital Imaging, 16, January 2018 epub ahead of print.

2. Jones, LAT,Bryden A, Wheeler T, Tansey KE, Anderson KD., Beattie MS., Blight A, Curt A, Field-Fote E, Guest, JD., Hseih J, Jakeman LB., K-R Sukhvinder, Krisa L, Lammertse DP. ,Leiby B, Marino R, Schwab JM., Scivoletto G, Tulsky, DS., Wirth E, Zariffa J, Kleitman N, Mulcahey MJ, Steeves JD. Considerations and recommendations for selection and utilization of upper extremity clinical outcome assessments in human spinal cord injury trials. Spinal Cord 2017 Dec 28.

3. Krisa L, Vogel, LC., Wecht, JM., Use of Ambulatory blood pressure monitoring in adolescents with SCI: a case series. Spinal Cord Series and Cases 3. 2017 Dec 12.

4. Alizadeh M, Fisher J, Saksena S, Sultan Y, Conklin CJ, Middleton DM, Finsterbusch J, Krisa L, Flanders AE, Faro SH, Mulcahey MJ, Mohamed FB. Reduced Field of View Diffusion Tensor Imaging and Fiber Tractography of the Pediatric Cervical and Thoracic Spinal Cord Injury. J Neurotrauma. 2017 Dec 18. [Epub ahead of print]

5. Alizadeh M, Conklin CJ, Middleton DM, Shah P, Saksena S, Krisa L, Finsterbusch J, Faro SH, Mulcahey MJ, Mohamed FB. Identification of ghost artifact using texture analysis in pediatric spinal cord diffusion tensor images. Magn Reson Imaging. 2017 Nov 15;47:7-15.

6. Saksena S, Middleton DM, Krisa L, Shah P, Faro SH, Sinko R, Gaughan J, Finsterbusch J, Mulcahey MJ, Mohamed FB. Diffusion Tensor Imaging of the Normal Cervical and Thoracic Pediatric Spinal Cord. AJNR Am J Neuroradiol. 2016 Jul 14. [Epub ahead of print].

7. Conklin CJ, Middleton DM, Alizadeh M, Finsterbusch J, Raunig DL, Faro SH, Shah P, Krisa L, Sinko R, Delalic JZ, Mulcahey MJ, Mohamed FB. Spatially selective 2D RF inner field of view (iFOV) diffusion kurtosis imaging (DKI) of the pediatric spinal cord. NeuroImage. Clinical. 2016 Jan 12; 11:61-7.

8. Bell A, Guido T, Krisa L, Muhlenhaupt M. Mulcahey M.J. Measures and Outcomes Instruments for Pediatric Spincal Cord Injury. Current Physical Medicine and Rehabilitation. 2016 July 6; 4(3):200-207

9. Gorski K, Harbold K, Haverstick K, Schultz E, Shealy SE, and Krisa L. Locomotor Training in the Pediatric Spinal Cord Injury Population: A Systematic Review of the Literature. Topics in Spinal Cord Injury Rehabilitation 2016;22(2):135–148

10. Carey A, Julian R, Kristeller K, Leonard P, Plamer S, Krisa L. The Cardiovascular and Cerebrovascular Effects on Cognition in Persons with Parkinson's Disease: A Systematic Review of the Literature. Advances in Parkinson's Disease. 2015 May 4, 28-42.

11. Krisa L, and Murray M. The implications of injury in the developing nervous system on upper extremity function. Journal of Hand Therapy. 2015 Apr-Jun;28(2):101-5.

12. Singh A, Krisa L, Fredrick K, Sandrow-Feinberg H, Sriram Balasubramanian, Stackhouse S, Murray M, Shumsky JS. Forelimb Locomotor Rating Scale for Behavioral Assessment of Recovery after Cervical Spinal Cord Injury. Journal of Neuroscience Methods, 2014 April: 15;226:124-31

13. Krisa L, Middleton D, Faro S, Calhoun CL, Mohamed F, Mulcahey MJ. Cerebral Activation during the Test of Spinal Cord Injury Severity in Children: an fMRI Methodological Study. Topics for Spinal Cord Injury Rehabilitation. 2013 Spring;19(2):121-28.

14. Krisa L, Mulcahey MJ, Gaughan J, Smith B, Vogel L. Using a Limited Number of Dermatomes as a Predictor of the 56-Dermatome Test of the International Standards for Neurological Classification of Spinal Cord Injury in the Pediatric Population. Topics in Spinal Cord Injury Rehabilitation. 2013 Spring;19(2):114-20.

15. Krisa L, Gaughan J, Vogel L, Betz R, Mulcahey MJ. Agreement of Repeated Motor and Sensory Scores at Individual Myotomes and Dermatomes in Young Persons with Spinal Cord Injury. Spinal Cord. 2013 Jan; 51(1):75-81

16. Barakat N Mulcahey MJ, Shah P, Samdani A, Krisa, L, Faro S., Mohamed F. Diffusion Tensor Imaging in Pediatric Transverse Myelitis: A Case Study. Journal of Pediatric Rehabilitation Medicine. 2012 Jan 1;5(4):275-9

17. Houle JD., Krisa L, Murray M. “Combining cell-based and pharmacologic interventions with behavioral training for chronic recovery from spinal cord injury.” Traumatic Brain & Spinal Cord Injury: Challenges & Development. Ed. Cristina Morganti-Kossmann, Ramesh Raghupathi and Andrew Maas. Cambridge University Press, July 2012.
¬ ¬ ¬
18. Krisa L, Frederick K, Canver J, Stackhouse S, Shumsky J, Murray M. Amphetamine Enhanced Motor Training Following Cervical Contusion Injury. Journal of Neurotrauma 2011 Sept 20; 29 (5):971-89.

Peer Reviewed Scientific and Professional Presentations (oral and poster):

1. Krisa L, Saksena S, Faro, Gaughan J, Middleton DM, Mulcahey MJ, Mohamed FB. Diffusion Tensor Imaging as a Biomarker to Identify Spinal Cord Integrity in Pediatric Spinal Cord Injury. Poster #670 Neurotrauma Society Meeting in Toronto, Canada. August 11-16, 2018

2. Middleton DM, Harrop J, Flanders A, Faro S, Talekar K, Krisa L, Samdani A, Mohamed FB. Phantom Study of MRI at 3T for Spine Instrumentation with Metal Suppression. Poster #478 Neurotrauma Society Meeting in Toronto, Canada. August 11-16, 2018

3. Johnston T, Krisa L, Saksena S, Conklin C, Alizadeh M, Fisher J, Mohamed FB. Central Nervous System Connectivity in a Man with Motor Incomplete Tetraplegia. APTA Combined Sections Meeting 2018 in New Orleans, LA February 22, 2018

4. Freedman J, Igbokwe J, Lin S, Ndaye L, Shaddock K, Krisa, L. Do Nerve Transfers Improve Function in Patients with Spinal Cord Injury? A Systematic Review of the Literature. APTA Combined Sections Meeting 2018 in New Orleans, LA February 22, 2018

5. Krisa L, Middleton D, Alizadeh M, Fisher J, Calhoun- Thielen C, Mulcahey MJ, Mohamed FB. Brain White Matter Abnormality Induced by Chronic Spinal Cord Injury in the Pediatric Population: A Tract Based Spatial Statistic Study. Award Eligible, 2018 Annual Scientific Meeting of the American Spinal Injury Association, May 2-4, at the Mayo Civic Center in Rochester, MN

6. Alizadeh M, Conklin C, Middleton D, Saksena S, Faro S, Krisa L, Mulcahey MJ, Mohamed F. First Order Texture Analysis of Typically Development Pediatric Spinal Cord MR Images. Abstract ID: 17018270 Radiological Society of North American Assembly and Annual Meeting, November 26 – December 1, 2017, McCormick Place, Chicago, Illinois

7. Alizadeh M, Sultan Y, Saksena S, Conklin C, Middleton D, Fisher J, Krisa L, Faro S, Mulcahey M, Mohamed F. Age Related Changes in Reduced FOV Diffusion Tensor Imaging and Fiber Tractography of the Typically Developed Cervical and Thoracic Pediatric Spinal Cord. American Spinal Injury Association April 29,2017 Albuquerque, NM

8. Saksena, S, Gaughan J, Middleton DM, Krisa L, Mulcahey MJ, Conklin C, Alizadeh M, Faro SH , and Mohamed FB. Can DTI Predict the MRI Level of Injury in Pediatric Spinal Cord Injury Subjects? Program No.1814. 2017 International Society for Magnetic Resonance In Medicine Honolulu, HI

9. Saksena S, Alizadeh S, Middleton DM, Krisa L, Mulcahey MJ, Mohamed FB, and Faro SH. Characterization of Spinal Cord DTI Metrics in Clinically Asymptomatic Pediatric Subjects with Incidental Congenital Lesions Program No.1813. 2017 International Society for Magnetic Resonance In Medicine Honolulu, HI

10. Alizadeh M, Sultan Y, Saksena S, Conklin CJ, Middleton DM, Fisher JM, Krisa L, Faro SH, Mulcahey MJ, and Mohamed FB. Age Related Diffusion and Tractography Changes in Typically Developing Pediatric Cervical and Thoracic Spinal Cord Program No.1867. 2017 International Society for Magnetic Resonance In Medicine Honolulu, HI

11. Alizadeh M, Conklin CJ, Middleton DM, Saksena S, Krisa L, Faro SH, Mulcahey MJ, and Mohamed FB. Texture Analysis of MR Images in Pediatric Cervical Spinal Cord Injury Program No. 2521. 2017 International Society for Magnetic Resonance In Medicine. Honolulu, HI

12. Krisa,L, Mulcahey, MJ, Middleton D, Mohamed FB, Zeffiro,T. Alterations of Resting State Connectivity Following Pediatric Spinal Cord Injury. American Spinal Injury Association. Philadelphia, PA and Lexington KY, 2016

13. Krisa, L, Saksena, S., Middleton, D., Sinko R., Conklin C, Gaughan J, Mulcahey,MJ, Mohamed,FB. Diffusion Tensor Imaging in the Pediatric Spinal Cord Injury Population. Philadelphia, PA and Lexington, KY 2016.

14. Devon M Middleton1, Shiva Shahrampour1, Scott H Faro1, Sona Saksena2, Mahdi Alizadeh1, Chris J Conklin2, Winston Liu3, Govind Nair4, Laura Krisa2, MJ Mulcahey2, and Feroze B Mohamed2 Correlation of DTI Metrics to Spinal Cord Cross Sectional Area in Pediatric Subjects with Spinal Cord Injury Program No. 4407. 2016 International Society for Magnetic Resonance In Medicine Singapore

Sona Saksena, Mahdi Alizadeh, Devon Middleton, Laura Krisa, MJ Mulcahey, Feroze Mohamed, Scott Faro Characterization of Spinal Cord DTI Metrics in Clinically Asymptomatic Pediatric Subjects with Incidental Congenital Lesions Program No. 1813. 2016 International Society for Magnetic Resonance In Medicine Singapore

15. Saksena S, Devon M Middleton2, Laura Krisa3, Pallav Shah2, Scott H Faro2, Rebecca Sinko3, John Gaughan4, Jürgen Finsterbusch5, M J Mulcahey3, and Feroze B Mohamed1 Diffusion Tensor Imaging of the Cervical and Thoracic Spinal Cord in Pediatric Subjects using an inner FOV 2D RF pulse sequence. Program No. 3429. 2016 International Society for Magnetic Resonance In Medicine Singapore

16. Shahrampour., S, Middleton, D, Liu,W, Nair, G, Jacobson, S, Alizadeh, M,Gaughan, J, Shah, P, Faro, S, Krisa, L, Mulcahey, MJ, Mohamed, F. Pediatric Spinal Cord Atrophy Imaging: Quantitative Measures in Normal and Patients with Spinal Cord Injury. Program No.5698. 2015. International Society for Magnetic Resonance In Medicine. Toronto, Ontario, Canada

17. Conklin, C. Middleton, D, Finsterbusch, J, Alizadeh,M, Krisa, L, Sinko, R, Delalic,J, Mulcahey, MJ, Mohamed, F. Inner Field of View Diffusion Kurtosis Imaging (DKI) of the Pediatric Spinal Cord. Program No.4932. 2015 International Society for Magnetic Resonance In Medicine Toronto, Ontario, Canada

18. Saksena, S, Middleton, D, Krisa, L, Shah, P, Faro, S, Sinko, R, Mulcahey, MJ, Gaughan, J, Finsterbusch, J, Mohamed, F. Diffusion Tensor Imaging of the Cervical and Thoracic Pediatric Spinal Cord in Normal Subjects. Program No.5715. 2015 International Society for Magnetic Resonance In Medicine. Toronto, Ontario, Canada

19. Krisa L, Mulcahey, MJ, Middleton, D, Mohamed, F. Zeffiro, T. Inter-regional intrinsic brain activity effects in pediatric spinal cord injury. Program No. 422.20/Y15. 2014 Society for Neuroscience Meeting

20. Krisa L, Middleton D, Faro S, Betz RR, Calhoun CL,Mohamed F, Mulcahey MJ. Validity of the Anorectal Examination as the Sole Indicator of Spinal Cord Injury Severity: an fMRI study. Program No. 653.30/H25. New Orleans, LA: Society for Neuroscience, 2012.

21. Krisa, L, Devon Middleton, Scott Faro, Randal R.Betz, Feroze Mohamed, MJ Mulcahey. Validity of the Anorectal Examination as the Sole Indicator of Spinal Cord Injury Severity: preliminary results. Howard H. Steel Conference, Orlando, FL 2012.

22. Krisa, L, John Gaughan, Randal Betz, MJ Mulcahey. Agreement of Repeated Motor and Sensory Scores at Individual Myotomes and Dermatomes in Young Persons with Spinal Cord Injury. ISCOS/ASIA Conference, June 2011 Washington, DC

23. Krisa L , Barakat N, Samdani A, Gaughan J, Faro S, Betz RR., Finsterbusch J, Mohamed F, Mulcahey, MJ. Diffusion Tensor Imagining of the Pediatric Spinal Cord: preliminary evaluation. Program No. 946.02/AAA27. Washington, DC: Society for Neuroscience, 2011.

24. Krisa L, Frederick K, Stackhouse SK, Shumsky JS, Murray M. Amphetamine Enhanced Motor Training But Not Enriched Environmental Housing Improves Recovery of Forelimb Function Following Cervical Contusion Injury. International Symposium of Neuronal Regeneration, Asilomer, Ca, 2009.

25. Murray M, Ogata K, Krisa L, Houle JD, Barr G. Neurons in Young Rats Respond Differently to Spinal Cord Injury and Therapeutic Interventions from Those in Adults. Howard H. Steel Conference, Lake Buena Vista, FL 2009, Society for Neuroscience, 2010.

26. Krisa L, Shoemaker L, Hoover, JE. Rodent Performance in the Morris Water Maze Under Normothermic and Hypothermic Conditions. Journal of the Pennsylvania Academy of Science. March 2005 Vol. 78.

Non-Peer Reviewed Presentations
1. Krisa, L. Beattie, M, Animal models of forelimb function following spinal cord injury. Upper Extremity Workshop sponsored by Craig H, Neilsen Foundation and the Spinal Cord Outcomes Partnership Endeavor, Philadelphia PA, January 2015.

2. Krisa, L, Kelly Frederick, John Canver, Scott Stackhouse, Jed Shumsky, Marion Murray. Amphetamine Enhanced Motor Training Following Cervical Contusion Injury. Shriners Hospitals Pediatric Research Center for Neural Repair and Rehabilitation, September 2010, Philadelphia, PA

Funded Grant Activity:

1. Title: Reliability Assessment of Subjective and Objective Measures of Spinal Cord Injury using the NINDS SCI MRI CDE Instrument
Source: Craig H. Neilsen Foundation
Project Period: 1/2/2017 – 12/31/2019
Role: Collaborator

2. Title: Metal Artifact Characterization in Spinal Cord Injury
Source: Craig H. Neilsen Foundation
Project Period: 10/01/2016 - 9/30/2019
Role: Collaborator

3. Title: Neuroimaging based on DTI as a biomarker for spinal cord injury in children
Source: National Institute of Health
Project Period: 7/1/2013 – 6/30/2018
Role: Co-Investigator

Completed Grant Activity:

1. Title: Validity of the Anorectal Exam in Persons with SCI: an fMRI study
Source: Craig H. Neilsen Foundation
Project Period: 10/1/2013-9/30/2017
Role: Principal Investigator

2. Title: Effects of Autonomic Dysfunction in Spinal Cord Injured Youth and Adolescents
Source: Dean Research Award, Thomas Jefferson School of Health Professions
Project Period : 07/01/2015-06/30/2016
Role: Principal Investigator

3. Title: Validity of the Anorectal Examination as the Sole Indicator of Spinal Cord Injury Severity
Source: Shriners Hospitals for Children Post-Doctoral Research Fellowship,
Project Period: 6/1/2010-6/30/2013
Role: Principal Investigator; Mentor: MJ Mulcahey, Ph.D.

Continuing Education Workshops Conducted/Organized

Course Co-Chair - The importance of tissue perfusion in acute and chronic spinal cord injury: New Findings in Animal and Human Models American Spinal Injury Association May, 2, 2018 Mayo Civic Center in Rochester, MN.

Course Chair -The Path to Successful Translational Research: How to Move to the Next Step. American Spinal Injury Association April 29,2017 Albuquerque, NM

Pre-Course Chair – Full day work shop Progress in Translational Research: Moving from the Bench to Bedside and Back American Spinal Injury Association April 13, 2016 Philadelphia, PA

Membership in Professional and Honorary Societies

1. American Spinal Injury Association (ASIA) (2010-Present)
- Autonomic Standards Committee Member (2014-Present)
- Electronics Communication Committee (2015-Presnt)
Chair (2015-present)
2. International Spinal Cord Society (ISCoS) (2011-Present)
3. Society for Neuroscience (SFN) (2005-Present)
4. Philadelphia Chapter of The Society for Neuroscience (2015-Present)

Consultative and Advisory Positions

Journal Reviewer –Topics in Spinal Cord Injury Rehabilitation 2017-Present

Community Service
1. Drexel University Discovery Day 2011, 2012, 2013, 2014,2015
Role: Poster Judge

2. Franklin Institute Brain Awareness Week 2012, 2013,2014
Role: Facilitator for student activities

3. Sigma Xi Research Day at Thomas Jefferson University 2015, 2017
Role: Judge

4. Philadelphia Chapter of Neuroscience 2017
Role: Judge

Services to the University/College/School on Committees/Councils/Commissions

Department
Admission Committee Member (2014, 2016-present)

College
Committee on Faculty Affairs (2013 –present)
Co-chair 2017-2018

University
The Institutional Animal Care and Use Committee (IACUC) Member (2016-present)

Current Teaching Responsibilities

Fall: PT 516 Neuroscience (Course Director) Graduate, 3-credits
Spring: OT 751 Foundations of Neuroscience (Course Co-Director) Graduate, 3-credits
Spring: OT 780 Neuroscience Foundations of Occupational Therapy (Course Co-Director) Graduate, 4-Credits
Summer/Fall/Spring: PT 628 Graduate Capstone Projects I,II and III Graduate 3-credits total

---

Sona Saksena, PhD
Thomas Jefferson University

(no CV uploaded)

Scott Faro, MD
Johns Hopkins Medicine

(no CV uploaded)

John Gaughan, PhD
Temple University

(no CV uploaded)

Devon Middleton, PhD
Thomas Jefferson University

(no CV uploaded)

MJ Mulcahey, OT, PhD
Thomas Jefferson University

(no CV uploaded)

Feroze Mohamed, PhD
Thomas Jefferson University

(no CV uploaded)

Prospective Study of Pregnancy in Women With and Without Spinal Cord Injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Amie (Jackson) McLain, MD
University of Alabama at Birmingham

CV:
A. PERSONAL STATEMENT
I am a board-certified physiatrist who has been involved in research or clinical care activities involving spinal cord injured individuals since 1988. My research interest began before medical school while performing translational work in pyelonephritis as a secondary complication from neurogenic bladder. In 1989, following medical training and board certification in Physical Medicine and Rehabilitation, I continued research and clinical care activities involving individuals with neurological disabilities. I am currently a professor in the University of Alabama (UAB) School of Medicine, and I serve as Chair of the Department of Physical Medicine and Rehabilitation (PM&R) and Director of the PM&R Residence Program. I also serve as the Project Directorship/Principal Investigator for the National Institute of Disability Research and Rehabilitation (NIDRR) Regional UAB Spinal Cord Injury (SCI) Model Care System grant. Our system maintains a vast database of long term follow-up conditions for individuals with SCI. Specific research leadership has involved assessing and improving health outcomes in individuals with disabilities. I have served as PI for several intersystem collaborative research projects, such as “Respiratory Complications after Acute SCI,” “Gynecological and Obstetrical Complications in Females with SCI,” and “Menopause and Effects of Osteoporosis after SCI.” Other related research has included participation as co-PI for studies investigating urological dysfunction and management, sexual functioning, weight management, and general determination of appropriate outcome measurements for individuals with SCI and other disorders. This research has resulted in publications in peer-reviewed journals and improved the quality of life for individuals with disabilities. Furthermore, I am an executive committee and steering committee member of the NIH National Center for Medical Rehabilitation Research 1T32HD071866 Grant: Interdisciplinary Training in Pathobiology and Rehabilitation Medicine, which has the overarching goal “to develop future leaders in translational rehabilitation research who are specifically equipped to test and disseminate novel rehabilitative strategies that will alleviate functional impairment and compromised life quality in the face of chronic disease management with exercise medicine as a major focus." One of the two main fields of focus for grant awardees is neuromusculoskeletal and movement disorders. In addition, I have mentored four medical students over the past 10 years, and I continue to lecture trainees and residents in various departments within the UAB School of Medicine.
1. Jackson AB. UAB Index of Motor Recovery: An Outcome Measure for Neurological Return and Assessment Following SCI. Intellectual property of Amie B. Jackson M.D. and the UAB Research Foundation. 2007.
2. Alexander MS, Biering-Sorensen F, Bodner D, Brackett NL, Cardenas D, Charlifue S, Creasey G, Dietz V, Ditunno J, Donovan W, Elliott SL, Estores I, Graves DE, Green B, Gousse A, Jackson AB, Kennelly M, Karlsson AK, Krassioukov A, Krogh K, Linsenmeyer T, Marino R, Mathias CJ, Perkash I, Sheel AW, Schilero G, Schurch B, Sonksen J, Stiens S, Wecht J, Wuermser LA, Wyndaele JJ. International standards to document remaining autonomic function after spinal cord injury. Spinal Cord. 2009 Jan;47(1):36-43. PubMed PMID: 18957962.
3. Yarar-Fisher C, Bickel CS, Windham ST, McLain AB, Bamman MM. Skeletal muscle signaling associated with impaired glucose tolerance in spinal cord-injured men and the effects of contractile activity. J Appl Physiol (1985). 2013 Sep 1;115(5):756-64. PubMed PMID: 23766505; PubMed Central PMCID: PMC4073980.
4. Yarar-Fisher C, Bickel CS, Kelly NA, Windham ST, McLain AB, Bamman MM. Mechanosensitivity may be enhanced in skeletal muscles of spinal cord-injured versus able-bodied men. Muscle Nerve. 2014 Oct;50(4):599-601. PubMed PMID: 24668759; PubMed Central PMCID: PMC4263275.
B. POSITIONS AND HONORS
Positions and Employment
1988 - Attending and Member, Medical and Dental Staff, UAB Hospital, Birmingham, AL
1988 - Attending for SCI and General Rehabilitation Inpatient Services (Admitting attending 12 months per year, 1988-2006), UAB Hospital, Birmingham, AL

1988 - 1991 Instructor, Department of Rehabilitation Medicine, UAB SOM, Birmingham, AL
1989 - Director and Practitioner for Women's Clinic for the Disabled (1clinic/month), UAB Hospital, Birmingham, AL
1990 - 2006 Director of Spinal Cord Injury Services, UAB Hospital, Birmingham, AL
1991 - 1995 Assistant Professor, Department of Rehabilitation Medicine, UAB SOM, Birmingham, AL
1992 - 1994 Assistant Medical Director, Spain Rehabilitation Center, UAB Hospital, Birmingham, AL
1994 - 1996 Interim Chair, Department of Physical Medicine & Rehabilitation, UAB SOM, Birmingham, AL
1994 - 2003 Medical Director, Spain Rehabilitation Center, UAB Hospital, Birmingham, AL
1995 - Professor with tenure, Department of Physcial Medicine & Rehabilitation, UAB SOM, Birmingham, AL
1995 - Attending and Member, The Children's Hospital of Alabama, Birmingham, AL
1996 - Chair, Department of Physical Medicine & Rehabilitation, UAB SOM, Birmingham , AL
1996 - 2006 Fellowship Program Director, Spinal Cord Injury Medicine, Department of Physical Medicine & Rehabilitation, UAB SOM, Birmingham, AL
1998 - Active Practitioner for SCI and General Rehabilitation Outpatient Clinics, UAB Hospital, Birmingham, AL
2003 - Assistant Medical Director, Spain Rehabilitation Center, UAB Hospital, Birmingham, AL
2006 - Senior Scientist, Department of Neurobiology, UAB SOM, Birmingham, AL
2006 - 2010 Chief of Staff, UAB Highlands Hospital, Birmingham, AL
2007 - Residency Program Director, Department of Physical Medicine & Rehabilitation, UAB SOM, Birmingham, AL
2009 - Director of Adolescent-Adult Transition Clinic (in partnership with The Children's Hospital of Alabama) for individuals with spina bifida, spinal cord injury and other spine disorders, UAB Hospital, Birmingham, AL
2010 - 2011 Associate Chief of Staff (CoS renamed to Assoc. CoS after incorporation under UAB Health System), UAB Hospital, Highlands Campus, Birmingham, AL
2011 - Senior Scientist, UAB Center for Exercise Medicine, UAB SOM, Birmingham, AL
2012 - Senior Scientist, University-wide Interdisciplinary Research Center, University of Alabama School of Medicine (UAB SOM), Birmingham, AL
Other Experience and Professional Memberships
Current Reviewer, Arch PMR; JSCM; PM&R; and AJPH
1987 - Member, American Academy of Physical Medicine and Rehabilitation
1988 - Member, American Spinal Injury Association
1988 - Member, Alabama Society of Physical Medicine and Rehabilitation
1988 - Teaching in Department of PM&R (15 topics), UAB School of Medicine (Residents)
1988 - Teaching in Department of Surgery; Division of Orthopedics (3 topics), UAB School of Medicine (Residents)
1988 - Lecturer: Departments of Physical Medicine and Rehabilitation (6 topics), Neurology (2 topics), and Medicine (1 topic), UAB School of Medicine Departmental Grand Rounds
1988 - Lecturer, UAB Schools of Optometry, Allied Health Related Professions (Physical Therapy Students), Biomedical Engineering Graduate School, Women's Studies, Nutritional Sciences
1988 - 2006 Teacher: Independent Living Skills Classes—Daily Inpatient Education for Spain Rehabilitation Center's Patients with SCI and their Families (4 topics), Spain Rehabilitation Center
1990 - Member, American Medical Association
1990 - Member, International Spinal Cord Society
1991 - Member, American Society of SCI Professionals (formerly American Paraplegia Society)
1992 - Member, Association of Academic Physiatrists
1992 - 1994 President, Alabama Society of Physical Medicine and Rehabilitation
1995 Ad Hoc Review Committee (Development/Evaluation of Female External Urinary Collection Devices), National Institute of Child Health and Human Development (NICHD)
1995 - 2000 Governing Board, Model SCI Care Systems
1995 - 2000 Director, National Spinal Cord Injury Statistical Center (funded by National Institute on Disability and Rehabilitation Research)
1996 - 2007 Medical Director, Orthotics-Prosthetic Division, University Hospital
1997 - School of Medicine Dean's Council for Graduate Medical Education, UAB
1997 - 1998 Graduate Education Policy Advisory Committee, UAB
2000 - Board of Directors, American Spinal Injury Association
2000 Ad Hoc Review Panel, Urological Center for Spinal Cord Injury, National Institute of Health
2001 - Member, The American Board of Medical Consultants

2001 - Co-director, National Spinal Cord Injury Statistical Center (funded by National Institute on Disability and Rehabilitation Research)
2002 - Board of Directors, Center for Research in Women's Health, UAB
2003 - 2007 Physician Advisory Council, Spina Bifida Association of America
2004 Reviewer, Ad Hoc Study Section, Grant 133B-7 Health and Function Outcomes for Individuals with Disabilities for the National Institute on Disability and Rehabilitation Research (NIDRR)
2006 - Invited as Founding Member to establish an international agenda for individuals with SCI, Landsort Initiative--Present Care and Future Research for Individuals Living throughout the World with SCI
2007 - Editorial Board, Journal of Spinal Cord Medicine
2007 - Editorial Board, Disability and Health Journal: The official Journal of the American Association on Health and Disability
2008 President, American Spinal Injury Association
2009 - Board of Directors, Lakeshore Foundation
2009 Consultant for Spinal Cord Injury Research Program FY2009, U.S. Department of Defense
2010 - UAB Health System Board, UAB Health System
Honors
1992
1997 Lotus Award Nominee for service and promotion of advocacy for individuals with Disabilities
Robert B. Kyle Professorship in Rehabilitation Medicine, UAB
2008
2014
2014
Distinguished Clinician Award, American Academy of Physical Medicine and Rehabilitation
International Biographical Centre, Top 100 Health Professionals 2014
America's Top Doctor - 2001, 2002, 2003, 2004, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014
Harrison Society (Medical School)
Alumni Honors Scholarship and Award (Undergraduate)
University of Alabama Alpha Epsilon Delta Pre-Medical Honor Society (Undergraduate)

C. Contribution to Science
1. Women with SCI or other musculoskeletal diseases often must deal with unique issues, such as those related to reproduction, breast feeding, menopause, and metabolism, among others. As the founder and director of the nation's first Women's Clinic for the Disabled at the Spain Rehabilitation Center, I have served on the NIH Committee for Health of Women with Disabilities and I currently have an NIDRR-funded collaborative study to prospectively examine the conditions encountered in women with SCI who become pregnant. The gender-specific therapies and dissemination of information to patients and care givers provided through this clinic, as well as the results of my long-standing research program involving these topics, continue to improve the quality of life for many women with SCI and/or other musculoskeletal disorders.
a. Jackson AB, DeVivo M. Effects of menopause after SCI: A comparison study of women with SCI, able-bodied women, and men with SCI. Global Spinal Cord Injury conference, a combined scientific conference of the American Spinal Injury Association and the International Spinal Cord Society; 2006 June; Boston, MA, USA.
b. Alexander MS, Bodner D, Brackett NL, Elliott S, Jackson AB, Sønksen J. Development of international standards to document sexual and reproductive functions after spinal cord injury: preliminary report. J Rehabil Res Dev. 2007;44(1):83-90. PubMed PMID: 17551862.
c. Yarar-Fisher C, Chen Y, Jackson AB, Hunter GR. Body mass index underestimates adiposity in women with spinal cord injury. Obesity (Silver Spring). 2013 Jun;21(6):1223-5. PubMed PMID: 23913734; PubMed Central PMCID: PMC3740452.
d. Jackson AB. Cherry and Merkatz's Complications of Pregnancy. 6th ed. Cohen WR, editor. Philadelphia, PA: Lippincott Williams and Wilkins; 2015. Women with Disabilities
2. For three 5-year cycles I have successfully maintained the Project Directorship/Principal Investigator for the National Institute of Disability Research and Rehabilitation (NIDRR) Regional UAB Spinal Cord Injury (SCI) Model Care System grant. Our system provides comprehensive services for patients from emergency services through rehabilitation and community re-entry, and maintains a vast database of long term follow-up conditions for individuals with SCI. Furthermore, we conduct collaborative and site-specific research, such as the controlled intervention trial of a novel approach to treating neuropathic pain.

a. Jackson AB. Developer and Narrator. Reproductive Health for women with SCI, Part II Pregnancy and Delivery. [Video]. Birmingham, AL: UAB Medical Rehabilitation Research and Training Center; 2002.
b. DeVivo MJ, Go BK, Jackson AB. Overview of the national spinal cord injury statistical center database. J Spinal Cord Med. 2002 Winter;25(4):335-8. PubMed PMID: 12482178.
c. Jackson AB. SCI in the last 30 years: A demographic profile of new injuries. 30th Annual Meeting of the American Spinal Injury Association; 2004 May; Denver, CO, USA.
d. Jackson AB. Medical Consultant. Smoking's Effects on Secondary Complications of Spinal Cord Injury. [DVD]. Birmingham, AL: Board of Trustees of the University of Alabama at Birmingham; 2009.
D. RESEARCH SUPPORT
Ongoing Research Support
2016/01/01-2020/01/01
H133N110008, National Institute on Disability and Rehabilitation Research (NIDRR)
McLain, Amie B. (Project Director)
Spinal Cord Injury Model Systems
Grantee: UAB Spinal Cord Injury Care System.
Role: Project Director
Completed Research Support
2011/01/01-2016/01/01
H133N110008, National Institute on Disability and Rehabilitation Research (NIDRR) Grant
Jackson, Amie B. (Project Director)
Spinal Cord Injury Model Systems
Grantee: UAB Spinal Cord Injury Care System.
Role: Project Director
2009/01/01-2010/01/01
National Institute of Child Health and Human Development (NICHD)
Bickel, C. Scott (PI)
Fatigability, Gender, and Optimal Stimulation Parameters after Spinal Cord Injury
Role: Co-Investigator
2000/01/01-2006/01/01
H133N110008, National Institute on Disability and Rehabilitation Research (NIDRR)
Jackson, Amie B. (Project Director)
Spinal Cord Injury Model Systems
Grantee: UAB Spinal Cord Injury Care System Project Director: Dr. Amie B. Jackson
Role: Project Director

Jan Troncale, RN
University of Alabama at Birmingham

(no CV uploaded)

Lena Zhang, MS
University of Alabama at Birmingham

(no CV uploaded)

Yu-Ying Chen, MD, PhD
University of Alabama at Birmingham

(no CV uploaded)

Claire Kalpakjian, PhD
University of Michigan

(no CV uploaded)

Medical and Surgical Management of Acute Spinal Cord Injury during Pregnancy: Experience from a Case Series in a Third World Country

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Ajmal Zemmar, MD, PhD
Henan Provincial People's Hospital - Juha Hernesniemi International Neurosurgery Center

CV:
Education:
2014 – 2019: Residency in Neurosurgery Vancouver General Hospital (Canada)
University Hospital Zurich (Switzerland)

2010 – 2013: PhD in Neuroscience
ETH & University of Zurich (Switzerland)

2007 – 2008: Medical Doctorate Thesis
Max Planck Institute for Brain Research (Frankfurt, Germany)

10/2003 – 12/2009: School of Medicine Goethe-University Frankfurt (Germany)

Competitive Funding, Awards & Grant Evaluations:
2016: Evaluator of European Commission (ERC) grants
2015: Zurich University Career Award
2015: EMDO Foundation Research Grant
2015: Heidi Demetriades Foundation Grant
2014: EANS Research Prize
2013: Swiss National Science Foundation Fellowship
2012: Boehringer Ingelheim Fellowship
2009: Scholarship Allianz-Foundation
2007 - 2008: Student Funding by the Max-Planck-Society
2006 - 2009: Full Scholarship Friedrich-Ebert-Foundation

Invited Lectures:
2017: Hernesniemi Center Opening, Zhengzhou (China)
2017: Neurotechnology Conference, Toronto (Canada)
2016: Goethe University, Frankfurt (Germany)
2015: Ohio State University, Columbus (USA)
2013: University of California, Santa Cruz (USA)
2013: University of Helsinki, Helsinki (Finland)
2012: Technical University of Braunschweig (Germany)
2012: New York University, New York (USA)

Publications:
A. Zemmar, C.C. Chen, O. Weinmann, F. Vajda, J. Bozeman, N. Isaad, Y. Zuo, M.E. Schwab
Oligodendrocyte- and neuron-specific Nogo-A restrict dendritic branching and synaptic density in the adult mouse motor cortex
Cerebral Cortex (2017)

A. Petruska, F. Ruetz, A. Hong, L. Regli, O. Sueruecue, A. Zemmar, B. J. Nelson
Magnetic Needle Guidance for neurosurgery: Initial design and proof of concept
IEEE Robotics and Automation (2016)

A. Zemmar, B. Kast, K. Lussi, A. R. Luft, M. E. Schwab
Acquisition of a high-precision skilled forelimb reaching task in rats

Journal of Visualized Experiments (JoVE) (2015)

A. Zemmar, X. Yu, Y. Kellner, R. Vicente, M.Gullo, H. Kasper, O. Weinmann, K. Lussi, A. Luft, M. Pedotti, M. Zagrebelsky, Y. Zuo, M. E. Schwab
Neutralization of Nogo-A enhances synaptic plasticity in the motor cortex and improves motor learning in-vivo
The Journal of Neuroscience (2014)

A. Kempf, B. Tews, M. Arzt, O. Weinmann, F. Obermair, V. Pernet, M. Zagrebelsky, A. Delekate, C. Iobbi, A. Zemmar, Z. Ristic, M. Gullo, P. Spies, D. Dodd, D. Gygax, M. Korte, M. E. Schwab
“The Sphingolipid Receptor S1PR2 is a Receptor for Nogo-A Repressing Synaptic Plasticity”
PLoS Biology (2014)

S. Choi, E. Yu, G. Rabello, S. Merlo, A. Zemmar, H. Moreno, J. Moreira, M. Sugimori, R. Llinás
Optimization of synaptic transmission at the squid giant synapse by physically modified artificial seawater
Frontiers in Neuroscience (2014)

B. Tews, K. Schönig, M. Arzt, S. Clementi, M. Pedotti, A. Zemmar, S. Berger, M. Schneider, O. Weinmann, H. Kasper, M. E. Schwab, D. Bartsch
Synthetic miRNA-mediated downregulation of Nogo-A in transgenic rats reveals its role as regulator of plasticity, learning and memory
Proc Natl Acad Sci U S A (2013)

Havenith, M.N.*, A. Zemmar*, S. Yu, S.M. Baudrexel, W. Singer and D. Nikolić (2009)
Measuring sub-millisecond delays in spiking activity with millisecond time-bins.
Neuroscience Letters (2009)

Ahmed Al-Jradi, MD
Neurosurgery Department, Al Thawrah General Hospital

(no CV uploaded)

Vincent Ye, MD
University of Toronto

(no CV uploaded)

Ismail Al-Kebsi, MD
Neurosurgery Department, Al Thawrah General Hospital

(no CV uploaded)

Hugo Andrade, MD, PhD
Henan Provincial People's Hospitaljuha Hernesniemi International Neurosurgery Center

(no CV uploaded)

Josue Avecillas, MD, PhD
Neurosurgery Department, Hospital Joan Xxii

(no CV uploaded)

Iype Cherian, MD
Nobel Institute of Neuroscience, Nobel Medical College Teaching Hospital,

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord); Faculty of Medicine, University of British Columbia

(no CV uploaded)

Juha Hernesniemi, MD, PhD
Henan Provincial People's Hospitaljuha Hernesniemi International Neurosurgery Center

(no CV uploaded)

Changes in provocative shoulder physical exams after a single, ultrasound-guided platelet-rich plasma treatment in wheelchair users with SCI compared to the untreated contralateral limb

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Nathan Hogaboom, PhD
Kessler Foundation

CV:
NAME: Nathan Scott Hogaboom
OFFICE ADDRESS: 1199 Pleasant Valley Way, West Orange, NJ 07052

POSTGRADUATE TRAINING:
A. Postdoctoral Appointments
Kessler Foundation
Spinal Cord Injury Research
Outcomes & Assessment Research
March 2018 – present

ACADEMIC APPOINTMENTS:
Department of Physical Medicine & Rehabilitation
Rutgers University (School of Medicine)
Research Assistant Professor
March 2018 – present

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:
Rehabilitation Engineering and Assistive Technology Society of North America
Member
2013 – 2015

American Society of Biomechanics
Member
2014-2016

Academy of Spinal Cord Injury Professionals
Member
2011-2015

American Congress of Rehabilitation Medicine
Member
2015-2018

HONORS AND AWARDS:
Rory A. Cooper and Dion Johnson Award for Outstanding Research Paper
Awarded by the University of Pittsburgh Department of Rehabilitation Science and Technology
2017

IGERT Fellow
Awarded by the National Science Foundation
2016-2017

Second Place – Student Poster Contest
Awarded by Veterans Affairs Pittsburgh Healthcare System
2015

Student Honoree
Awarded by the University of Pittsburgh
2015

Student Honoree
Awarded by the University of Pittsburgh
2014

Rory A. Cooper and Dion Johnson Award for Outstanding Research Paper
Awarded by the University of Pittsburgh Department of Rehabilitation Science and Technology
2014

Finalist – Student Paper Competition
Awarded by the Rehabilitation Engineering and Assistive Technology Society of North America
2014

Finalist – Student Paper Competition
Awarded by the Rehabilitation Engineering and Assistive Technology Society of North America
2013

Graduate Research Fellow
Awarded by the National Science Foundation
2013-2016

SERVICE ON MAJOR COMMITTEES:
A. International
a. RESNA Inclusive Fitness Committee, July 2014 – August 2017

SERVICE TO THE COMMUNITY:
Public Relations and Outreach Chair, Students for Disability Advocacy, University of Pittsburgh, 2015-2016

Business Manager, Students for Disability Advocacy, University of Pittsburgh, 2012-2014

Invited Speaker, "Move 'em Out: Emergency Evacuation Planning that Includes People with Disabilities," February 2014

Doctoral Student Representative, Human Engineering Research Laboratories, University of Pittsburgh, 2012

TEACHING RESPONSIBILITIES: Lectures or Course Directorships
University of Miami, Introduction to Composition, Writing a Scientific Research Paper, 1.5 hours

University of Pittsburgh, Ethics and the Health-related Professions, Ethical Dilemmas in Research, 3 hours

University of Pittsburgh, Ethics and the Health-related Professions, Disparities in the U.S. Healthcare System, 3 hours

University of Pittsburgh, The Individual, Social, and Cultural Experience of Disability, International Disparities in Disability Healthcare, 3 hours

Human Engineering Research Laboratories, Experiential Learning for Veterans in Assistive Technology and Engineering, Math and Statistics, 16 hours

Research Training
Pre Doctoral Students:
Jeremy Schapp, June 2012-August 2012
Nicole Kocher, June 2013-August 2013
Bernice Huang, January 2013- October 2013

Josh Marino, June 2014-August 2014
Jessica Diehl, January 2014-August 2016
Karen Hranek, June 2015-August 2015
Amy Strong, June 2017-August 2017

GRANT SUPPORT:
A. Principal Investigator
1. Human Engineering Research Laboratories, Center Pilot Project Funding, inclusive September 2015 – August 2017, $25,000

PUBLICATIONS: (Please list in chronological order; published or accepted for publication only; should be segregated into the following categories)

A. Refereed Original Article in Journal
1. Hogaboom, NS; Worobey, LA; Houlihan, BV; Heinemann, AW; Boninger, ML; Wheelchair breakdowns are associated with pain, pressure injuries, rehospitalization, and self-perceived health in full-time wheelchair users with spinal cord injury; Archives of Physical Medicine and Rehabilitation, 2018, ePub ahead of print.
2. Worobey, LA; Rigot, SK; Hogaboom, NS; Venus, C; Boninger, ML; Investigating the efficacy of web-based transfer training on independent wheelchair transfers through randomized controlled-trials; Archives of Physical Medicine and Rehabilitation, 99(1): 9-16, 2018.
3. Hiremath, S; Hogaboom, NS; Roscher, MS; Worobey, LA; Oyster, ML; Boninger, ML; Longitudinal prediction of quality of life scores and locomotion in individuals with traumatic spinal cord injury; Archives of Physical Medicine and Rehabilitation, 98(12): 2385-2392, 2017.
4. Popchak, A; Hogaboom, N; Vyas, D; Abt, J; Delitto, A; Irrgang, JJ; Boninger, M; Acute response of the infraspinatus and biceps tendons to pitching in youth baseball; Medicine & Science in Sports & Exercise, 49(6): 1168-1175, 2017.
5. Hwang, S; Lin, YS; Hogaboom, NS; Wang, LH; Koontz, AM; Relationship between linear velocity and tangential push form while turning to change the direction of the manual wheelchair; Biomedical Engineering/Biomedizinische Technik, 62(4): 439-445, 2017.
6. Hogaboom, NS; Worobey, LA; Boninger, ML; Wheelchair transfer technique is associated with shoulder pain and pathology in people with spinal cord injury; Archives of Physical Medicine and Rehabilitation, 97(10): 1770-1776, 2016
7. Hogaboom, NS; Huang, LY; Worobey, LA; Koontz, AM; Boninger, ML; Acute changes in ultrasonographic markers for biceps and supraspinatus tendon degeneration after repeated wheelchair transfers in people with spinal cord injury; American Journal of Physical Medicine and Rehabilitation, 95(11): 818-830, 2016.
8. Hogaboom, NS; Diehl, JA; Oyster, ML; Koontz, AM; Boninger, ML; Ultrasonographic median nerve changes after repeated wheelchair transfers in persons with paraplegia: Relationship with subject characteristics and transfer skills; PM R, 8(4): 305-313, 2016.
9. Koontz, AM; Tsai, CY; Hogaboom, NS; Boninger, ML; Transfer component skills deficit rates among veterans who use wheelchairs; Journal of Rehabilitation Research and Development, 53(2): 279-294, 2016.
10. Toosi, KK; Hogaboom, NS; Oyster, ML; Boninger, ML; Typing biomechanics and acute changes in the median nerve indicative of carpal tunnel syndrome; Clinical Biomechanics, 30(6): 546-550, 2015.
11. Tsai, CY; Hogaboom, NS; Boninger, ML; Koontz, AM; The relationship between independent transfer skills and upper limb kinetics in wheelchair users; BioMedical Research International, ePub 2014.
12. Hogaboom, NS; Riggins, M; Boninger, ML; Oyster, M; Evacuation preparedness in individuals with spinal cord injury; Journal of Spinal Cord Medicine, 36(4): 290-295, 2013.

B. Books, Monographs and Chapters
1. Hogaboom, NS; Morse, LM; Boninger, ML; Chapter #, Overuse Injuries and Fractures in Spinal Cord Injury; In: Spinal Cord Medicine (Textbook), 3rd Edition; Steven Kirshblum and Vernon Lin; Springer, New York, NY; 2018.

C. Abstracts (*mentored research project)
1. *Strong, A; Hogaboom, N; Koontz, A; Boninger, M; Development of an upperlimb musculoskeletal wheelchair propulsion model to analyze the influence of axle position on shoulder moments; Presented at the American Society of Biomechanics Conference, 2018.

2. Bossuyt, FM; Hogaboom, NS; Worobey, LA; Koontz, AM; Arnet, U; Boninger, ML; Fatigue during overground wheelchair propulsion induced changes in propulsion biomechanics; Presented at the International Society of Biomechanics, 2017.
3. Hogaboom, NS; Worobey, LA; Kamaraj, DC; Boninger, ML; Relationship between power-wheelchair skills and measures of independence and mobility in people with spinal cord injury;. Podium presentation at the Meeting of the American Congress of Rehabilitation Medicine, 2016; Abstract 915.
4. Hogaboom, NS; Lin, YS; Worobey, LA; Koontz, AK; Boninger, ML; Wrist compressive forces affect the median nerve response to propulsion and other markers for carpal tunnel syndrome in people with paraplegia; Presented at the Annual Meeting of the American Society of Biomechanics, 2015; Abstract 365CD.
5. *Diehl JA, Hogaboom NS, Boninger ML. Ultrasonographic median nerve changes after repeated transfers are related to specific transfer skills. Presented at the Association of Academic Physiatrists Annual Meeting, 2015.
6. Hogaboom NS, Lin YS, Oyster ML, Koontz AM, Boninger ML. Handrim biomechanical differences between people with tetraplegia and paraplegia during overground propulsion. Presented at the World Congress of Biomechanics, 2014. Abstract T390.
7. Lin, YS; Donahoe, SR; Hogaboom, NS; Boninger, ML; Koontz, AM; The effects of wheelchair setting on shoulder tendon characteristics after intense wheelchair propulsion. Presented at the World Congress of Biomechanics, 2014; Abstract F249.
8. Hogaboom NS, Oyster ML, Koontz AM, Boninger ML. Ultrasonographic changes of the median nerve indicative of carpal tunnel syndrome are related to hand placement during transfers. Presented at the Conference of the Rehabilitation Engineering and Assistive Technology Society of North America, 2014.
9. *Kocher, NK; Hogaboom, NS; Lin, YS; Boninger, ML; Gender differences in ultrasound measures of biceps tendon degeneration after wheelchair propulsion. Presented at the 247th American Chemical Society National Meeting, 2014.
10. *Huang, LY; Hogaboom, NS; Koontz, AM; Boninger, ML; Effects of wheelchair transfers on ultrasonographic markers of shoulder pathology in people with spinal cord injuries; Presented at the Association of Academic Physiatrists Annual Meeting, 2014.
11. Hogaboom, NS; Fullerton, BF; Rice, LM; Oyster, ML; Boninger, ML; Ultrasound changes, pain, and pathology in shoulder tendons after repeated wheelchair transfers. Presented at the Conference of the Rehabilitation Engineering and Assistive Technology Society of North America, 2013.
12. Lin, YS; Boninger, M; Hogaboom, N; Koontz, A; Ultrasonographic-measured acromiohumeral distance associated with wheelchair pushrim kinetics in individuals with spinal cord injury. Presented at the Conference of the Rehabilitation Engineering and Assistive Technology Society of North America, 2013.
13. Day, KA; Lin, YS; Boninger, M; Hogaboom, N; Koontz, AM; Effect of shoulder positions on the acromiohumeral distance following upper extremity fatiguing exercises. Presented at the Conference of the Rehabilitation Engineering and Assistive Technology Society of North America, 2013.
14. *Beauchamp, D; Hogaboom, NS; Fullerton, B; Rice, L; Boninger, M; Ultrasound changes in shoulder tendons in response to repeated transfers. Presented at the Meeting of the Association of Academic Physiatrists, 2013.
15. Hogaboom NS, Oyster ML, Riggins M, Boninger ML. Efficacy of evacuation plans of full-time wheelchair users with Spinal Cord Injury. Presented at the Meeting of the Academy of Spinal Cord Injury Professionals, 2012.

PRESENTIONS:

A. Scientific (Basic Science):
1. Hogaboom, NS; Onishi, K; Worobey, LA; Boninger, ML; Shoulder joint cytokine increases correlated with rotator cuff pathology ultrasound markers after wheelchair use; Presented at the Meeting of the American Congress of Rehabilitation Medicine, 2018.
2. Hogaboom, NS; Fyffe, D; Botticello, A; Worobey, LA; Boninger, ML; Perceived healthcare discrimination is associated with major and minor depression in wheelchair users with spinal cord injury; Presented at the Meeting of the American Congress of Rehabilitation Medicine, 2018.
3. Hogaboom, NS; Onishi, K; Worobey, LA; Boninger, ML; Shoulder joint cytokine increase correlated with rotator cuff pathology ultrasound markers after wheelchair use. Presented at the Meeting of the American Congress of Rehabilitation, 2018.

4. Hogaboom, NS; Fyffe, DC; Botticello, AL; Worobey, LA; Boninger, ML; Perceived healthcare discrimination is associated with major and minor depression in wheelchair users with Spinal Cord Injury. Presented at the Meeting of the American Congress of Rehabilitation, 2018.
5. Hogaboom, NS; Worobey, LA; Boninger, ML; Adverse consequences from wheelchair breakdowns and increased risk of hospitalization. Presented at the International Seating Symposium, 2017. Presentation PS4.3.
6. Hogaboom, NS; Worobey, LA; Heinemann, AW; Boninger, ML; Wheelchair breakdowns, adverse consequences, and pressure ulcer development in people with spinal cord injury. Presented at the Meeting of the American Congress of Rehabilitation Medicine, 2016.
7. Worobey L, Hogaboom N, Boninger M. Effects of web-based and in-person transfer training on individuals with spinal cord injury. Presented at the Meeting of the American Congress of Rehabilitation Medicine, 2016; Oral Presentation 374.
8. Hogaboom NS, Worobey LA, Boninger ML. The relationship between transfer quality and shoulder pathology is mediated by bodyweight in people with spinal cord injuries. Presented at the Meeting of the Academy of Spinal Cord Injury Professionals, 2015.
9. Hogaboom NS, Worobey LA, Boninger ML. Relationship between clinical practice guidelines for wheelchair transfers and biceps tendon health in people with spinal cord injury. Presented at the ASIA/ISCoS Joint Meeting, 2015.
10. Hogaboom NS, Oyster ML, Koontz AM, Boninger ML. Transfers affect changes in ultrasonographic markers for biceps tendon degeneration. Presented at the International Seating Symposium, 2015.
11. Duvall JA, Hogaboom NS. Why policies are holding people with disabilities away from employment. Podium presentation at the Disability Issues and Advocacy Conference, November 26-30, 2012, Knoxville, Tennessee, USA.

B. Professional (Clinical):
1. Hogaboom, NS. Transfer skills and soft-tissue injuries in wheelchair users with spinal cord injury. Grand Rounds Presentation at the Kessler Institute, May 10, 2018.
2. Worobey LA, Rice LA, Hogaboom NS, Koontz AM. Independent transfers: Why technique is important, how to teach it, and does training change it? Presented at the Meeting of the American Congress of Rehabilitation Medicine, 2016.

Gerard Malanga, MD
New Jersey Regenerative Institute

CV:
n/a

Steven Kirshblum, MD
Kessler Institute for Rehabilitation

CV:
n/a

Trevor Dyson-Hudson, MD
Kessler Foundation

CV:
n/a

Spinal Mobility Intervention Improves Function: A Case Study

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Martha Sliwinski, PT, PhD
Columbia University

CV:
Personal Statement:
My research focus is centered to individuals who have suffered a spinal cord injury. These individuals are in an advanced aging process in comparison to the normal population as well hospital readmission and challenges with quality of life. I am is interested in pursuing interventions, particularly that have promise to prevent wellness decline in this population and to improve their quality of life. Collaborating with other researchers who have an interest in these same principles provides promise for this population. Collaboration with community partners and centers serving this population has been an ongoing part of my research.

Employment and Positions Held: Academic Appointments:
Academic Appointments:

2015 – present Associate Professor of Clinical Rehabilitation & Regeneration Medicine
Columbia University, College of Physicians and Surgeons, Program in Physical Therapy; New York, New York

2004 – 2014 Assistant Professor of Clinical Rehabilitation & Regeneration Medicine
Columbia University, College of Physicians and Surgeons, Program in Physical Therapy; New York, New York

2002 - 2004 Assistant Professor of Physical Therapy
Hunter College Physical Therapy
New York, New York

1993 – 2002 Lecturer Physical Therapy
Hunter College Physical Therapy
New York, New York

1991 – 1993 Adjunct in Physical Therapy
Hunter College Physical Therapy
New York, New York

Spring 1993 Adjunct in Physical Therapy
Fall 1993 New York University
New York, New York

1985-1987 Adjunct in Physical Therapy
Univ. of Medicine and Dentistry of NJ
Newark, New Jersey

Employment and Positions Held- Clinical:

2012 to 2017 Per Diem Physical Therapist
Responsive Physical Therapy
Tom's River, New Jersey

2004-2012 Per Diem Physical Therapist
Mountainside Hospital

Montclair, New Jersey

2002- 2008 Consultant
Kessler Medical Research Rehabilitation and Education Corporation
West Orange, New Jersey

1986-2009 Per Diem/Consultant Physical Therapist
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey

1986-1989 Assistant Director Inpatient PT(Spinal Cord Injury Unit)
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey

1983-1985 Assistant Director Clinical Education
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey

1982-1983 Senior Physical Therapist (Traumatic Brain Injury)
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey

1980- 1982 Clinical Education Chairperson
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey
1979-1980 Staff Physical Therapist
Kessler Institute for Rehabilitation Inc.
West Orange, New Jersey

Peer Reviewed Publications:
Macht Sliwinski M, Smith R, Wood A. Spinal cord injury rehabilitation patient and physical therapist perspective: a pilot study. Spinal Cord Case Series. 2016;3:15036; doi:10.1038/scsandc.2015.36

Gómara-Toldrà N, Sliwinski M M, Dijkers M P. Physical therapy for spinal cord injury: A systematic review of treatments focusing on participation. Journal of Spinal Cord Medicine. 2014;37(4):371-379.

Cortese A, Horr K, Krautle E, Lieberg J, Scibelli NP, Sliwinski MM. The use of virtual reality to improve gait function in stroke patients. JSPTR October 2012.

Macht Sliwinski M, Sisto S. “Gait, Quality of Life and Their Association Following Total Hip Arthroplasty”. Journal of Geriatric Physical Therapy Winter 2006.

Macht Sliwinski M, Sisto S, Batavia M, Chen B, Forrest G F. “Dynamic stability during walking following unilateral total hip arthroplasty”. 2004, Gait & Posture Volume 19, # 2, 141-147.

Macht Sliwinski M, Schultze K, Lyons Hansen R, Malta S, Babyar SR . “Clinical Performance Expectations: A Comparison of Students, Clinical Instructors and Academic Faculty”. Journal of Physical Therapy Education. 2004, Volume 18, #1, Spring, 50-57.

Babyar SR, Rosen, E, Sliwinski M, Krasilovsky G, Holland, T, Lipovac, M. “Physical Therapy Student’s Self Reports of Development of Clinical Reasoning: A Survey”. Journal of Allied Health Education. 2003, Volume 32, #4, Winter, 227-239.

Ross EC, Deutsch JE, Sliwinski MM. Intrasubject Reliability of Six Upper Extremity Movement Patterns: A Kinematic Analysis of the Scapula. Physical Therapy. 1997 Volume 77, #6 Supplement.

Babyar SR, Sliwinski M, Krasilovsky G, Rosen E, Thornby M, and Masefield JR. Survey of Inclusion of

Cultural and Gender Issues in Entry- Level Physical Therapy Curriculum in New York State. Journal of Physical Therapy Education. 1996, Volume 10, #2, Fall, 53-62.

Books:
Spinal Cord Injuries: Management and Rehabilitation. Editors Sue Ann Sisto, PT, PhD, Erica Druin, MPT, and Martha Macht Sliwinski PT PhD. Mosby Elsevier 2009.

Peer Reviewed Scientific and Professional Presentations:
May 2018
Poster Presentation: Sliwinski M, Leathem J. Inspiratory Respiratory Training in Individuals with Spinal Cord Injuries.
2018 Scientific Meeting ASIA, Rochester, MN.

February 2018
Platform Presentation:Brough C, Sliwinski M, Lee C, You J. Clinical Education Hybrid Models: Can Peer-to-Peer and Near-Peer Teamwork Foster Clinical Confidence, Reasoning and Communication for the Student Physical Therapist? Combined Sections APTA Meeting 2018 New Orleans, LA.

April 2017
Poster Presentation: The effect of a Community Exercise Program on Functional Reach and Quality of Life in Community Dwelling Individuals with Spinal Cord Injuries. Sliwinski M, Axselrad G, Alla V, Buan, Kaemmerlen E. 2017 Scientific Meeting ASIA, Albuquerque, NM

February 2017
Poster Presentation: The effect of a Community Exercise Program on Functional Reach and Quality of Life in Community Dwelling Individuals with Spinal Cord Injuries. Sliwinski M, Axselrad G, Alla V, Buan, Kaemmerlen E. Combined Sections APTA Meeting 2017 San Antonio, TX

January 2013
Poster Presentation: Service Learning Geriatrics and Global Health. Sliwinski M, Lazar V Levy J, Madrigal J, Parisi D, Wood A. Combined Sections APTA Meeting 2013 San Diego, CA

Research Activity:
Sliwinski M, Timmerberg J. Co-investigators. A Multimedia Application for Developing Clinical Reasoning Skills in Physical Therapy Students: A Blended Classroom Approach. Funded $14,000, Spring 2015.

Membership in Scientific/Professional Organizations:
American Physical Therapy Association: 1977-present
Current sections: Geriatrics, Neurology Sections, Women's Health and Health Policy and Administration
New York Clinical Education Consortia January 1993 to 2008
Vice Chairperson 6/96 to 7/98, Chairperson 7/98 to June 2001
New Jersey Chapter, APTA 1979-present, HOD 2011 to present

Consultative and Advisory Positions Held:
Reviewer:
Journal of Neurological Physical Therapy (2008 to present)
Spinal Cord Case Series (2016 to present)

Honors & Awards:
2016 CoSMO Outstanding Service Award

Christopher P, SPT
Columbia University

(no CV uploaded)

Ensuring relevance: national consultation regarding SCI-High indicators importance and urgency

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Matheus Wiest, PhD
University Health Network - Toronto Rehabilitation Institute

CV:
Name: Matheus Joner Wiest, PhD
Position: Postdoctoral Fellow, Lyndhurst Centre, University Health Network - Toronto Rehabilitation Institute

Peer-Reviewed Publications
1. Barss TS, Ainsley EN, Claveria-Gonzalez FC, Luu J, Miller DJ, Wiest MJ, Collins DF. (2018). Utilizing Physiological Principles of Motor Unit Recruitment to Reduce Fatigability of Electrically-Evoked Contractions: A Narrative Review. Archives of Physical Medicine and Rehabilitation. 99(4): 779-791. http://dx.doi.org/10.1016/j.apmr.2017.08.478
2. Orssatto LBR Wiest MJ Diefenthaeler F. (2018). Neural and musculotendinous mechanisms underpinning age-related force reductions. Mechanisms of Ageing and Development (0047-6374). 175: 17-23. http://dx.doi.org/10.1016/j.mad.2018.06.005
3. Wiest MJ, Bergquist A, Schimidt HL, Jones KE, Collins DF. (2017). Interleaved neuromuscular electrical stimulation: Motor unit recruitment overlap. Muscle & Nerve (1097-4598). 55(4): 490-499. http://dx.doi.org/10.1002/mus.25249
4. Wiest, MJ, Bergquist, AJ, Collins DF. (2017). Torque, current, and discomfort during 3 types of neuromuscular electrical stimulation of tibialis anterior. Physical Therapy (1538-6724). 97(8): 790-798. http://dx.doi.org/10.1093/ptj/pzx053
5. Bergquist AJ, Wiest MJ, Okuma Y, Collins DF. (2017). Interleaved neuromuscular electrical stimulation after spinal cord injury. Muscle & Nerve (1097-4598). 56(5): 989–993. http://dx.doi.org/10.1002/mus.25634

6. Menezes KM, Flores FM, Medeiros MA, Wiest MJ, Trevisan CM, Mota CB, Copetti F. (2015). Effect of hippotherapy on postural balance in women with Machado Joseph Disease. Revista Neurociências (0104-3579). 23(1): 116-122. http://dx.doi.org/10.4181/RNC.2015.23.01.1003.7p
7. Antes DL, Wiest MJ, Mota CB, Corazza ST. (2014). Analysis of postural stability and proprioception in elderly physically active women. Physical Therapy in Movement (0103-5150). 27(4): 531-539. http://dx.doi.org/10.1590/0103-5150.027.004.AO05
8. Menezes KM, Copetti, F, Wiest MJ, Trevisan CM, Silveira AF. (2013). Effect of hippotherapy on a postural stability of patients with multiple sclerosis: a preliminary study. Physical Therapy & Research (ISSN 1809-2950). 20(1): 43-49. http://dx.doi.org/10.1590/S1809-29502013000100008
9. Silva FC, Rodrigues AM, Wiest MJ. (2013). Effects of a subsequent task after sit-to-stand movement on muscle activation and initiation of movement. Brazilian Journal of Kinanthropometry and Human Performance (1980-0037). 15(4): 458-466. http://dx.doi.org/10.5007/1980-0037.2013v15n4p458
10. Bergquist AJ, Wiest MJ, Okuma Y, Collins DF. (2013). H-reflexes reduce fatigue of evoked contractions after spinal cord injury.Muscle & Nerve (1097-4598). 50(2): 224–234. http://dx.doi.org/10.1002/mus.24144

Conference Publications
1. Wiest MJ, Cayer L, Chan B, Cowley K, Fouad K, Furlan J, Giangregorio L, Gilbert PM, Kalsi-Ryan S, Kwon B, Magnuson DSK, Masani K, Morse L, Musselman K, Petrie S, Zariffa J, Craven BC. (2018). ReCon Team development: true translational research for the next generation of spinal cord injury rehabilitation scientists. Abstracts of the 2nd Canadian Musculoskeletal Conference. 2nd Canadian Musculoskeletal Conference, Toronto, Canada.
2. Chen, M; Wiest, MJ; Miller, D; Bergquist, AJ; Pinheiro, LR; Jones KE; Collins DF. (2018). Does the relationship between torque and frequency differ when three types of FES are used to dorsiflex the ankle?. A Canadian Conversation About FES — CanCon 2018, Edmonton, Canada.
3. Heffernan MG, Bergquist AJ, Wiest MJ, Yamashita T, Popovic MR, Masani K. (2018). Fatigue and discomfort during sequential stimulation of the tibialis anterior. Abstracts of the 2018 Toronto Rehabilitation Institute Research Day. 2018 Toronto Rehabilitation Institute Research Day, Toronto, Canada, Canada.

4. Wiest MJ, Bergquist AJ, Collins DF. (2018). Torque, Current, and Discomfort During three types of electrical stimulation. Abstracts of the 2018 Toronto Rehabilitation Institute Research Day. 2018 Toronto Rehabilitation Institute Research Day, Toronto, Canada, Canada.
5. Chan BC, Wiest MJ, Howe S, Craven BC. (2018). Virtual support platform for individuals with spinal cord injury requires an evaluation framework re-think. Abstracts of the 2018 Toronto Rehabilitation Institute Research Day. 2018 Toronto Rehabilitation Institute Research Day, Toronto, Canada, Canada.
6. Collins DF, Wiest MJ, Bergquist AJ. (2016). Maximizing the central contribution to electrically-evoked contractions. XXI ISEK Congress, Chicago, United States, United States.
7. Wiest MJ, Collins DF. (2014). Assessing the overlap of motor units recruited by tibialis anterior muscle belly stimulation and common peroneal nerve stimulation. XLV Meeting of the Alberta Motor Control Group, Kananaskis, Canada, Canada.
8. Wiest MJ, Collins DF. (2014). Torque vs frequency relationships when neuromuscular electrical stimulation is applied over the muscle belly, nerve trunk or alternated between the two. Abstracts of the 9th International Motoneuron Meeting. 9th International Motoneuron Meeting, Halifax, Canada, Canada.
9. Wiest MJ, Collins DF. (2013). Mechanisms of extra torque generation during neuromuscular electrical stimulation. Neuroscience 2013, San Diego, United States, United States.
10. Wiest MJ, Collins DF. (2013). Central contribution to "extra torque" during neuromuscular electrical stimulation. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, Brazil.

Funding
2018/1 - 2020/1 Co-applicant OSCIRN Team Building Grant, Grant, Ontario Neurotrauma Foundation (ONF). Total Funding - 40,000 (Canadian dollar). Funding Reference Number: 2017-SCI-RECON-1037. Principal Applicant: D Cathy Craven
2017/5 - 2020/4 Co-investigator Postdoctoral Fellowship, Fellowship. Project Description: Postdoctoral funding for Years I, II and III Funding Sources:
2017/5 - 2018/4 Toronto Rehabilitation Institute Postdoctoral fellowship. Total Funding - 50,000 (Canadian dollar) Principal Applicant: Dr Cathy Craven
2018/5 - 2020/4 Ontario Center of Excellence (OCE) Health Technologies Fund Postdoctoral fellowship. Total Funding - 100,000 (Canadian dollar). Principal Applicant: Dr Cathy Craven

---

Mark Bayley, BA, FRCPC, MD
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Heather Flett, MSc, B.Sc(PT), BA
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Sander Hitzig, PhD
St. John's Rehab Research Program - Sunnybrook Research Institute

(no CV uploaded)

Farnoosh Farahani, HBSc, CCRP
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Seyed Alavinia, PHD, MD
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Cathy Craven, BA, MD, Msc, FRCPC
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

The Negative Impact of Muscle Stretch after SCI is Nociceptor Dependent

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

David Magnuson, PhD
University of Louisville

CV:

David S. K. Magnuson, PhD
Friends for Michael Chair in Spinal Cord Injury Research
Professor of Neurological Surgery, University of Louisville, Louisville, KY.
A. Personal Statement. I am currently a Professor and hold an Endowed Chair in Neurological Surgery. I have limited teaching duties (25 hrs/year), serve on one campus wide committee (the IACUC Committee) and have 85% of my full time effort reserved for research. I have an active laboratory with 1 postdoctoral fellow, 5 PhD students, 2 technicians, 1 laboratory manager and several bioengineering co-op students. Over the past several years my research has focused on spinal cord circuitry, the central pattern generator for locomotion, activity-based rehabilitation and cardiovascular/vascular function in rat models of spinal cord injury. I am the Director of both the Electrophysiology and Behavioral Assessment and the Surgery and Animal Care Cores at the Kentucky Spinal Cord Injury Research Center and therefore have easy access to all of the equipment, space and expertise. We use a two-virus synaptic silencing system to dissect spinal circuitry and a comprehensive set of kinematic and gait analyses to assess locomotion, speed dependent gait change and swimming.
B. Positions and Honors
1988 – 1990 Postdoctoral Fellow (Dr. A. H. Dickenson) Dept Pharmacology, University College, London
1990 – 1992 Postdoctoral Fellow (Dr. Ken Marshall) Dept Physiology, University of Ottawa, Ontario
1992 – 1995 Assistant Professor, Dept Physiology, University of Manitoba, Canada
1995 – 2000 Assistant Professor, Neurological Surgery, University of Louisville, KY
1995 – 2000 Secondary appointment, Anatomical Sciences and Neurobiology, University of Louisville, KY
2000 – 2010 Associate Professor, Depts Neurological Surgery and Anatomical Sciences and Neurobiology, University of Louisville, KY
2001 – present Member, Kentucky Spinal Cord Injury Research Center, University of Louisville, KY
2010 – present Professor, Depts of Neurological Surgery, Anatomical Sciences and Neurobiology and Biomedical Engineering, University of Louisville, KY
2010 – present Friends for Michael Endowed Chair in Spinal Cord Injury Research
2016-2017 Vice-President, National Neurotrauma Society
1988 Wellcome Trust Postdoctoral Research Fellowship, University College, London.
1990 Network of Centres of Excellence Fellowship, University of Ottawa, Ontario.
1993 Canadian Paraplegic Association (Manitoba) “Will to Win” Scholar.
Study Sections: University of Manitoba Health Sciences Centre Foundation, 2002; NSERC of Canada, 2002; The New Zealand Neurological Foundation, 2002; The MRC of Canada - 2003 to 2005; The Alberta Heritage Foundation, Alberta, Canada, 2005 – 2007; New York State Spinal Cord Injury Research Program, 2006 to present; Morton Cure Paralysis Fund, 2006 to 2009; The Craig H. Neilsen Foundation, 2006 to present; NIH/NINDS: Ad-Hoc - Sensorimotor Integration (ZRG1 IFCN-F), 2007; The Maryland Spinal Cord Injury Research Fund, 2008 to present; NIH/NINDS FORE-SCI Special Emphasis Panel, 2008; The Spinal Cord Injury and Regenerative Medicine panel, Department of Veterans Affair, 2009, 2010; Spinal Cord Injury and Rehabilitation Panel, The Department of Defense; The Canadian Paraplegic Association (Manitoba); NIH/NIGMS “SCORE” Grants, 2010; Shriners Hospital Research Program, 2010-present. The NICHD/NIH Focus Group on Plasticity, January 2011. Wings for Life, 2017. International Spinal Research Trust, 2017.

Associate Editor: Journal of Neurotrauma, BMC Neuroscience

C. Contributions to science (papers from a total of 73)

1. Acute activity. In this series of papers we demonstrate that swimming and shallow water stepping cannot be used to retrain locomotion after an incomplete spinal cord injury supporting the concept that rats retrain

themselves by moving about in their cages. This activity influences not just locomotor recovery, but cardiovascular function as well. These studies also suggest that the capacity to generate a locomotor pattern is not lost after a thoracic spinal cord injury, but the capacity to support weight (load) is lost. Finally, we have shown that stretching, as used by physical therapists to help maintain range-of-motion, is detrimental to functional recovery, again after an incomplete thoracic SCI.

Keller AV, Wainwright GN, Shum-Siu A, Prince D, Hoeper A, Martin E and Magnuson DSK. Disruption of locomotion in response to hindlimb muscle stretch at acute and chronic time points after a spinal cord injury in rats. J Neurotrauma 2017 34(3):661-670. doi: 10.1089/neu.2015.4227. PubMed PMID: 27196003.

Caudle KL, Atkinson DA, Brown EH, Donaldson K, Seibt E, Chea T, Smith E, Chung K, Shum-Siu A, Cron C, Magnuson DSK. Hindlimb stretching alters locomotor function post-spinal cord injury in the adult rat. Neurorehab and Neural Repair 29(3): 268-77, 2015. PMID 25106555

Caudle KL, Brown EH, Shum-Siu A, Burke DA, Magnuson TSG, Voor MJ, Magnuson DSK. Hindlimb immobilization in a wheelchair alters functional recovery following contusive spinal cord injury in the adult rat. Neurorehab and Neural Repair 25(8): 729-39. 2011. PMID: 20302862.

Kuerzi J, Brown EH, Shum-Siu A, Siu A, Burke D, Morehouse J, Smith RR, Magnuson DSK. Task-specificity vs ceiling effect: Step-training in shallow water after spinal cord injury. Exp Neurol 224: 178-87. 2010. PMID: 20302862

Magnuson DSK, Smith RR, Brown EH, Enzmann G, Angeli C, Quesada PM and Burke DA. Swimming as a model of task-specific locomotor re-training after spinal cord injury in the rat. Neurorehab and Neural Repair. 23(6):535-45. 2009. PMID: 19270266

2. VLF and locomotor pathways. This series of papers focuses on locomotor pathways, both descending from the higher CNS (reticulospinal, vestibulospinal) and propriospinal (short, long, ipsilateral and commissural) and how the ventrolateral and lateral white matter contains pathways that are critical for locomotion in normal animals and for recovery of function after contusive spinal cord injuries. Most importantly, these studies lead to current work demonstrating unequivocally that propriospinal neurons with axons in the lateral and ventrolateral funiculus are critical for the central pattern generation of locomotion.

Kim JH, Song SK, Burke DA, Magnuson DSK. Comprehensive locomotor outcomes correlate to hyperacute diffusion tensor measures after spinal cord injury in the adult rat. Exp Neurol 235: 188-196, 2012. PMID: 22119625

Reed WR, Shum-Siu A, Whelan A, Onifer SM and Magnuson DSK. Anterograde labeling of ventrolateral funiculus pathways with spinal enlargement connections in the adult rat spinal cord. Br Res 1302: 76-84. 2009. PMID: 19766612

Reed WR, Shum-Siu A, Magnuson DSK. Reticulospinal pathways in the ventrolateral funiculus with terminations in the cervical and lumbar enlargements of the adult rat spinal cord. Neuroscience 151: 505-517, 2008. PMID: 18065156

Reed WR, Shum-Siu A, Onifer SM, Magnuson DS. Inter-enlargement pathways in the ventrolateral funiculus of the adult rat spinal cord. Neuroscience 142:1195-1207, 2006. PMID: 16938403

3. L2 and SCI. In this series of papers I demonstrated that core components of the central pattern generating circuitry are located at the L2 segment in the adult rat, the location of some of these neurons in the intermediate gray matter and the fact that the commissural population of L2 propriospinal neurons are critical for normal pattern generation in the rat pup spinal cord, in vitro. These papers also demonstrate that gray matter loss at T9/10 is irrelevant for functional recovery after SCI thus indicating that spared white matter is key. These papers had a big impact on subsequent research focused on the central pattern generator, and on neuroprotection after SCI which cannot be investigated using a thoracic contusion model and locomotor outcome measures.

Pocratsky AM, Burke DA, Morehouse JR, Bear JE, Riegler AS, Tsoulfas P, States GJR, Whittemore SR and Magnuson DSK. Reversible silencing of lumbar spinal interneurons unmasks a task-specific network for securing hindlimb alternation. Nat Commun 8(1): 1963. 2017. PMID: 29213073.

Magnuson DSK, Lovett MR, Coffee C, Gray RA, Han Y, Zhang YP, Burke DA Functional consequences of lumbar spinal cord contusion injuries in the adult rat. J Neurotrauma 22(5): 529-543, 2005. PMID: 15892599

Antonino-Green DM, Cheng J, Magnuson DSK: Neurons labeled from locomotor-related ventrolateral funiculus stimulus sites in the neonatal rat spinal cord. J Comp Neurol 442:226-238, 2002. PMID: 11774338

Magnuson DSK, Trinder TC, Zhang YP, Burke D, Morassutti DJ, Shields CB: Comparing deficits following excitotoxic and contusion injuries in the thoracic and lumbar spinal cord of the adult rat. Exp Neurol 156(1):191-204, 1999. PMID: 10192790

4. Electrophysiological maturation of neural precursors. In this series of papers I used intracellular and whole cell patch clamp recording to demonstrate the electrophysiological and pharmacological maturation of neurons derived from two different neural precursors sources, P19 EC cells and SVZ isolated precursors. The key findings are that the maturation of many precursor-derived neurons is incomplete and that this may limit their integration with host circuitry and ability to participate in normal functions.

Whittemore SR, Morassutti DJ, Walters WM, Liu R-H, Magnuson DSK: Mitogen and substrate differentially affect the lineage restriction of adult rat subventricular zone neural precursor cell populations. Exp Cell Res 252(1):75-95, 1999. PMID: 10502401

Liu RH, Morassutti DJ, Whittemore SR, Sosnowski JS, Magnuson DSK: Electrophysiological properties of mitogen-expanded adult rat spinal cord and subventricular zone neural precursor cells. Exp Neurol 158(1):143-154, 1999. PMID: 10448426

Magnuson DSK, Morassutti DJ, Staines WA, McBurney MW, Marshall KC: In vivo electrophysiological maturation of neurons derived from a multipotent precursor (embryonal carcinoma) cell line. Brain Res Dev Brain Res 84(1):130-141, 1995. PMID: 7720212

Morassutti DJ, Staines WA, Magnuson DSK, Marshall KC, McBurney MW: Murine embryonal carcinoma-derived neurons survive and mature following transplantation into adult rat striatum. Neuroscience 58(4):753-763, 1994. PMID: 7910671

5. HIV and AIDS-related encephalopathy. In this series of papers I used whole-cell patch clamp recording in cultures of human embryo derived neurons, adult human cortical slices and rat hippocampal slice preparations to explore how the HIV related protein Tat interacts with neurons and is, in fact, excitotoxic. These papers are highly cited and the involvement of Tat and other HIV related proteins in CNS pathology has driven the development of therapeutics for AIDS and HIV-related encephalopathy and dementia.

Nath A, Geiger JD, Mattson MP, Magnuson DSK, Jones M, Berger JR: Role of viral proteins in HIV-1 neuropathogenesis with emphasis on Tat. Science On-Line NeuroAids 1(6). http://mednav.com/zone/Naids/zones/Articles/199810_1/index.html, 1998.

Cheng J, Nath A, Knudson B, Hochman S, Geiger JD, Ma M, Magnuson DSK: Neuronal excitatory properties of human immunodeficiency virus type 1 Tat protein. Neuroscience 82(1):97-106, 1998. PMID: 9483506

Nath A, Psooy K, Martin C, Knudsen B, Magnuson DSK, Haughey N, Geiger JD: Indentification of a human immunodeficiency virus type 1 Tat epitope that is neuroexcitatory and neurotoxic. J Virol 70(3):1475-1480, 1996. PMID: 8627665

Magnuson DSK, Knudsen BE, Geiger JD, Brownstone RM, Nath A: Human immunodeficiency virus type 1 tat activates non-N-methyl-D-aspartate excitatory amino acid receptors and causes neurotoxicity. Ann Neurol

37(3):373-380, 1995. PMID: 7695237

My complete pub list can be found at: https://www.ncbi.nlm.nih.gov/pubmed/?term=Magnuson+DS%5Bau%5D

D. Research Support
Current
R01 NS089324 Magnuson DSK (PI) Whittemore SR (PI) 02/01/15-01/31/20
Functional consequences of silencing propriospinal pathways after SCI in the adult rat. 2.4 calendar
The goal of this grant is to determine the roles played by specific spinal cord interneurons in normal locomotion and in the recovery of locomotion after spinal cord injury using a conditional silencing approach.

KSCHIRT 13-14 Whittemore SR (PI) Magnuson DSK (PI) 01/15/14-01/14/18 (NCE)
Functional consequences of silencing lumbar interneurons after SCI in the adult rat. 0.6 calendar. This grant will conditionally silence L2 interneurons, which project to L5, bilaterally and examine the effects on locomotor activity in uninjured rats and after SCI.'

KSCHIRT 15-7 Magnuson DSK (PI) 01/15/16- 01/14/2018
Activity, exercise and ANS dysfunction after incomplete SCI in the rat. 0.6 calendar. This grant focuses on developing a model of incomplete contusion injury with reduced in-cage activity that exhibits both induced and spontaneous autonomic dysreflexia.

Completed in last 3 years

DOD SC110169 Magnuson DSK (PI) 10/01/12-09/30/16 (NCE)
Directing Spinal Cord Plasticity: The Impact of Stretch Therapy on Functional Recovery after Spinal Cord Injury".1.2 calendar. The goal of this grant to examine the effects of a clinically-based hindlimb stretching therapy, applied acutely post-SCI, on functional recovery of the locomotor system in the rat.

P30 GM103507 Whittemore SR (PD) Magnuson DSK (PI Core C) 08/01/11-07/31/16
Mechanisms of plasticity and repair after SCI (Core C: Magnuson). 1.2 calendar. This grant supports our Centers of Biomedical Research Excellence (COBRE) Core Facilities and extends their availability to other members of the University of Louisville neuroscience community.

KSCHIRT 11-11 Magnuson DSK (PI) 01/15/12-01/14/16
Kentucky Spinal Cord and Head Injury Research Trust (KSCHIRT)
Re-training locomotor circuitry in a rat model of SCI. The goal of this grant is to understand the relationship between in-cage activity and functional recovery.

Jeffery Petruska, PhD
University of Louisville

(no CV uploaded)

Anastasia Keller, PhD
University of Louisville

(no CV uploaded)

Opioid Tapering in a Spinal Cord Injury Clinic

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Marwa Mekki, MD
Burke Rehabilitation Hospital

CV:
Mekki M, Delgado AD, Fry A, Putrino D, Huang V. Robotic Rehabilitation and Spinal Cord Injury: A Narrative Review. Neurotherapeutics (2018) 15:3, 604-617

A Novel Approach to Patient Education: Creating a Mobile Web Application for Patients with Spinal Cord Injury. Oral Presentation at the American Spinal Injury Association Conference, Rochester, MN, May 2018

The Reliability of Modified Posturography to Test Dynamic Sitting Balance in Patients with Spinal Cord Injury, accepted to the American Academy of Physical Medicine and Rehabilitation Conference, to be presented Oct 2018

Book Chapter in upcoming Mitra, R. Principles of Rehabilitation Medicine, Chapter 16: SCI: Infectious and Inflammatory Diseases. Bryce, T; Huang, V; Mekki, M. to be released December 2018

Mekki M, Bryce T. Very Early Surgical Excision of Heterotopic Ossification during Inpatient Rehabilitation 7 weeks after Diagnosis in a Patient with Left Acromioclavicular Fracture and Spinal Cord Injury: A Case Report. Poster Presented at the American Academy of Physical Medicine and Rehabilitation, New Orleans Oct 2016

Mekki M, Abrams S, Bryce T. Oxycodone Overdose and Global Hypoxia Leads to Anterior Cord Ischemia Resulting in Tetraplegia: A Case Report. Poster Presented in the American Academy of Physical Medicine and Rehabilitation, Boston Oct 2015

A Phantom Study for Metal Suppression with Spinal Instrumentation for 3T MRI

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Devon Middleton, PhD
Thomas Jefferson University

CV:
Devon Middleton
1528 Naudain St #2
Philadelphia, PA 19146
267-879-6187
devon.m.middleton@gmail.com

Curriculum vitae

Education
• PhD in Bioengineering, Temple University, Aug 2017
• MS in Mechanical Engineering, Temple University, Jan 2013
• BS in Mechanical Engineering, Temple University, May 2005
Research
Temple University Magnetic Resonance Imaging Lab
• Diffusion Tensor Imaging of the pediatric spinal cord
o Research goals are to identify DTI indices which can serve as biomarkers for spinal cord pathology and develop techniques for processing spinal cord DTI data
o Collected and analyzed DTI data for the pediatric thoracic spinal cord for both injured and typically developing subjects.
o Evaluated motion correction algorithms for post-processing of DTI data collected for the pediatric cervical spinal cord.
o Performed characterization of metal implant induced artifacts in DTI to assess feasibility of imaging injured subjects with spinal implants.
o Developed analysis software to create a flexible and expandable platform for data analysis.
o Optimizing DTI techniques to improve resolution/signal for spinal cord imaging.
o Examining post processing segmentation and motion correction for development of robust processing pipeline.
• Metal artifact in spinal cord imaging
o Examined structural and functional imaging near metal implants using custom built spine phantoms implanted with fixation hardware.
o Performed characterization of metal artifact in spinal cord DTI examining feasibility/reliability in EPI based imaging near metal implants.
o Examined VAT/SEMAC techniques for high field scanning using implanted spine phantoms.
• BOLD imaging
o Performed BOLD imaging and analysis for neurosurgical planning.
o Supported BOLD studies conducted by PIs in Radiology, Psychology, and Business departments including study design, protocol setup, paradigm design and programming, and response/monitoring hardware setup and support.

Manuscripts

• Alizadeh M, Fisher J, Saksena S, Sultan Y, Conklin C, Middleton DM et al. Age Related Diffusion and Tractography Changes in Typically Developing Pediatric Cervical and Thoracic Spinal Cord. NeuroImage Clinical 2018 (In Press).
• Saksena S, Alizadeh M, Middleton DM, et al. Characterization of Spinal Cord Diffusion Tensor Imaging

Metrics in Clinically Asymptomatic Pediatric Subjects with Incidental Congenital Lesions. Spinal Cord Series and Cases 2018 (In Press).
• Alizadeh M, Conklin CJ, Middleton DM, et al. Identification of ghost artifact using texture analysis in pediatric spinal cord diffusion tensor images. Magn Reson Imag 2018 Apr;47:7-15.
• Alizadeh M, Fisher J, Saksena S, Sultan Y, Conklin CJ, Middleton DM, et al. Reduced Field of View Diffusion Tensor Imaging and Fiber Tractography of the Pediatric Cervical and Thoracic Spinal Cord Injury. J Neurotrauma 2018 Feb;31(1):90-94.
• Alizadeh M, Intintolo A, Middleton DM, et al. Reduced FOV diffusion tensor MR imaging and fiber tractography of pediatric cervical spinal cord injury. Spinal Cord 2017 Mar;55(3):314-20.
• Saksena S, Middleton DM, Shah P, et al. Diffusion Tensor Imaging of the Normal Cervical and Thoracic Pediatric Spinal Cord. Am J Neuroradiol 2016 Nov;37(11):2150-7.
• Conklin CJ, Middleton DM, Alizadeh M, et al. Spatially selective 2D RF inner field of view (iFOV) diffusion kurtosis imaging (DKI) of the pediatric spinal cord. Neuroimage Clin 2016 Jan 12;11:61-7.
• Middleton DM, Mohamed FB, Barakat N, et al. An investigation of motion correction algorithms for pediatric spinal cord DTI in healthy subjects and patients with spinal cord injury. Magn Reson Imag 2014 Jun;32(5):433-9.
• Krisa L, Middleton DM, Faro S, et al. Cerebral Activation during the Test of Spinal Cord Injury Severity in Children: an fMRI Methodological Study. Topics for Spinal Cord Injury Rehabilitation. 2013, 19(2):121-8.

Selected Conference Papers/Abstracts

• Middleton DM, Shahrampour S, Faro S. et al. Spinal cord cross section and DTI by vertebral level correlate superior and inferior to injury. International Society for Magnetic Resonance in Medicine Annual Meeting 2018, Paris, France.
• Middleton DM, Shahrampour S, Faro S, et al. Correlation of DTI Metrics to Spinal Cord Cross Sectional Area in Pediatric Subjects with Spinal Cord Injury. International Society for Magnetic Resonance in Medicine Annual Meeting 2016, Singapore.
• Conklin CJ, Middleton DM, Finsterbusch J, et al. Inner Field of View Diffusion Kurtosis Imaging (DKI) of the Pediatric Spinal Cord. 23rd International Society for Magnetic Resonance in Medicine Annual Meeting 2015, Toronto, Canada.
• Alizadeh M, Shah P, Middleton DM, et al. Ghost Artifact Removal Using Texture Analysis in Spinal Cord Diffusion Tensor Images. International Society for Magnetic Resonance in Medicine Annual Meeting 2015, Toronto, Canada.
• Saksena S, Middleton DM, Krisa L, Shah P, Faro SH, Sinko R, Mulcahey MJ, Gaughan J, Finsterbusch J, Mohamed FB. Diffusion Tensor Imaging of the Cervical and Thoracic Pediatric Spinal Cord in Normal Subjects. Annual meeting of the American Society of Neuroradiology, 2015, Chicago IL.
• Shahrampour S, Middleton DM, Liu W, Nair G, Jacobson S, Mahdi Alizadeh, Gaughan J, Shah P, Faro SH, Krisa La, Mulcahey MJ, Mohamed FB. Pediatric Spinal Cord Atrophy Imaging: Quantitative Measures in Normal and Patients with Spinal Cord Injury. Annual meeting of the American Society of Neuroradiology, 2015, Chicago IL.
• Conklin CJ, Middleton DM, Finsterbusch J, Mahdi Alizadeh, Faro SH, Shah P, Krisa L, Sinko R, Delalic JZ, Mulcahey MJ, and Mohamed FB. Inner Field of View Diffusion Kurtosis Imaging (DKI) of the Pediatric Spinal Cord. Annual meeting of the American Society of Neuroradiology, 2015, Chicago IL.
• Carabelli E, Shah P, Faro SH, Devon Middleton, Mohamed FB. Diffusion Tensor Imaging (DTI) Indices as Defined by Various Region¬s of Interest (ROI) Analysis in the Typically Developing Pediatric Cervical Spinal Cord: A Comparison of Gray Matter, White Matter, and Whole Cord ROI Analysis and its Effects on DTI Metrics. Annual meeting of the American Society of Neuroradiology, 2015, Chicago IL.
• Middleton DM, Mohamed F, Faro S, Mulcahey MJ. Improving Fractional Anisotropy Measurements and Gray Matter/White Matter Differentiation in DTI of the Pediatric Spinal Cord Using Rigid Body Motion Correction, Radiological Society of North America Annual Meeting 2014, Chicago, IL.
• Middleton DM, Barakat N, Shellikeri S, et al. Examination of Tensor Estimation Methods Cervical Spinal Cord DTI in Pediatric Subjects with Spinal Cord Injury and Typically Developing Subjects. International Society for Magnetic Resonance in Medicine Annual Meeting 2014, Milan, Italy.
• Middleton DM, Mohamed FB, Barakat N, et al. Diffusion Tensor Imaging of the Pediatric Thoracic Spinal Cord Using a Short Echo Time Inner-Field-of-View Sequence. International Society for Magnetic Resonance in Medicine Annual Meeting 2013, Salt Lake City, UT.

Laura Krisa, PhD
Thomas Jefferson University

(no CV uploaded)

James Harrop, MD
Thomas Jefferson University

(no CV uploaded)

Adam Flanders, MD
Thomas Jefferson University

(no CV uploaded)

Scott Faro, MD
Johns Hopkins University

(no CV uploaded)

Kiran Telekar, MD
Thomas Jefferson University

(no CV uploaded)

Amer Samdani, MD
Shriners Hospital for Children

(no CV uploaded)

Feroze Mohamed, PhD
Thomas Jefferson University

(no CV uploaded)

Autonomic gains associated with 6 months of high-intensity FES assisted rowing after SCI

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Ryan Solinsky, MD
Spaulding Rehabilitation Hospital

CV:
Name: Ryan J. Solinsky, MD

Faculty Academic Appointments:

10/2017 Instructor Physical Medicine & Rehabilitation Harvard University

Appointments at Hospitals/Affiliated Institutions:

10/2017 Active Staff Physical Medicine and Rehabilitation Spaulding Rehabilitation Hospital
10/2017 Trauma Rehabilitation Consultant Trauma Surgery Beth Israel Deaconess Medical Center

Honors and Prizes:

2013 House Officer of the Week Harborview Medical Center Clinical
2014 Interdisciplinary Champion Award Academy of Spinal Cord Injury Professionals Clinical
2014, 2015, 2016 Rehabilitation Medicine Scientist Training Program (RMSTP) Pre-applicant Scholar Association of Academic Physiatrists Research
2016 Visiting Spinal Fellow Burwood Hospital, Christchurch, New Zealand Clinical
2016 Ernest Bors Award for Scientific Development Academy of Spinal Cord Injury Professionals Research
2016 Outstanding Resident Award University of Washington, Department of Rehabilitation Medicine Clinical
2016 Outstanding Resident Research Award University of Washington, Department of Rehabilitation Medicine Research
2017 Golden Apple Teaching Award nominee Rutgers New Jersey Medical School Teaching
2017 Best Oral Presentation Award International Autonomic Symposium, Vancouver, BC, CAN Research
2017 Post-doctoral Fellow Research Award Kessler Institute for Rehabilitation Research
2018 Ruth L. Kirschstein National Research Service Award National Institute of Health Research

Report of Funded and Unfunded Projects
Funding Information:
Past

2015-2016 The Role of Bioelectric Signaling in Maintenance of CGRP Neurons Following Spinal Cord Injury
Walter C and Anita C Stolov Foundation, Institutional Research Grant
PI ($1,700)

2015-2016 Bidirectional Interface for Organ Nerve Integrated Control (Phase 1)
GlaxoSmithKline Innovation Challenge
Co-I, PI: Chet Moritz, PhD ($280,000) – Investigator Initiated

2016-2017 Bidirectional Interface for Organ Nerve Integrated Control (Phase 2)
GlaxoSmithKline Innovation Challenge
Co-I, PI: Chet Moritz, PhD ($1,000,000) – Investigator Initiated

Current

2013 - 2018 Hybrid-FES Exercise to Prevent Cardiovascular Declines in Acute and Chronic SCI
National Institute of Health, R01HL117037-04
Co-I, PI: J. Andrew Taylor, PhD

2016 - 2021 Understanding risks of cardiometabolic disease following (SCI)
National Institute of Health, Spinal Cord Injury Models Systems, 90SI5023
Co-I (site PI: Ross Zafonte, DO. National PI: Mark Nash, PhD)

2015-2020 Design and Development of a Soft Upper-Extremity Assistive Device for Individuals with Upper-Extremity Impairments
National Science Foundation, CBET1454472
Co-I, PI: Conor Walsh, PhD

2018-2020 Identifying key non-traditional risk factors for cardiovascular disease following spinal cord injury
Milbank Foundation
PI

2018-2020 Functional Imaging and Resting State Connectivity in Human Spinal Cord at 7 Tesla
NIH-NIBIB National Institute of Biomedical Imaging and Bioengineering, R00-EB016689-06
Co-I, PI: Robert Barry, PhD

Training Grants and Mentored Trainee Grants

2018-2020 Spinal Cord Neuromodulation through transcutaneous spinal cord stimulation
PI, co-mentors: Ross Zafonte, DO/ Felipe Fregni, MD, PhD
T32NS100663-01. Training Program in Recovery and Restoration of CNS Health and Function. Department of Neurology, Massachusetts General Hospital

Unfunded Current Projects

2016 - present Pharmacodynamics of nitroglycerin ointment and lidocaine for individuals with bladder-induced autonomic dysreflexia following spinal cord injury.
Co-I, PI: Todd Linsenmeyer, MD

2017 - present Charcot Spine following SCI, systematic review
PI

2018 - present Improving Ventilatory Capacity in Those with Chronic High-Level Spinal Cord Injury
Co-I, PI: J. Andrew Taylor, PhD

2018 – present Exploring the role of buspirone and fluoxetine in subacute spinal cord injury
Co-PI, Kevin O'Connor, MD

Report of Local Teaching and Training
Teaching of Peers (e.g., CME and other continuing education courses):
No presentations below were sponsored by outside entities

2018 Updates on Autonomic Dysreflexia
NeuroRehabilitation Course, Harvard Medical School Waltham, MA

Local Invited Presentations:
No presentations below were sponsored by outside entities

2014 Neglected problems: Neurogenic bowel and skin in patients with spinal cord injuries (Invited presentation) - Inaugural practitioner roundtable
Center for Sensorimotor Neural Engineering- University of Washington
2015 Improving functional outcomes following SCI with aggressive primary prevention (Invited presentation)
VA Puget Sound- Spinal Cord Injury Division
2017 Detailed characteristics of autonomic dysreflexia (Invited presentation)
PM&R Department- Kessler Institute for Rehabilitation
2017 Rising above autonomic dysreflexia: one step at a time (Invited presentation) - Resident/Fellow Research Day
PM&R Department- Kessler Institute for Rehabilitation
2018 Variable Obstacles to Recovery: Minimizing Secondary Complications following Spinal Cord Injury (Invited presentation)
Spaulding Campaign Executive Committee
2018 Acute Spinal Cord Injury Management (Invited presentation)
Trauma Surgery Department - Beth Israel Deaconess Medical Center
2018 Starting the Conversation: Neuroethical considerations for Brain Computer Interfaces after SCI (Invited presentation)
Harvard Collaborative Spinal Cord Injury Work Group

Report of Regional, National and International Invited Teaching and Presentations
No presentations below were sponsored by outside entities
National

2016 A Retrospective Review of Safety Using a Nursing Driven Autonomic Dysreflexia Protocol for Patients with Spinal Cord Injuries (Invited presentation - Bors Award Lecture)
Academy of Spinal Cord Injury Professional Annual Assembly
Nashville, TN
2017 Introduction to the ISNCSCI exam (Invited presentation)
University of Washington
Seattle, WA
2017 Understanding the International Standards exam: historical insights for contemporary mastery (Selected Oral Abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
Denver, CO
2017 Autonomic Dysreflexia elaborated: New emerging details from statistical analysis (Selected Oral Abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
Denver, CO
2018 Intravesicular Lidocaine: Pharmacodynamics and Effects on Autonomic Dysreflexia Prevention (Selected Oral Abstract)
American Spinal Injury Association Annual Assembly
Rochester, MN

2018 Charcot Spine following Spinal Cord Injury: Lessons from Big Data (Selected from abstract)
Academy of Spinal Cord Injury Professionals Annual Assembly
New Orleans, LA
2018 Pearls from the Changing Landscape of Autonomic Dysreflexia (Selected oral abstract)
American Academy of Physical Medicine and Rehabilitation Annual Assembly
Orlando, FL
International

2016 The emerging evidence behind electrically modulated neural plasticity (Invited Visiting Fellow Lecture)
Burwood Hospital Spinal Rounds
Christchurch, New Zealand
2016 International Spinal Cord Injury Medicine Care Paradigms (Invited Visiting Fellow Lecture)
Burwood Hospital Spinal Rounds
Christchurch, New Zealand
2017 Foundational research for a next-generation, optogenetics based bladder neuroprosthesis for individuals with spinal cord injury (Selected Oral Abstract)
4th International Autonomic Symposium
Vancouver, BC, Canada
2018 Transcutaneous Spinal Cord Stimulation to Regulate Autonomic Signals after SCI (Invited Lecture)
Prof. Winfried Mayr Neuromodulation Lab Meeting, Medical University of Vienna
Vienna, Austria

Report of Clinical Activities and Innovations
Current Licensure and Certification:

2017 Certification, American Board of Physical Medicine and Rehabilitation
2017 Massachusetts Medical License

Practice Activities:

2017 - present Ambulatory Care Spaulding Rehabilitation Hospital
2017 - present Consults Acute Care Surgery- Beth Israel Deaconess Medical Center

Report of Scholarship
Peer-Reviewed Scholarship in print or other media

Research Investigations
1. Solinsky R, Beaupre GS, Fredericson M. Variable Criteria for Patellofemoral Bracing among Sports Medicine Professionals. PM&R 2014;6:498-505.
2. Solinsky R, Svircev JN, James JJ, Burns SP, Bunnell AE. A Retrospective Review of Safety Using a Nursing Driven Autonomic Dysreflexia Protocol for Patients with Spinal Cord Injuries. Journal of Spinal Cord Medicine 2016;39(6):713-9.
a. Winner of Ernest Bors award for best annual paper published in the Journal of Spinal Cord Medicine by a trainee, 2016
3. Solinsky R, Bunnell AE, Linsenmeyer TA, Svircev JN, Engle A, Burns SP. Pharmacodynamics and effectiveness of topical nitroglycerin at lowering blood pressure during autonomic dysreflexia. Spinal Cord 2017;55(10):911-4.
4. Solinsky R, Kirshblum SC, Burns SP. Exploring detailed characteristics of autonomic dysreflexia. Journal of Spinal Cord Medicine 2017. Advanced e-publication: DOI 10.1080/10790268.2017.1360434
5. Solinsky R, Kirshblum SC. Challenging questions regarding the International Standards. Journal of Spinal Cord Medicine 2017. Advanced e-publication: DOI 10.1080/10790268.2017.1362929
6. Solinsky R, Kirshblum SC. Quantifying and reducing retained botulinum toxin post-injection. PM&R (accepted)

7. Solinsky R, Specker-Sullivan L. Ethical issues surrounding a new generation of neuroprostheses for patients with spinal cord injuries. PM&R (accepted)
8. Brockbrader M, Francisco G, Olsen J, Solinsky R, Lee R, Boninger M. Brain Computer Interfaces in Rehabilitation Medicine. PM&R (accepted)

Other peer-reviewed scholarship
1. Solinsky R, Bunnell AE. Rehabilitation of a Patient with Overlap of Acute Transverse Myelitis and Bickerstaff's Brainstem Encephalitis: A Case Report. Spinal Cord Series and Cases 2016: 1, 15032

Non-peer reviewed scholarship in print or other media:

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings:

1. Solinsky R, Moritz CT. A Conceptual Neuroprosthetic Device to Detect and Ameliorate Autonomic Dysreflexia. Justus F. Lehmann Symposium, poster presentation, 2014
2. Solinsky R, Sunshine M, Richner T, Moritz CT. An emerging optogenetic neuroprosthesis to address lower urinary tract dysfunction in individuals with spinal cord injuries Justus F. Lehmann Symposium, poster presentation, 2015
3. Solinsky R, Bunnell AE. Autonomic Dysreflexia Treatment with Nitroglycerin Paste. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, 2015
4. Solinsky R, Sunshine M, Mondello S, Richner T, Moritz CT. Neuroprostheses Use in the Management of Neurogenic Bladder. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, 2015
5. Solinsky R, Bunnell AE. The Role of Chronicity of Spinal Cord Injury on Duration of Autonomic Dysreflexia. American Academy of Physical Medicine & Rehabilitation Annual Assembly, poster presentation, PM&R 2015 (7): 9S, S128
6. Solinsky R, Mondello S, Sunshine M, Moritz CT. Aberrant spinal CGRP afferent fiber arborization: A potential linchpin to target in limiting secondary complications from SCI. Justus F. Lehmann Symposium, poster presentation, 2016
7. Richner T, Boyer S, Smith J, Mahoney B, Ranganathan V, Solinsky R, Moore G, Horwitz G, Anikeeva P, Moritz CT. Development of a Wireless Neuromodulation System for the Bladder. North American Neuromodulation Society and Neural Interfaces joint Meeting, 2016
8. Solinsky R. Aberrant Calcitonin-Gene Related Peptide Afferent Arborization: Preventing Secondary Complications. Academy of Spinal Cord Injury Professionals Educational Conference, poster presentation, Journal of Spinal Cord Medicine 2016 (39):5,584
9. Richner T, Mahoney B, Boyer S, Ranganatha V, Sunshine M, Moore G, Solinsky R, Horwitz G, Anikeeva P, Smith J, Fawcett J, Moritz CT. Closed-loop neural interfacing strategies for the bladder. Society for Neuroscience Annual Conference, poster presentation, 2016
10. Chiou M, Solinsky R, Nieves JD. Decompression sickness, an uncommon cause of spinal cord injury and cerebrovascular accident: a case report. Association of Academic Physiatrists Annual Conference, poster presentation, 2017
11. Solinsky R, Linsenmeyer TA. Impact of intravesicular lidocaine to decrease blood pressure in those with SCI at risk for autonomic dysreflexia. 4th International Autonomic Symposium, 2017

Adina Draghici, PhD
Spaulding Rehabilitation Hospital

(no CV uploaded)

J. Andrew Taylor, PhD

Spaulding Rehabilitation Hospital

(no CV uploaded)

Needs, priorities, and attitudes of individuals with neurogenic bladder and bowel dysfunction considering nerve stimulation devices

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Dennis Bourbeau, PhD
Louis Stokes Cleveland Va Medical Center

CV:
A. Personal Statement
My research interests include the neurophysiological control of pelvic functions and, in particular, restoring these functions when lost to disease or trauma of the nervous system. After earning my PhD in Bioengineering in 2011, I took a position as a postdoctoral research associate at the Louis Stokes Cleveland VA Medical Center with Drs. Kenneth Gustafson and Steven Brose in ongoing bladder research studies. In 2013, I received a Career Development Award Level 1 (CDA1) from the Department of Veterans Affairs, which covered my salary while I worked on human subjects research in Dr. Gustafson's lab, focusing on developing an approach using genital nerve stimulation (GNS) to restore bladder function lost to SCI. We tested GNS acutely in over 3 dozen subjects and provided a stimulator for take-home self-administered stimulation for 6 subjects, who experienced significant improvements in bladder control. We expanded our research in pelvic functions to include bowel function, and I was awarded a Career Development Award Level 2 (CDA2) from the Department of Veterans Affairs in 2015 to pursue this line of research. This work addresses a clinically unmet need among the veteran population.

B. Positions and Honors
Positions and Employment
2017 – Assistant Professor, Dept of PM&R, Case Western Reserve University, Cleveland, OH
2016 – Staff Scientist, Dept of PM&R, MetroHealth Medical System, Cleveland, OH
2011 – Biomedical Engineer, Louis Stokes Cleveland VA Medical Center, Cleveland, OH
2005 – 2011 Graduate Student Researcher, University of Pittsburgh, Pittsburgh, PA
2002 – 2005 Engineer, High Technology, Inc., Walpole, MA
2000 Research Engineer, University of Massachusetts Medical School, Worcester, MA

Service
2014 – Grant Review Coordinator, Cleveland VA R&D Committee
2013 – 2016 Louis Stokes Cleveland VA IACUC committee member
2012 – Internal Grant Peer Reviewer, Cleveland VA and FES Center

Journal Review
2016 – Nature - Science Reports
2016 – Journal of Spinal Cord Medicine
2016 – BioMedical Engineering Online
2015 – Journal of Urology
2015 – Journal of Cellular Physiology
2014 – Journal of Neuroengineering and Rehabilitation
2012 – IEEE Transactions on Neural Systems and Rehabilitation Engineering (TNSRE)

Grant Review
2016 – NIH NINDS
2016 – Department of Veterans Affairs
2015 – New York State Dept of Health SCIRB CART-IDEA

Professional Memberships
2016 – American Spinal Injury Association
2005 – Society for Neuroscience

Honors

2017 Member to Mention, Association of Spinal Cord Injury Professionals (ASCIP)
2016 Best Paper Award, IEEE Biomedical Circuits and Systems Annual Meeting
2009 Honorable mention, Annual McGowan Institute Retreat poster session
2008 – 2010 NSF Integrative Graduate Education and Research Traineeship (IGERT)

C. Contribution to Science
For a general list of publications, see Dr. Bourbeau's public bibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/dennis.bourbeau.1/bibliography/47500202/public/?sort=date&direction=ascending

1. Neurogenic detrusor overactivity following neurological disease or trauma, such as spinal cord injury, can result in urinary incontinence, lower bladder capacity, can trigger autonomic dysreflexia, and significantly impact quality of life. Electrical stimulation, such as stimulation of the genital nerve (GNS), can inhibit the bladder via spinal reflex pathways. These publications document evidence for acute and chronic effectiveness of electrical stimulation approaches, and GNS in particular. I completed this work as a post-doctoral researcher, conducting and advancing these experiments in human subjects.
a. Bourbeau DJ, Gustafson KJ, Brose SW. At-home genital nerve stimulation for individuals with SCI and neurogenic detrusor overactivity: A feasibility pilot study. J Spinal Cord Med. 2018; Jan15:1-11.
b. Bourbeau DJ, Gustafson KJ, Sidik S, Brose SW, Creasey GH. Genital nerve stimulation increases bladder capacity after SCI: A meta-analysis. J Spinal Cord Med. 2017; Feb15:1-9.
c. Brose SW, Bourbeau DJ, Gustafson KJ. Genital nerve stimulation is tolerable and effective for bladder inhibition in sensate individuals with incomplete SCI. J Spinal Cord Med. 2017; Feb10:1-8.
d. Bourbeau DJ, Amend B, Sievert KD. Electrical stimulation for bladder management. In J Corcos & D Ginsberg (Eds.), Neurogenic Bladder 3rd Edition. Boca Raton, FL: CRC, 2015. In press.
e. Ho CH, Triolo RJ, Elias AL, Kilgore KL, DiMarco AF, Bogie K, Vette AH, Audu ML, Kobetic R, Chang SR, Chan KM, Dukelow S, Bourbeau DJ, Brose SW, Gustafson KJ, Kiss ZH, Mushahwar VK. Functional electrical stimulation and spinal cord injury. Phys Med Rehabil Clin N Am, 2014; 25(3):631-654.

2. Measuring bladder activity continuously and chronically would provide an important tool for experiments to understand the neural control of the lower urinary tract system; significantly enhance diagnostic examinations; or provide feedback for therapeutic interventions for neurogenic and non-neurogenic bladder problems, such as detrusor overactivity. Dr. Margot Damaser's group has been developing an implantable bladder sensor to meet this need and this work has resulted in several publications and inventions. I began collaborating with her group two years ago. My role has been to provide expertise on neuroscience and clinical translation applications, including engineering and clinical considerations, for design of this system. We have developed an algorithm that requires only one sensor placed in the bladder, rather than the traditional two-sensor method used clinically for acute bladder data measurements, and we have conducted human subjects experiments to provide data for validating the algorithm, including a live test in a human experiment; I have acted as senior author on this recent work.
a. Karam R, Majerus SJ, Bourbeau DJ, Damaser MS, Bhunia S. Tunable and Lightweight On-Chip Event Detection for Implantable Bladder Pressure Monitoring Devices. IEEE Trans Biomed Circuits Syst. 2017 Oct.
b. Karam R, Bourbeau D, Majerus S, Damaser M, Makovey I, Bhunia S. Real-time classification of bladder events for effective diagnosis and treatment of urinary incontinence. IEEE-TBME. 2016; 63(4): 721-9.
c. Karam R, Bourbeau D, Majerus S, Damaser M, Makovey I, Bhunia S. Real-time contraction event detection from bladder pressure recordings for effective diagnosis and treatment of urinary incontinence. IEEE-TBME, Aug 2015.
d. Damaser M, Bhunia S, Karam R, Majerus S, Bourbeau D: Abdominal Pressure-Free Bladder Contraction Detection System. Invention Disclosure, 2015.

D. Research Support
Ongoing Research Support
OT2OD023873 (Damaser/Bourbeau) February 2017 – January 2019 Role: co-PI
NIH Stimulating Peripheral Activity to Relieve Conditions (SPARC)
"Conscious ambulatory bladder monitoring to understand neural control of lower urinary tract function"
Objectives: Design, test, and validate a wireless pressure and volume bladder sensor for use in preclinical research studies that explore the mechanisms underlying the neural control of the lower urinary tract

Foundation Study of Neuromodulation (Bourbeau) March 2017 – February 2019 Role: PI
Society for Urodynamics and Female Urology (SUFU) Award
“Automated closed-loop stimulation to inhibit neurogenic bladder activity”
Objectives: Test effectiveness and feasibility of closed-loop genital nerve stimulation using a custom algorithm in persons with neurogenic detrusor overactivity

RX001962 VA (Bourbeau) October 2015 – September 2020 Role: PI
Department of Veterans Affairs, Career Development Award Level 1 (CDA2)
“Afferent Stimulation to Evoke Recto-colonic Reflex for Colonic Motility”
Objectives: Test electrical stimulation approaches to restore bowel function lost to neurological disease or trauma, such as spinal cord injury, and provide career development training for Dr. Bourbeau.

Completed Research Support
RX001607 VA (Creasey) September 2014-August 2016 Role: co-I (PI at Cleveland site)
Department of Veterans Affairs, SPiRE Award
“Evaluation of pudendal nerve block for voiding after spinal cord injury”
Objectives: Test feasibility of pudendal nerve conduction block using electrical stimulation via a percutaneous electrode, to temporarily and reversibly inhibit the urethral sphincter and improve voiding

RIP VISN 10 (Bourbeau) October 2013 – October 2014 Role: PI
Dept Veterans Affairs VISN 10 Research Initiative Program (RIP)
“Development of an experimental apparatus for observing the effects of electrical stimulation on bowel function”
Objectives: Design, develop, and benchtop test a rig for collecting bowel data in preclinical and translational experiments for bowel function.

RX000960 VA (Bourbeau) October 2013 – September 2015 Role: PI
Department of Veterans Affairs, Career Development Award Level 1 (CDA1)
“Afferent Stimulation-Based Neural Prosthesis to Restore Bladder Function”
Objectives: Test electrical stimulation approaches to restore bladder function lost to neurological disease or trauma, such as spinal cord injury, and provide career development training for Dr. Bourbeau.

Abby Bolon, BS
Case Western Reserve University

(no CV uploaded)

Graham Creasey, MD, FRCSEd
Stanford University

(no CV uploaded)

William Fertig, .
United Spinal Association

(no CV uploaded)

Jennifer French, MBA
Neurotech Network and Neurotech Reports

(no CV uploaded)

Tara Jeji, MD, MBA
Ontario Neurotrauma Foundation

(no CV uploaded)

Anita Kaiser, MS
Toronto Rehabilitation Institute-University Health Network; Canadian Spinal Research Organization

(no CV uploaded)

Alexander Rabchevsky, PhD
Scobirc, University of Kentucky

(no CV uploaded)

Bruno Gallo Santacruz, Pharm.D
Coloplast Inc.

(no CV uploaded)

Jiayang Sun, PhD
Case Western Reserve University

(no CV uploaded)

Karl Thor, PhD
Dignify Therapeutics Inc.

(no CV uploaded)

Tracey Wheeler, PhD
Craig H. Neilsen Foundation

(no CV uploaded)

Jane Wierbicky, RN, BSN
United Spinal Association

(no CV uploaded)

Risk-Benefit Value of Improvements in Upper Extremity and Trunk Function by an Implanted Electrical Stimulation Device Targeting Chronic Cervical Spinal Cord Injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Kimberly Anderson, PhD
Metrohealth Medical Center - Case Western Reserve University

CV:

A. Personal Statement

My research experience spans from cellular and molecular neuroscience in graduate school, to in vivo animal models of cervical spinal cord injury (SCI) and forelimb function as a post-doctoral fellow, to clinical studies as an Adjunct Assistant Professor at UC Irvine. I purposefully gained experience in those three very different avenues of research. I wanted to use my personal experience and knowledge gained from living with a spinal cord injury for 28 years combined with my detailed understanding of cellular, whole animal, and human research to make a unique difference in the lives of many people living with SCI. The opportunity to do so availed itself to me in 2009 and I joined the Miami Project as the Director of Education. In addition to continuing my outreach and education efforts, I have continued a research track. I was the PI conducting a multi-center clinical trial validating the Spinal Cord Independence Measure (SCIM III) in the US healthcare setting. I was the Chair of the NINDS SCI CDE Functional Outcomes Working Group. Several of my studies have focused on obtaining the perspective of people living with SCI on various aspects of research, including functional priorities, acceptable benefits and risks, preferences for neuroprosthetics, and exercise participation. One of my recent projects focuses on identifying the facilitators and barriers to clinical trial participation from the SCI consumer perspective. My current project focuses on exploring the risk-benefit thresholds of people living with cervical SCI with respect to implanted neurotechnology. I have significant experience with consumer-oriented research and FDA-regulated clinical trial programs targeting SCI.

B. Positions and Honors

Positions and Employment

1996-2000 Graduate Research Assistant, Dept. Neurosciences, Biomedical Sciences Graduate Program, Univ. of New Mexico
2000-2004 Post-doctoral Fellow, Reeve-Irvine Research Center, Dept. Anatomy & Neurobiology, Univ. of California, Irvine
2004-2009 Assistant Adjunct Professor, Reeve-Irvine Research Center, Dept. Neurological Surgery, University of California, Irvine
2009-2010 Visiting Project Scientist, Reeve-Irvine Research Center, Dept. Neurological Surgery, University of California, Irvine, School of Medicine
2009-2018 Director of Education, The Miami Project to Cure Paralysis, University of Miami
2011-2017 Research Associate Professor, Dept. Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami
2017-2018 Research Professor, Dept. Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami
2018-present Professor, Department of Physical Medicine and Rehabilitation, Metrohealth Medical Center, Case Western Reserve University School of Medicine

Other Experience and Professional Memberships

5/22/2006 Grant reviewer for U.S. Department of Education, National Institute on Disability and Rehabilitation Research, 2006 Spinal Cord Injury Model System Centers Program Grant Review
3/16/2007 Ad hoc grant reviewer for the National Institute of Child Health and Human Development (NICHD)
spring Population Sciences Committee
3/29/2007 Ad hoc grant reviewer for the Craig H. Nielsen Foundation spring cycle
3/16/2009 Ad hoc grant reviewer for Craig H. Neilsen Foundation, Spring 2009 Grant Review
3/31/2009 Ad hoc grant reviewer for Ontario Neurotrauma Foundation, Studentship/Fellowship Grant Review

6/12/2009 Special Emphasis Panel/Scientific Review Group RFA-OD-09-003 Challenge Grant Panel 11, NIH
1/12/2010 Department of Defense, U.S. Army Medical Research and Materiel Command, Congressionally Directed Medical Research Programs, Spinal Cord Injury Research Program Grant Review
2/21/2010 Alberta Paraplegic Foundation, Spring 2010 Grant Review
2010-2015 Expert Review Panel Member, Quality of Life Grants, Christopher and Dana Reeve Foundation
2012-present National SCI Association Medical and Scientific Advisory Committee Member
2012 Ad hoc grant reviewer for Patient Centered Outcomes Research Institute
2013 Grant reviewer for U.S. Department of Education, National Institute on Disability and Rehabilitation Research, DRRP Health and Function of Individuals with Disabilities Grant Review

1998-2018 Society for Neuroscience
2000-2018 National Neurotrauma Society
2004-present American Spinal Injury Association (ASIA)
2005-2009 UCI General Clinical Research Center Advisory Committee
2005-2015 ASIA Membership Committee
2006-2008 ASIA Outcome Measures – Functional Recovery Sub-committee member
2006-2012 Member, Geron ESCRO (embryonic stem cell research oversight) Committee
2007-2011 Committee Member, National Advisory Board for Medical Rehabilitation Research, NICHD, NIH
2008-2010 Pan-Canadian Spinal Cord Injury Solutions Network-Translational Research Program, Research Advisory Committee Member
2008-2010 North American Spine Society, International Education Committee, Member
2008-present International Spinal Cord Society (ISCoS)
2009-present Spinal Cord Outcomes Partnership Endeavor (SCOPE), Member
2009-2013 Optimizing Participation Through Technology – Rehabilitation Engineering Research Center (OPTT-RERC) Advisory Board Member, University of Southern California
2012-present ASIA Program Committee, Member
2013-present Chair, Spinal Cord Injury Functional Assessments Common Data Elements Working Group, NINDS, NIH
2013-present Asterias ESCRO (Embryonic Stem Cell Research Oversight) Committee, Member
2014-2016 Praxis 2016 Program Advisory Committee, Rick Hansen Institute
2015-present ASIA Research and Awards Committee, Member
2015-2017 Councilor, National Neurotrauma Society
2017-present ASIA Board of Directors

Honors
1997-2000 NIH Research Supplement for Individuals with Disabilities (Graduate Student)
1997 Department of Energy Committee for People with Challenged Abilities Scholarship
2000 Khatali Award for Outstanding Senior Graduate Student
2000-2001 NIH Research Supplement for Individuals with Disabilities (Post-doctoral Fellow)
2004 Stephen Aroff Memorial Award for a person with a spinal cord injury
2005 Paul H. Silverman Award for Outstanding Work on Science and Ethics
2006 Jerry Stein Independent Living Award
2007 Inducted into the SCI Hall of Fame in category of Research in Basic Science
2009 Ed Roberts Independent Living Award
2010 “Empower and Revitalizing Urban Communities”, Outstanding Career Mentor Award
C. Contribution to Science
1. My primary contributions to the field focus on the identification of research priorities of the human population living with SCI. My seminal publication in 2004, “Targeting recovery: Priorities of the spinal cord injured population”, has had significant impact on both the basic and clinical SCI research arenas. It is now the 3rd most cited article in the Journal of Neurotrauma. Individuals living with a disease should be included in the research process and my research has demonstrated that useful information can be obtained from the population living with SCI and that it can be used to shape the research agenda. There has been an increase in research addressing upper extremity function and autonomic function after SCI, the 2 highest priorities, as a result of my research contributions. I served as the primary investigator in all of these studies.

a. Anderson, KD. (2004). Targeting recovery: Priorities of the spinal cord injured population. J. Neurotrauma. 21:1371-1383.
b. Anderson, KD, Borisoff, JF, Johnson, RD, Stiens, SA, Elliott, SL. (2007). The impact of spinal cord injury on sexual function: concerns of the general population. Spinal Cord 45:328-337.
c. Cowan RE, Nash MS, Anderson KD. (2013). Exercise participation barrier prevalence and association with exercise participation status in individuals with spinal cord injury. Spinal Cord. 51(1):27-32.
d. Anderson KD, Cowan RE, Horsewell J. (2016). Facilitators and barriers to spinal cord injury (SCI) clinical trial participation: Multi-national perspective of people living with SCI. J. Neurotrauma. 33:493-499.

2. I have also led and/or collaborated with multiple investigators an area of research aimed at improving outcome assessments for SCI, particularly for use in clinical trials. The Functional Independence Measure had by default become the gold standard for measuring whole body function in SCI, yet it was not designed for SCI and is quite insensitive. My collaborative research has now enabled the Spinal Cord Independence Measure to become the outcome measure of choice when it comes to overall function. It was designed specifically for SCI, it is sensitive to change, it is now highly recommended by NIH SCI Common Data Elements as the primary outcome measure to evaluate overall function, and it is being used in multiple clinical trials.

a. Anderson, K, Aito, S, Atkins, M, Biering-Sørensen, F, Charlifue, S, Curt, A, Ditunno, J, Glass, C, Marino, R, Marshall, R, Mulcahey, MJ, Post, M, Savic, G, Scivoletto, G, Catz, A. (2008). Functional Recovery Measures for Spinal Cord Injury: Comparison by a Multi-National Work Group. J. Spinal Cord. Med. 31:133-144.
b. Anderson KD, Acuff ME, Arp BG, Backus D, Chun S, Fisher K, Fjerstad JE, Graves DE, Greenwald K, Groah SL, Harkema SJ, Horton III JA, Huang M-N, Jennings M, Kelley KS, Kessler SM, Kirshblum S, Koltenuk S, Linke M, Ljungberg I, Nagy J, Nicolini L, Roach MJ, Salles S, Scelza WM, Read MS, Reeves RK, Scott MD, Tansey KE, Theis JL, Tolfo CZ, Whitney M, Williams CD, Winter CM, Zanca JM. (2011). United States (US) multi-center study to assess the validity and reliability of the Spinal Cord Independence Measure (SCIM III). Spinal Cord. 49:880-885.
c. Steeves JD, Lammertse DP, Kramer LK, Kleitman N, Kalsi-Ryan S, Jones L, Curt A, Blight AR, Anderson KD. (2012). Outcome Measures for Acute/Subacute Cervical Sensorimotor Complete (AIS-A) Spinal Cord Injury During a Phase 2 Clinical Trial. Top Spinal Cord Inj Rehabil. 18(1):1–14.
d. Biering-Sørensen F, Alai S, Anderson K, Charlifue S, Chen Y, DeVivo M, Flanders AE, Jones L, Kleitman N, Lans A, Noonan VK, Odenkirchen J, Steeves J, Tansey K, Widerström-Noga E, Jakeman LB. (2015). Common data elements for spinal cord injury clinical research: a National Institute for Neurological Disorders and Stroke project. Spinal Cord. 53:265-277.
3. My early work directly addressed molecular mechanisms of axonal regeneration. The Growth Associated Protein 43 (GAP-43) mRNA is upregulated after neuronal injury but is unstable and quickly degraded. The RNA-binding protein HuD can bind to the 3' UTR of the GAP-43 mRNA transcript and enhance stability. My work established that overexpessing HuD promoted neurite outgrowth in different cell culture models by stabilizing the GAP-43 mRNA and allowing more protein to be translated. I was performing this research as a graduate student with Dr. Nora Perrone-Bizzozero as part of my dissertation.
a. Mobarak CD, Anderson KD, Beckel-Mitchener A, Rogers SL, Furneaux H, Perrone-Bizzozero NI (2000) The RNA-binding protein HuD is required for GAP-43 mRNA stability, GAP-43 gene expression, and PKC-dependent neurite outgrowth in PC12 cells. Mol. Biol. Cell. 11:3191-3203.
b. Anderson KD, Morin M, Beckel-Mitchener A, Mobarak C, Neve RL, Furneaux HM, Burry R, Perrone-Bizzozero NI (2000) Overexpression of HuD, But Not of Its Truncated Form HuD I+II, Promotes GAP-43 Gene Expression and Neurite Outgrowth in PC12 cells in the Absence of NGF. J. Neurochem. 75:1103-1114.

c. Anderson KD, Sengupta J, Morin M, Neve RL, Valenzuela CF, Perrone-Bizzozero NI (2001) Overexpression of HuD accelerates neurite outgrowth and increases GAP-43 mRNA expression in cortical neurons and retinoic acid-induced embryonic stem cells in vitro. Exp. Neurol. 168:250-258.
d. Anderson KD, Merhege MA, Morin M, Bolognani F, Perrone-Bizzozero NI (2003) Increased expression and localization of the RNA-binding protein HuD and GAP-43 mRNA to cytoplasmic granules in DRG neurons during nerve regeneration. Exp. Neurol. 183:100-108.

4. Another phase of research focused on forelimb function after cervical spinal cord injury (SCI) in rodents. I established the natural recovery profile of gripping ability in mice and rats and the relationship to

corticospinal integrity. We went on to develop the first bilateral contusion injury model in the cervical region of the rat spinal cord and the subsequent novel Forelimb Locomotor Assessment Scale. This work led to an increase in cervical SCI research in the field, which had previously been dominated by thoracic injury. I performed this research as a post-doctoral fellow and junior faculty member with Dr. Oswald Steward.

a. Anderson KD, Abdul M, Steward O (2004) Quantitative assessment of deficits and recovery of forelimb motor function after cervical spinal cord injury in mice. Exp. Neurol. 190:184-191.
b. Anderson KD, Gunawan A, Steward O (2007) Spinal pathways involved in the control of forelimb motor function in rats. Exp. Neurol. 206:318-331.
c. Anderson KD, Sharp KG, Hofstadter M, Irvine KA, Murray M, Steward O (2009) Forelimb Locomotor Assessment Scale (FLAS): A new tool to assess forelimb dysfunction after cervical spinal cord injury. Exp. Neurol. 220:23-33.
d. Anderson KD, Sharp KG, Steward O (2009) Bilateral cervical contusion spinal cord injury in rats. Exp. Neurol. 220:9-22.

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1j7AeQ3Zue7A6/bibliography/45178578/public/?sort=date&direction=descending
D. Research Support
Ongoing Research Support
Widerstrom-Noga (P.I.), Anderson (Co-I.) 2015-2018
U.S. Department of Defense, Spinal Cord Injury Research Program
Perspectives in Management of Severe Neuropathic Pain After a Spinal Cord Injury

Peckham (P.I.) 2010-2018
National Institutes of Health, NINDS
Multi-functional Neuroprosthetic System for Restoration of Motor Function

Completed Research Support
Craven (P.I.), Nash (Co-I.), Anderson (Co-I.) 2016-2018
Craig H. Neilsen Foundation
Statin Monotherapy for Treatment of Endocrine Metabolic Disease Risk

Nash (P.I), Anderson (Co-I.) 2015-2018
U.S. Department of Education, National Institute on Disability, Independent Living, and Rehabilitation Research
A Lifestyle Intervention Targeting Enhanced Health and Function for Persons with Chronic SCI in Caregiver/Care-Receiver Relationships: Effects of Caregiver Co-Treatment

Brackett (P.I.), Anderson (Co-I.) 2015-2018
Craig H. Neilsen Foundation
Management of Infertility in Men with SCI: An Educational Program for Practitioners and Clients

Anderson (P.I.) 2014-2018
Craig H. Neilsen Foundation
The Miami Project to Cure Paralysis Education Program

Anderson (P.I.) 2014-2018
Bryon Riesch Foundation
The Safety of Autologous Human Schwann cells (ahSC) in Subjects with Chronic Spinal Cord Injury (SCI) Receiving Rehabilitation - Screening

Levi (P.I.), Anderson (Co-I.) 2014-2016
StemCells Inc.
A Single-Blind, Randomized, Parallel Arm, Phase II Proof-of-Concept Study of the Safety and Efficacy of HuCNS-SC Transplantation in Cervical Spinal Cord Injury

R25NS083064 Anderson (P.I.), Dietrich (Co-P.I.) 2013-2018
National Institutes of Health, NINDS
NIH Neurotrauma Summer Research Experience Program

Widerstrom-Noga (P.I.), Anderson (Co-I.) 2012-2015
U.S. Department of Defense, Spinal Cord Injury Research Program
Experiences of living with persistent pain after a spinal cord injury

Anderson (P.I.), Field-Fote (Co-I.), Nash (Co-I.), Thomas (Co-I.), Widerstrom-Noga (Co-I.) 2013-2014
Robert J. Kleberg, Jr. and Helen C. Kleberg Foundation
Exercise and Locomotor Training Required for Clinical Trials Targeting Chronic Spinal Cord Injury

---

Anne Bryden, OTR/L
Institute for Functional Restoration - Case Western Reserve University

CV:
NA

Megan Moynahan, MS
Institute for Functional Restoration - Case Western Reserve University

CV:
NA

Metabolic dysfunction after SCI: diet-induced obesity in a rodent model of thoracic spinal contusion

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Kwamie Harris, MS
University of Mississippi Medical Center

(no CV uploaded)

Brittany Duncan, MS
University of Mississippi Medical Center

(no CV uploaded)

Alexandra Himel, MS
University of Mississippi Medical Center

(no CV uploaded)

Raymond Grill, PHD
University of Mississippi Medical Center

(no CV uploaded)

Bernadette Grayson, PhD, MCR
University of Mississippi Medical Center

CV:

Bernadette Elizabeth Grayson, PhD, MCR
Department of Neurobiology and Anatomical Sciences
University of Mississippi Medical Center
2500 North State Street, Research Wing 735
Jackson, MS 39216
Phone: 601-984-6809
Fax: 601-984-1655
Email: bgrayson@umc.edu
Citizenship: USA
DOB: June 18, 1975
Birth Place: Yonkers, New York

EDUCATION
1993-1997 BS in Biology, Rensselaer Polytechnic Institute
2004-2009 PhD in Neuroscience, Oregon Health & Sciences University
Dissertation: Development of Hypothalamic Systems in the Fetal Japanese Macaque Mentor: Kevin Grove
2007-2009 Masters in Clinical Research, Oregon Health & Sciences University.
Capstone: Oregon Women's Study: Placenta and Inflammation Mentors: Kevin Grove, Cynthia Morris, Kent Thornburg
2009-2014 Postdoctoral Fellow, Department of Internal Medicine, University of Cincinnati Mentors: Randy Seeley and Stephen Woods

PROFESSIONAL EXPERIENCE

1993 - Lab Aide, Rensselaer Polytechnic Institute, Troy, NY
1995 - Intern, National Aerospace and Medical Research Lab, US Navy, Pensacola, FL 1998-1999 - High School Math/Science Instructor, Mercy Ships (Europe and Africa Tour)
1999-2000 - Research Specialist, Carleton College, Northfield, MN
2001-2002 - Research Assistant I-III, Oregon Health Sciences University, Portland, OR 2002-2004 - Lab Manager, Oregon Health Sciences University, Portland, OR
2004-2009 - Graduate Research Assistant, Oregon National Primate Research Center, OR 2009-2014 - Postdoctoral Fellow, University of Cincinnati, Cincinnati, OH
2014-Present - Assistant Professor, Department of Neurobiology and Anatomical Sciences, University of Mississippi Medical Center, Jackson, MS

ACADEMIC AWARDS

2004-2005 - Neuroscience Predoctoral Training Award
2005 - National Science Foundation, Honorable Mention 2008 - NIH OSLER TL1 Award
2008 - Human Investigations Program Award 2008 - N.L. Tartar Research Fellowship
2010-2011 - Neuroendocrinology of Homeostasis Training Award
2011-2013 - NIH Postdoctoral National Service Research Award (HD068103-01) 2012-2017 - NIH Loan Repayment Program Award Recipient
2017 - UMMC Research Excellence Award, Bronze Medal

DEPARTMENTAL SERVICE

2014-Present - Director, Neurobiology and Anatomical Sciences (N&A) Seminar Series
2015-Present - Member, N&AS Departmental Advisory Committee
2015-Present - AME and CE Director for Departmental Seminar Series

INSTITUTIONAL SERVICE

2014 -Poster Judge, Graduate School of Health Sciences Research Day 2015 -Poster Judge, Medical Student Research Program
2015-2016 -Poster Judge, Neuroscience Research Day
2017 -Poster Judge, Pathology Research Day
2015 -Reviewer, UMMC IRSP grant review committee
2016-Present -Elected Member, Faculty Senate representing School of Medicine
2018 -Elected Secretary, Faculty Senate
2018-Present -Elected President, Faculty Senate
2017-Present -Board Member, School of Dentistry Loan Repayment Program
2017-Present -Preclinical Advisor to M1/M2 Medical Students
2017-Present -Member, Center for Developmental Disorders Research (CDDR) Advisory Committee
2018-Present - Member, SACSCOC Leadership Committee
2018-Present - Member, Council on Diversity & Inclusion

EXTERNAL SERVICE

2015 -Veteran's Administration Molecular Disease Rounds Co-Host
2017 -National ABCRMS meeting, Awarded Poster Judge, Phoenix, Arizona
2017-present -Early Career Reviewer (ECR) program at the Center for Scientific Review (CSR), National Institutes of Health.

EDUCATION

Faculty Appointments
2014-Present - Graduate School of Health Sciences

2014-Present - Program in Neuroscience
2017-Present - Program in Pathology

Mentor of Record
2017-Present - Redin A. Spann, Program in Neuroscience Graduate Student
2017-Present - William Dungan, Medical Student Research Program, Full Option
2017-Present - Charles Phillips, Program in Pathology

Dissertation Committee Member
2014-2017 - Advisee, Peyton Weems, Mentor: M. Lehman

Teaching
2015 - D714 Professional Skills Course: Negotiations
2016-2017 -615 Medical Neurobiology
2016-Present - Science Education Partnership Award (STEMI) lecturer (2 contact hours)
2017 -NSCI708, Special Topics in Neuroscience (12 contact hours)
2018 -NSCI701, lectures on hypothalamic neural control (6 contact hours);
Lecture 1: Regulatory Systems: Hypothalamus
Lecture 2: Regulatory Systems: Other hypothalamic pituitary (organ) systems

Publications (Last 5 years)
1. Chambers AP, Wilson-Perez HE, McGrath S, Grayson BE, Ryan KK, D'Alessio DA, Woods SC, Sandoval DA, Seeley RJ. Effect of vertical sleeve gastrectomy on food selection and satiation in rats. American journal of physiology Endocrinology and metabolism. 2012;303(8):E1076-84. Epub 2012/08/31. doi: 10.1152/ajpendo.00211.2012. PubMed PMID: 22932782; PMCID: PMC3469608.
2. Ryan KK, Grayson BE, Jones KR, Schneider AL, Woods SC, Seeley RJ, Herman JP, Ulrich-Lai YM. Physiological responses to acute psychological stress are reduced by the PPARgamma agonist rosiglitazone. Endocrinology. 2012;153(3):1279-87. Epub 2012/01/19. doi: 10.1210/en.2011-1689. PubMed PMID: 22253428; PMCID: PMC3281543.
3. Grayson BE, Schneider KM, Woods SC, Seeley RJ. Improved rodent maternal metabolism but reduced intrauterine growth after vertical sleeve gastrectomy. Science translational medicine. 2013;5(199):199ra12. Epub 2013/08/24. doi: 10.1126/scitranslmed.3006505. PubMed PMID: 23966301; PMCID: PMC3939702
4. Grayson BE, Seeley RJ, Sandoval DA. Wired on sugar: the role of the CNS in the regulation of glucose homeostasis. Nature reviews Neuroscience. 2013;14(1):24-37. Epub 2012/12/13. doi: 10.1038/nrn3409. PubMed PMID: 23232606; PMCID: PMC4231433.
5. Stemmer K, Bielohuby M, Grayson BE, Begg DP, Chambers AP, Neff C, Woods SC, Erben RG, Tschop MH, Bidlingmaier M, Clemens TL, Seeley RJ. Roux-en-Y gastric bypass surgery but not vertical sleeve gastrectomy decreases bone mass in male rats. Endocrinology. 2013;154(6):2015-24. Epub 2013/04/05. doi: 10.1210/en.2012-2130. PubMed PMID: 23554454; PMCID: PMC5393329.
6. Davis JF, Tracy AL, Schurdak JD, Magrisso IJ, Grayson BE, Seeley RJ, Benoit SC. Roux en Y gastric bypass increases ethanol intake in the rat. Obesity surgery. 2013;23(7):920-30. Epub 2013/02/27. doi: 10.1007/s11695-013-0884-4. PubMed PMID: 23440511; PMCID: PMC3970194.
7. Ressler IB, Grayson BE, Seeley RJ. Metabolic, behavioral, and reproductive effects of vertical sleeve gastrectomy in an obese rat model of polycystic ovary syndrome. Obesity surgery. 2014;24(6):866-76. Epub 2014/01/11. doi: 10.1007/s11695-013-1153-2. PubMed PMID: 24408363; PMCID: PMC4024375.
8. Grayson BE, Hakala-Finch AP, Kekulawala M, Laub H, Egan AE, Ressler IB, Woods SC, Herman JP, Seeley RJ, Benoit SC, Ulrich-Lai YM. Weight loss by calorie restriction versus bariatric surgery differentially regulates the hypothalamo-pituitary-adrenocortical axis in male rats. Stress (Amsterdam, Netherlands). 2014;17(6):484-93. Epub 2014/09/23. doi: 10.3109/10253890.2014.967677. PubMed PMID: 25238021; PMCID: PMC4415587.
9. Chambers AP, Smith EP, Begg DP, Grayson BE, Sisley S, Greer T, Sorrell J, Lemmen L, LaSance K, Woods SC, Seeley RJ, D'Alessio DA, Sandoval DA. Regulation of gastric emptying rate and its role in nutrient-induced GLP-1 secretion in rats after vertical sleeve gastrectomy. American journal of physiology Endocrinology and metabolism. 2014;306(4):E424-32. Epub 2013/12/26. doi: 10.1152/ajpendo.00469.2013. PubMed PMID: 24368666; PMCID: PMC3923088
10. Li B, Matter EK, Hoppert HT, Grayson BE, Seeley RJ, Sandoval DA. Identification of optimal reference genes for RT-qPCR in the rat hypothalamus and intestine for the study of obesity. International journal of

obesity (2005). 2014;38(2):192-7. Epub 2013/06/06. doi: 10.1038/ijo.2013.86. PubMed PMID: 23736358; PMCID: PMC3925437.
11. Grayson BE, Fitzgerald MF, Hakala-Finch AP, Ferris VM, Begg DP, Tong J, Woods SC, Seeley RJ, Davidson TL, Benoit SC. Improvements in hippocampal-dependent memory and microglial infiltration with calorie restriction and gastric bypass surgery, but not with vertical sleeve gastrectomy. International journal of obesity. 2014;38(3):349-56. Epub 2013/06/06. doi: 10.1038/ijo.2013.100. PubMed PMID: 23736372.
12. Ressler IB, Grayson BE, Ulrich-Lai YM, Seeley RJ. Diet-induced obesity exacerbates metabolic and behavioral effects of polycystic ovary syndrome in a rodent model. American journal of physiology Endocrinology and metabolism. 2015;308(12):E1076-84. Epub 2015/06/17. doi: 10.1152/ajpendo.00182.2014. PubMed PMID: 26078189; PMCID: PMC4469809.
13. Enriori PJ, Chen W, Garcia-Rudaz MC, Grayson BE, Evans AE, Comstock SM, Gebhardt U, Muller HL, Reinehr T, Henry BA, Brown RD, Bruce CR, Simonds SE, Litwak SA, McGee SL, Luquet S, Martinez S, Jastroch M, Tschop MH, Watt MJ, Clarke IJ, Roth CL, Grove KL, Cowley MA. alpha-Melanocyte stimulating hormone promotes muscle glucose uptake via melanocortin 5 receptors. Molecular metabolism. 2016;5(10):807-22. Epub 2016/10/01. doi: 10.1016/j.molmet.2016.07.009. PubMed PMID: 27688995; PMCID: PMC5034615.
14. Lawson WJ, Shirey K, Spann RA, Zamarripa CA, Hosler JP, Grayson BE. Vertical sleeve gastrectomy improves indices of metabolic disease in rodent model of surgical menopause. Menopause (New York, NY). 2017;24(4):426-36. Epub 2016/11/02. doi: 10.1097/gme.0000000000000764. PubMed PMID: 27801704; PMCID: PMC5365358.
15. Grayson BE, Gutierrez-Aguilar R, Sorrell JE, Matter EK, Adams MR, Howles P, Karns R, Seeley RJ, Sandoval DA. Bariatric surgery emphasizes biological sex differences in rodent hepatic lipid handling. Biology of sex differences. 2017;8:4. Epub 2017/02/06. doi: 10.1186/s13293-017-0126-x. PubMed PMID: 28149499; PMCID: PMC5273842.
16. Spann RA, Lawson WJ, Grill RJ, Garrett MR, Grayson BE. Chronic spinal cord changes in a high-fat diet-fed male rat model of thoracic spinal contusion. Physiological genomics. 2017;49(9):519-29. Epub 2017/08/20. doi: 10.1152/physiolgenomics.00078.2017. PubMed PMID: 28821567; PMCID: PMC5625269.
17. Spann RA, Lawson WJ, Bidwell GL, 3rd, Zamarripa CA, Maranon RO, Bandyopadhyay S, Taylor ER, Reckelhoff JF, Garrett MR, Grayson BE. Rodent vertical sleeve gastrectomy alters maternal immune health and fetoplacental development. Clinical science (London, England : 1979). 2018;132(2):295-312. Epub 2017/11/24. doi: 10.1042/cs20171416. PubMed PMID: 29167317; PMCID: PMC5989318.
18. Himel AR, Cabral SA, Shaffery JP, Grayson BE. Anxiety behavior and hypothalamic-pituitary-adrenal axis altered in a female rat model of vertical sleeve gastrectomy. PloS one. 2018;13(7):e0200026. Epub 2018/07/07. doi: 10.1371/journal.pone.0200026. PubMed PMID: 29979735.

EXTRAMURAL FUNDING

ACTIVE
Agency: (FY15) Department of Defense Spinal Cord Injury Research Program (SCIRP) Investigator-Initiated Research Award
Start and end dates: Period: 9/01/16-8/31/20
Project title: “Metabolic disease in a clinically-relevant rodent model of spinal cord injury”
Total direct and indirect funding requested: direct: $483,990; indirect: $254,095
Areas of overlap: 0%
Role of Applicant: PI
Percent effort: 20%

Agency: NIGMS (COBRE) [P20] -- Mississippi Center of Excellence in Perinatal Research
Start and end dates: Period: 09/01/2017-8/31/2020
Project title: “Role of maternal bariatric surgery in programming cardio-metabolic disease in growth-restricted offspring”
Total direct and indirect funding requested: direct: $525,000.72; indirect: $275,625.38
Areas of overlap: 0%
Role of Applicant: PI
Percent effort: 50%

COMPLETED

Agency: Centers for Biomedical Research Excellence (COBRE) [P20] – Pilot Grants Program
Start and end dates: 11/01/2014-10/31/2016
Project title: Placental dysfunction and VSG-induced intrauterine growth restriction
Total direct and indirect funding requested: direct: $50,000, internal matching grant: $40,000
Areas of overlap: 0%
Role of Applicant: PI
Percent effort: 10%

Source: NIH NRSA 1 F32 HD068103
Start and end dates: Period: 09/01/11-08/31/13
Project title: “Metabolic Consequences of Maternal Bariatric Surgery on Pregnant and Lactating Rats and their Offspring”
Role of Applicant: PI
Percent effort: 95%

Source: NIH T32 DK 59803 Postdoctoral Institutional Training Grant in Neuroendocrinology
Start and end dates: Period: 9/01/10-8/31/11
Areas of overlap: 0%
Role of Applicant: Trainee
Percent effort: 95%

Source: OSLER Training grant
Start and end dates: 5/1/08-4/30/09
Project title: Placenta and Inflammatory Cytokines
Role of Applicant: PI
Percent effort: 20%

Source: NIH T32 NS 7466 Predoctoral Institutional Training Grant in Neuroscience
Start and end dates: 8/01/04-7/31/05
Role of Applicant: Trainee
Percent effort: 95%
Source: NIH OSLER TL1 RR 24159

Daily Acute Intermittent Hypercapnia Training to Improve Respiratory Plasticity Following Spinal Cord Injury.

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Margo Randelman, BS
Drexel University College of Medicine

CV:
My undergraduate research projects focused on the psychological and biological aspects of neuroscience including investigating differences in visual spatial processing and emotional processing in individuals with autistic qualities and the effect of hydrogen peroxide on apoptosis in Caenorhabditis elegans dopaminergic neurons. During my graduate studies I wanted to use the skills I learned through my undergraduate research in order to investigate something that had a personal connection to me which is spinal cord injury. I have an uncle who received a cervical spinal cord injury while in his twenties and seeing the life challenges both emotionally and physically experienced by him as well as those around him is a motivator in my research. It is for this reason that I decided to attend Drexel University because of its spinal cord injury core facility and the lab of Dr. Michael Lane in order to study mechanisms to improve respiratory plasticity following cervical spinal cord injury. Within the Lane lab there is a variety of work being conducted to improve functional plasticity after injury including therapeutic strategies for promoting axonal growth with the transplantation of neural progenitor cells as well as investigating the role of spinal and phrenic pre-motor interneurons in plasticity and recovery after spinal cord injury. My current role within the lab is to investigate respiratory rehab strategies such as daily Acute Intermittent Hypercapnia training in order drive the phrenic circuit to improve functional plasticity and diaphragm function and therefore respiration following spinal cord injury.

Contribution to Science
1. Respiratory rehabilitation to improve diaphragm functional recovery following SCI. After joining the Lane Lab my first project was using daily Acute Intermittent Hypercapnia (dAIHc) training as a respiratory rehabilitation method to improve functional plasticity following C3/4 spinal cord injury. Neuroanatomical methods including using the transsynaptic tracer Pseudorabies Virus (PRV) was used to identify changes in the phrenic circuit controlling diaphragm respiration following injury and training and electrophysiological diaphragm EMGs were also used in order to assess functional recovery following treatment. This study revealed that there was an upregulation in the levels of serotonin, which is an indicator of plasticity, within the ventral horn and around the phrenic motor neurons of the dAIHc trained animals compared to the non-trained control. Additionally using western blotting it was found that there was an upregulation of BDNF within the medulla which is the origin of respiratory neurons following training. These findings suggest that there is an increase in functional plasticity with dAIHc to improve respiration following spinal cord injury.
a. Randelman M, Hormigo K, Zholudeva L, Spruance V, Bezdudnaya T, Côté M, Lane MA. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Drexel University Discovery Day Poster Abstract. October, 20, 2016.

b. Randelman M, Hormigo K, Zholudeva L, Spruance V, Bezdudnaya T, Côté M, Lane MA. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Society for Neuroscience Poster Abstract. November, 20, 2016.

c. Victoria Spruance, Lyandysha Viktorovna Zholudeva, Kristiina M Hormigo, Margo L Randelman, Tatiana Bezdudnaya, Vitaliy Marchenko, Michael A Lane. Integration of Transplanted Neural Precursors with the Injured Spinal Cord. Journal of Neurotrauma. January 2018.

2. Effect of reactive oxidative species on dopaminergic neurons. An undergraduate research project within the lab of Dr. Rebecca Kohn investigated the role of hydrogen peroxide, which is a known reactive oxidative species, on GFP labeled dopaminergic neurons within Caenorhabditis elegans (C. elegans). These C. elegans were used as a model for Parkinson's disease in which reactive oxidative species (ROS) are believed to have a role in the degeneration of dopaminergic neurons contributing to the disease phenotype. The C. elegans were pretreated with antioxidants and compared to non-pretreated control to see the amount of

dopaminergic neuron cell death that occurred after exposure to hydrogen peroxide as well as prolong the life of the C. elegan. From this study it was found that hydrogen peroxide can initiate dopaminergic cell death and that a pretreatment with antioxidants is able to improve the survival of dopaminergic neurons.

A. Gorenberg, E., Randelman, M., Roadcloud, E., Quinn, T., Minniti, A., Inestrosa, N., Hart, K. and Kohn, R. Effect of hydrogen peroxide on apoptosis in Caenorhabditis elegans dopaminergic neurons. Sigma Xi Student Research Day, Thomas Jefferson University. Philadelphia, PA, April, 2014.

B. Gorenberg, E., Randelman, M., Roadcloud, E., Quinn, T., Minniti, A., Inestrosa, N., Hart, K. and Kohn, R. Effect of hydrogen peroxide on apoptosis in Caenorhabditis elegans dopaminergic neurons. Neuroscience Research Retreat, Penn State Institute of the Neurosciences. Hershey, PA, March, 2014.

C. Gorenberg, E., Randelman, M., Roadcloud, E., Quinn, T., Minniti, A., Inestrosa, N., Hart, K. and Kohn, R. Effect of hydrogen peroxide on apoptosis in Caenorhabditis elegans dopaminergic neurons. Celebration of Student Achievement, Ursinus College, Collegeville, PA May 2014.

3. Differences in visual spatial processing and emotional processing of individuals with autistic traits. This undergrad research project was within the lab of Dr. Jole Bish where individuals were presented with landscapes as well as portraits of faces and required to perform a memory task to remember the images after a passing of time and identify if they had seen them before. The participants were also given a questionnaire in order to evaluate the level of autistic traits in order to correspond the gaze pattern with the level of autistic traits. It was found that while there was no correlation with landscape processing, there was a significant difference in the processing of faces with the level of autistic traits where an autistic individual was more likely to focus on the nose of the portrait and avoid the eyes. This project was then expanded to include emotional processing and compare it to the level of autistic traits. It was found that autistic individuals do not correctly identify the emotion presented and have a different gaze activation pattern compared to an individual with less autistic traits.
A. Layman, C, Randelman, M., O'Donnel, H., Bish, J. Visual with Differential Autistic Qualities. DeSales University, March, 2014
B. Layman, C, Randelman, M., O'Donnel,sh,J. VisualH.,ProcessingBi in Individuals with Differential Autistic Qualities. 26th Annual American Psychological Association, San Francisco, CA, May, 2014
4. A senior undergraduate research project involved working in the lab of Dr. Carlita Favero investigating the effects of prenatal ethanol consumption on the developing brain. The region of interest was within the striatum and specifically the Medial Ganglionic Eminences (MGE) and the Lateral Ganglionic Eminences (LGE) which have been believed to be affected by prenatal ethanol exposure during development because of the cognitive problems observed later in development within the patients population with fetal alcohol syndrome. In order to look at the cells during development an islet-1 stain was used and the number of positive cells were counted within the MGE and LGE. It was found that although the total number of islet-1 cells did not change, the distribution of the cells within the MGE and LGE changed suggesting that prenatal ethanol exposure it able to affect the migration of these developing neurons within the striatum.
A. Randelman M., Habecker A., and Favero C. No Effect of Prenatal Ethanol Exposure on Number or Distribution of Islet-1 Expressing Cells in the Lateral Ganglionic Eminences of Swiss Webster Outbred Mice. IMPULSE. 2015

Published abstracts and Presented Research

Gorenberg, E., Randelman, M., Roadcloud, E., Quinn, T., Minniti, A., Inestrosa, N., Hart, K. and Kohn, R. Effect of hydrogen peroxide on apoptosis in Caenorhabditis elegans dopaminergic neurons. Sigma Xi Student Research Day, Thomas Jefferson University. Philadelphia, PA, April, 2014.

Layman, C, Randelman, M., O'Donnel, H., Bish, J. Visual with Differential Autistic Qualities. DeSales University, March, 2014

Layman, C, Randelman, M., O'Donnel, H. Bish, J. Visual Processing in Individuals with Differential Autistic Qualities. 26th Annual American Psychological Association, San Francisco, CA, May, 2014

Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Drexel University Discovery Day. Philadelphia, PA. October 2016
Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. National Center of Neuromodulation for Rehabilitation (NC NM4R) Society For Neuroscience Satelite Meeting. San Diego, CA. November 2016
Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Philadelphia Chapter Society for Neuroscience Meeting, Philadelphia, PA. May 2017

Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Third Annual Shriners-Temple Symposium on Neuro Repair, Philadelphia, PA. June, 2017
Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Drexel University Discovery Day, Philadelphia, PA. October, 2017
Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. International Symposium on Neural Regeneration (ISNR), Asilomar CA. November, 2017

Published Abstracts and Poster Viewing Only

Randelman, M. Negron, K., Zholudeva, L., Spruance, V., Bezdudnaya T., Côté, M., Lane, M. Daily Intermittent Hypercapnia Training To Enhance Functional Plasticity Following Spinal Cord Injury. Australian Neuroscience Society. Hobart, Australia, December, 2016
Oral Presentations

Randelman, M. K-Ras Studies in Pancreatic Cancer, Drexel University, Philadelphia, PA SURF Program, August 2014

Randelman, M. Daily Intermittent Hypercapnia Respiratory Training To Enhance Anatomical and Functional Plasticity Following Spinal Cord Injury. Therapeutic Intermittent Hypoxia Retreat- Data Blitz. University of Florida- Gainesville, FL. April, 2018

Honor Society and Science Society Memberships
Beta Beta Beta – National Biology Honor Society 2015- present
Nu Rho Psi- National Neuroscience Honor Society 2015- present
Society for Neuroscience (USA)2015- Present
Society for Neuroscience (AUS)2016

Fellowships and Awards
Summer Undergraduate Research Fellowship- Drexel University2014

Best Poster Award- Sigma Xi Student Research Day-
Thomas Jefferson University, Philadelphia, PA2014

Robin Blood Harris Outstanding Senior
Leadership Award- Ursinus College2015

Goldberger/Boyne/Levine Award – Drexel University 2016

Graduate Student Association Travel Award – Drexel University 2016

International Symposium on Neural Regeneration (ISNR)
Travel Award Winner 2017

Therapeutic Intermittent Hypoxia Retreat- Travel Award Winner 2018

Drexel University International Travel Award Winner 2018

Lyandysha Zholudeva, PhD
Drexel University College of Medicine

(no CV uploaded)

Victoria Spruance, PhD
Drexel University College of Medicine

(no CV uploaded)

Kristiina Hormigo, M.S
Drexel University College of Medicine

(no CV uploaded)

Tatiana Bezdudnaya, PhD
Drexel University College of Medicine

(no CV uploaded)

Victoria Fenton, B.S
Drexel University College of Medicine

(no CV uploaded)

Hemalatha Muralidharan, M.S
Drexel University College of Medicine

(no CV uploaded)

Liang Qiang, PhD
Drexel University College of Medicine

(no CV uploaded)

Michael Lane, PhD
Drexel University College of Medicine

(no CV uploaded)

Advancing research equity by standardizing recruitment processes.

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Louise Brisbois, HBA
University Health Network - Toronto Rehabilitation Institute

CV:
Louise M. Brisbois

Employment:
University Health Network - Toronto Rehabilitation Institute
2017- present; Research Manager, TRI Central Recruitment
2010- 2017; Clinical Research Coordinator, TRI Spinal Cord Injury rehab research
2012-2017; Central Recruitment Patient Research Liaison, TRI Spinal Cord Injury rehab research

Abstracts/Posters:
TRI Research Day Nov. 2011. Central Recruitment Process: Exploring Feasibility and Scalability for research studies in Spinal Cord Injury.

ISCOS Conference 2012. Exploring the feasibility and scalability of central recruitment for patients with subacute SCI in tertiary academic rehabilitation centres.

GTA Rehab Day July 2012. Exploring feasibility and scalability for research studies in spinal cord injury.

TRI Research Day 2015.The Rick Hansen Spinal Cord Injury Registry: Consent and Retention Rates 2010-2015

CAPM&R May 2017. Patient Recruitment in Spinal Cord Injured populations: An ethical model at Toronto Rehabilitation Institute.

7th National SCI Conference Nov. 2017.
Feasibility of a Central Recruitment Process for Research Participation for Individuals with Spinal Cord Injuries during Inpatient Rehabilitation. Journal of Spinal Cord Medicine vol. 40 no. 6, 2017. p 823-4.

Implementation of Longitudinal Study Participation Retention Methods & Development of a Standardized Operating Procedure to Minimize Participant Attrition. Journal of Spinal Cord Medicine vol. 40 no. 6, 2017. p 837.

Effectiveness of Retention Strategies to Minimize Participant Attrition. RHSCIR. Journal of Spinal Cord Medicine vol. 40 no. 6, 2017. p 837.

TRI Research Day Jan. 2018.
If you build it, they will come: Adoption of a Research Volunteer Pool (RVP) for contact and recruitment of outpatient rehabilitation research participants.

Implementation of the Centralized Recruitment Processes across all TRI Inpatient Clinical Care Units.

B. Catherine Craven, MD
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

SCiPad: Patient Satisfaction with Telemedicine Consultations in Individuals with a Spinal Cord Injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Cria-May Khong, BS
Santa Clara Valley Medical Center

CV:
EDUCATION:
Bachelors in Biological Science Concentration in Molecular Cell Biology

Bachelors in Justice Studies Concentration in Biological Forensic Science
Minor in Chemistry and Spanish

PROFESSIONAL EXPERIENCE:
Clinical research Assistant, Santa Clara Valley Medical Center
Rehabilitation Research Center, July 2017- Present
Project Coordinator, TeachAids - Stanford University
HIV and TBI Concussion Research, February 2017 –Present

MEMBERSHIP
Academy of Spinal cord Injury Professionals

PUBLICATION:
Sechrist S, Lavoie S, Khong CM, Dirlikov B, Shem K. (2018). Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Series and Cases. 4:71. doi: 10.1038/s41394-018-0105-4.

PRESENTATIONS:
Khong, C., Dirlikov, B., & Shem, K. (2018, September). SCiPad: Telemedicine Using iPad s for Individuals with Spinal Cord Injury. Study presentation for the Academy of Spinal Cord Injury Professionals, New Orleans, Louisiana.

Loomis, E.1, Shem, K.1,2, Khong, C., Bellon, K.2, & Isaac, L. (2017, September) SCiPad: Telemedicine Using iPads with Individuals with Spinal cord Injuries. Study presented by Benjamin Dirlikov at the Northern and Central California Hospital council Annual Summit, Tahoe, California.

Ben Dirlikov, MA
Santa Clara Valley Medical Center

CV:
EDUCATION
Johns Hopkins University M.A., Psychological and Brain Sciences, Biopsychology May 2009
Master's Project: The Role of Sensory Information in Locomotor Control.
University of Michigan B.S., Brain, Behavior, and Cognitive Sciences, Biopsychology May 2007

PROFESSIONAL EXPERIENCE
Clinical Research Program Director, Santa Clara Valley Medical Center
Rehabilitation Research Center, September 2017- present Supervisor: Mrs. McLarin
Clinical Research Program Manager, Santa Clara Valley Medical Center
Rehabilitation Research Center, January – September 2017 PI: Dr. Isaac
Research Coordinator II, Kennedy Krieger Institute
Center for Neurodevelopmental and Imaging Research, Fall 2011-Fall 2016 PI: Dr. Mostofsky

PUBLICATIONS

• Zakrasek, E.C., Yurkiewicz, S., Dirlikov, B., Pence, B.T., Crew, J.D. Use of Nonsteroidal Anti-inflammatory Drugs to Prevent Heterotopic Ossification after Spinal Cord Injury: a retrospective review. Spinal Cord. (In Press).
• Sechrist, S., Lavoie, S., Khong, C.-M., Dirlikov, B. & Shem, K. Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Ser. Cases 4, 71 (2018).
• Dirlikov, B., Younes, L., Nebel, M.B., Martinelli, M.K., Tiedemann, A.N., Koch, C.A., Fiorilli, D., Bastian, A., Denckla, M.B., Miller, M.I., Mostofsky, S. H."Novel Automated Morphometric and Kinematic Handwriting Assessment: A validity study in children with ASD and ADHD." J. Learn. Disabil. 2017; 10(2):185-201.
• Mahajan, R.*, Dirlikov, B.*, Crocetti, D., & Mostofsky, S.H. “Motor Circuit Anatomy in children with Autism Spectrum Disorder with or without Attention Deficit Hyperactivity Disorder.” Autism Res. 2016; 9(1):67-81. *authors contributed equally to the manuscript.
o Mostofsky, S.H., Dirlikov, B., Younes, L., & Miller, M.I. (2015). Kinematic and Morphometric Analysis of Digitized Handwriting Tracings. PCT/US15/30270. International Patent Filed 05/12/15.
• Dirlikov, B., Rosch, K.S., Crocetti, D., Denckla, M.B., Mahone, E.M., & Mostofsky, S.H. “Distinct frontal lobe morphology in girls and boys with ADHD.” Neuroimage Clin. 2014; 7:222-9.
• Gaddis, A., Rosch, K.S., Dirlikov, B., Crocetti, D., MacNeil, L., Barber, A.D., Muschelli, J., Caffo, B., Pekar, J.J., & Mostofsky, S.H. “Motor overflow in children with attention-deficit/hyperactivity disorder is associated with decreased extent of neural activation in the motor cortex.” Psychiatry Res. 2015; 233(3):488-95
• Rosch, K.S., Dirlikov, B., & Mostofsky, S.H. “Reduced intrasubject variability with reinforcement in boys, but not girls, with ADHD: Associations with prefrontal anatomy.” Biol Psychol. 2015; 110:12-23.

CONFERENCE PRESENTATIONS
• PI: Dr. Pape, site PI: Dr. Duong, presenter Dirlikov, B “rTMS: a Treatment to Restore Function after Severe TBI” Northern and Central California Hospital Council Annual Submit, September 28th, 2017, Lake Tahoe, California.
• PI: Dr. Shem, presenter Dirlikov, B “SCiPAD: Telemedicine Using iPads with Individuals with Spinal Cord Injuries” Northern and Central California Hospital Council Annual Submit, September 28th, 2017, Lake Tahoe, California.
o Dirlikov, B (2017). “Impact of Comorbid ADHD on Cortical Morphology in Children with Autism Spectrum Disorder.” 14th Annual World Brain Mapping of SBMT, April 18-20th, Los Angeles, California.
o Dirlikov, B (2017). “rTMS: A Treatment to Restore Function after Severe TBI.” 14th Annual World Brain Mapping of SBMT, April 18-20th, Los Angeles, California.
• Dirlikov, B., Koch, C.A., Zakorchemny, T., Frauwirth, S., Younes, L., Miller, M.I., & Mostofsky, S.H. (2017). “A Novel Kinematic and Morphometric Tablet-based Method for Handwriting Assessment.” 100th Annual meeting of the American Occupational Therapy Association, March 30- April 2, Philadelphia, Pennsylvania.
• Dirlikov, B., Zink, C.F., Huddleston, D.A., Gilbert, D.L., & Mostofsky, S.H. (2016). “Effects of Reward and Motivation on GABAergic Cortical Inhibition. A Pilot Study in Adults.” 22nd Annual meeting of the Organization for Human Brain Mapping (OHBM), June 25-30th, Geneva, Switzerland.
• Rosch, K., Dirlikov, B., and Mostofsky, S.H. (2015). “Distinct neuranatomical correlates of delay discounting in ADHD and typically developing children.” 21st Annual meeting of the OHBM, June 14-18th, Honolulu, Hawaii.
• Dirlikov, B., Nebel, M.B., Bastian, A.J., Younes, L., and Mostofsky, S.H. (2015). “Tablet-Based Method for Handwriting Assessment”. Innovative Technology Demonstrations. 14th Annual International Meeting for Autism Research (IMFAR); 2015; May 14-16th; Salt Lake City, Utah.
• Mahone, E.M., Crocetti, D., Dirlikov, B., Slifer, K., Denckla, M.B., & Mostofsky, S.H. (2015) Early Cerebellar Anomalies Show Sexual Dimorphism in Preschool Children with ADHD. World Congress on ADHD. May 28-31st; Glasglow, Scotland.
• Dirlikov, B. Young Investigator Award Presentation. (2014). 43rd annual Neurobiology of Disease in Children, Columbus, Ohio. October 21-24th.
• Dirlikov, B., Nebel, M.B., Barber, A., Laue, C., Gilbert, D.L., Mostofsky, S.H. (2014). “A multimodal examination of interhemispheric connectivity and mirror overflow in ADHD.” 20th Annual meeting of the OHBM, Hamburg, Germany.
• Crocetti, D., Dirlikov, B., Peterson, D., Laue, C., Gilbert, D.L., Mostofsky, S.H. (2014). “Transcallosal mediated motor inhibition in attention deficit hyperactivity disorder (ADHD).” 20th Annual meeting of the

OHBM, Hamburg, Germany.
• Mahajan, R.*, Dirlikov, B.*, Crocetti, D., & Mostofsky, SH. (2014) “Frontal and Parietal Lobes' Structure Is Associated with Impairments in Motor and Social Skills in Children with Autism Spectrum Disorder.” Poster session: Social Skills in Children with Autism Spectrum Disorder. 13th Annual IMFAR; 2014; May 15-17th; Atlanta Georgia.
• Dirlikov, B., Nebel, M.B., Fiorilli, D., Younes, L., Bastian, A., Mostofsky, S. (2014)."Analysis of Handwriting Fluency in Children with Autism." Poster session presented at: Cognition and Behavior V. 13th Annual IMFAR; 2014 May 15-17th; Atlanta, Georgia.

Sarah Lavoie, MPH, RD
Santa Clara Valley Medical Center

CV:
EDUCATION
Master in Public Health
Health Promotion & Behavioral Science
San Diego State University, Graduate School of Public Health

Bachelor of Science
Nutrition & Food Science
California State University, Chico

PROFESSIONAL EXPERIENCE
Clinical Research Associate, Santa Clara Valley Medical Center
Rehabilitation Research Center, May 2018- Present
Clinical Support Program Coordinator, Santa Clara Valley Medical Center
Rehabilitation Research Center, July 2014- May 2018

PUBLICATIONS
Sechrist S, Lavoie S, Khong CM, Dirlikov B, Shem K. (2018). Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Series and Cases. 4:71. doi: 10.1038/s41394-018-0105-4.

Lavoie S, Sechrist S, Quach N, Ehsanian R, Duong T, Gotlib IH, & Isaac L. (2017). Depression in Men and Women One Year Following Traumatic Brain Injury (TBI): TBI Model Systems Study. Front. Psychol. 8:634. doi: 10.3389/fpsyg.2017.00634.

Anders D, Ashley M.J, Bartlett S., Bellon K, Benoit N, Bergman A,...Wright J. (2016). The Essential Brain Injury Guide (5th Ed.). USA: Brain Injury Association of America. (Listed as a Technical Editor).

PRESENTATIONS
Lavoie S, Sechrist S, Quach NT, Ehsanian R, Duong T, Gotlib IH, Isaac L. (2017). Prevalence and Management of Depression in Persons with TBI: Longitudinal Perspectives. 14th Annual World Congress of the Society for Brain Mapping & Therapeutics. Los Angeles, CA. (Invited Guest Speaker)

Lavoie S, Sechrist S, Quach NT, Ehsanian R, Duong T, Gotlib IH, Isaac L. (2016). Depression in men and women one year following traumatic brain injury. PINK Concussions Symposium: Female Brain Injury, Neurobiology and Trauma. Palo Alto, CA. (Poster Presentation)

Samantha Sechrist, BS
Santa Clara Valley Medical Center

CV:

EDUCATION
Graduate Certificate
Interprofessional Health Medical Post Baccalaureate
University of California, San Francisco School of Medicine
2018

Bachelor of Science
Microbiology, Immunology, and Molecular Genetics
Univeristy of California, Los Angeles
2014

PROFESSIONAL EXPERIENCE
Clinical research Assistant, Santa Clara Valley Medical Center
Rehabilitation Research Center, June 2015 - June 2017

PUBLICATIONS
Sechrist S, Lavoie S, Khong CM, Dirlikov B, Shem K. (2018). Telemedicine using an iPad in the spinal cord injury population: a utility and patient satisfaction study. Spinal Cord Series and Cases. 4:71. doi: 10.1038/s41394-018-0105-4.

Shem, K.*, Sechrist, S.*, Loomis, E., Isaac, L. (2017). SCiPad: Effective Implementation of Telemedicine Using iPads with Individuals with Spinal Cord Injuries, a Case Series. Front. Med. 4:58. doi.org/10.3389/fmed.2017.00058
* Co-first authors

Lavoie S, Sechrist S, Quach N, Ehsanian R, Duong T, Gotlib IH, & Isaac L. (2017). Depression in Men and Women One Year Following Traumatic Brain Injury (TBI): TBI Model Systems Study. Front. Psychol. 8:634. doi: 10.3389/fpsyg.2017.00634.
PRESENTATIONS
Brzyska, K.*, Sechrist, S.*, Valenzuela, A.* “Effects of Prescriber Alerts for Managing Drug Shortages.” UCSF Interprofessional Health Post Baccalaureate Program CQI Research Symposium, San Francisco, CA, 2018. (Poster presentation).

Shem, K., Sechrist, S., Loomis, E., Isaac, L. “SCiPad: Telemedicine using iPads with individuals with spinal cord injuries, a case series.” American Spinal Injury Association, Albuquerque, NM, 2017.

Lavoie, S., Sechrist, S., Quach, N., Ehsanian, R., Duong, T., Gotlib, I., Isaac, L. “Depression in Women and Men One Year Following Traumatic Brain Injury: A TBI Model Systems Study.” Pink Concussions Symposium, Palo Alto, CA, 2016. (Poster presentation).

Sechrist, S., Jamison, L., Quach, N., Crew, J., Isaac, L. “Outcomes of Rural and Urban Populations after Traumatic Brain
Injury.” TBI Research Forum: TBI and Integrative Medicine, Palo Alto, CA, 2015. (Poster presentation)

Sechrist S., Jamison L., Balakrishnan S., Crew J., Isaac L. “Re-Hospitalization Rates after Traumatic Brain Injury: Differences in Causes and Rates Across Ethnicity.” Brain Injury Rehabilitation: Practical Solutions to Real World Problems, Williamsburg, VA, 2015. (Poster presetation)

Feeter K.*, Lee A.*, Ostresh S.*, Sechrist S.*, Goodwin E., Moberg-Parker J., Pirino G. “Investigation of the phylogenetic diversity and plant-growth promoting functions of soil bacteria in the rhizosphere of Mimosa aculeaticarpa.” UCLA MIMG & MCDB Undergraduate Research Poster Symposium, Los Angeles, CA, 2014. (Poster presetnation)

Kazuko Shem, MD
Santa Clara Valley Medical Center

CV:

EDUCATION

Stanford University, residency in Physical Medicine & Rehabilitation, 7/95 – 6/98.

West Los Angeles Veterans' Administration, Internship in Medicine, 6/94 - 6/95.

University of California, San Francisco (UCSF) School of Medicine
M.D. Degree, June 1994.
.
University of California, Los Angeles (UCLA) School of Engineering and Applied Science
B.S. Degree in BIOENGINEERING, March 1990.

PROFESSIONAL POSITION

Santa Clara Valley Medical Center, Department of Physical Medicine & Rehabilitation
Chief of PM&R Outpatient Clinics 9/11 - present
Acting Medical Director of Spinal Cord Injury Program 12/06 -11/09
Director of Electromyography Clinic, 7/98 – present.
Women with Disabilities Health Care Clinic Medical Director, 10/00 – present
Northern California Spinal Cord Injury Model System of Care Grant Principal Investigator, 10/00 – 9/06
"Back on Track" A Community-Based Mentoring Program Co-Principal Investigator, 11/06 – 7/10

Stanford University School of Medicine, Department of Orthopedic Surgery
Physical Medicine & Rehabilitation Assistant Residency Program Director, 5/99 – 5/10
Clinical Assistant Professor (Affiliated) July 1, 2006 – present

Fremont-Rideout Health Group Services, Active Ancillary Staff Member, 6/1/15-5/31/17

Doctors Medical Center, Affiliate Medical Staff Member, 10/31/08 – 5/31/13

Easter Seals Bay Area Timpany Center, Medical Director, 12/00 – 9-01

BOARD CERTIFICATION

American Board of Physical Medicine and Rehabilitation, 1999 – 2019
American Board of Electrodiagnostic Medicine, 2000 – 2020
American Board of Physical Medicine and Rehabilitation, Spinal Cord Injury Subspecialty, 2001 – 2021
American Board of Physical Medicine and Rehabilitation, Pain Subspecialty, 9/03 – 9/23

LICENSES

Medical Board of California, expires 5/31/2019

AWARDS

San Andreas Regional Center 18th Annual Service Above Self Award – Recognition of Merit (2016)
Craig Neilsen Foundation Quality of Life Grant (2015)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2015)
Dr. Robert Violante VMC Foundation Physicians and Philanthropy Award (2014)
Stanford University Physical Medicine and Rehabilitation James Thompson Humanitarian Award (2014)
Craig Neilsen Foundation Quality of Life Development Grant (2014)
Santa Clara Valley Medical Center Volunteer Auxiliary Board Award (2010)
Christopher and Dana Reeve Foundation Quality of Life grant (2009)
Jose C. Montero Excellence in Teaching Physical Medicine and Rehabilitation award (2004)
Sell Research Grant, American Spinal Injury Association (2004)

Sally Rynne National Association of Women's Health Quality Award (2002)
AAP Elan Pharmaceutical Award for Outstanding Paper Presentation (2002)
San Jose Mercury News "10 People to Watch" (4/1/01)
Robert Taylor California Society of PM&R Research Award (1998)
UCSF Student Summer Research Scholarship (1991)
Tau Beta Pi National Engineering Honor Society
UCLA Medical Auxiliary Scholarship (1990, 1986)
UC Regents Scholarship (1985-1989)
Rehabilitation Service Guild Scholarship (1988)

MEMBERSHIPS
American Academy of Physical Medicine and Rehabilitation
American Spinal Cord Injury Association
American Association of Electrodiagnostic Medicine

PUBLICATIONS

Elliott CS, Dallas KB, Zlatev D, Comiter CV, Crew J, Shem K. Volitional Voiding of the Bladder following Spinal Cord Injury: Validation of Bilateral Lower Extremity Motor Function as a Key Predictor. J Urol. 2018 Feb 17. pii: S0022-5347(18)32264-X. doi: 10.1016/j.juro.2018.02.064.

Shem K, Barncord S, Flavin K, Mohan M. Adverse cognitive effect of gabapentin in individuals with spinal cord injury: preliminary findings. Spinal Cord Series Cases 2018. 4:9. doi:10.1038/s41394-018-0038-y.

Elliot C, Shem K. Volitional Voiding After Spinal Cord Injury—Who Will and Who Will Not. Current Bladder Dysfunction Reports 2017. 12 (4): 337–342.

Shem K, Sechrist SJ, Loomis E. Isaac L. SCiPad: Effective Implementation of Telemedicine Using iPads with Individuals with Spinal Cord Injuries, a Case Series. Front. Med. 29 May 2017 |https://doi.org/10.3389/fmed.2017.00058

Zlatev DV, Shem K, Elliott C. Predictors of Long-Term Bladder Management in Spinal Cord Injury Patients - Upper Extremity Function May Matter Most. Neurourology and Urodynamics. Article DOI: 10.1002/nau.23430.

Shem K, Sechrist S. Solis L. SCiPAD: Telemedicine Program Using iPad's for Individuals with Spina Cord Injury. Topics in Spinal Cord Inj Rehab. 2017:23(Supplement 1):82.

Shem K, Karasik D, Carufel P, Kao M, Zheng P. Seated Tai Chi to Alleviate Pain and Improve Quality of Life in Individuals with Spinal Cord Disorder. J Spinal Cord Med. Feb 2016.
Williams TG, Ehsanian R, Shem KL, Wright J, Isaac L, Crew J. The effect of vitamin D supplementation on pain, mood, depression and strength in patients with spinal cord injury. PMR 2016:Suppl 98;S153.

Zlatev DV, Shem K, Elliott CS. How Many Spinal Cord Injury Patients Can Catheterize Their Own Bladder? The Epidemiology of Upper Extremity Function as it Affects Bladder Management. Spinal Cord advance online publication, January 19 2016. doi:10.1038/sc.2015.169

Timmerman MA, Crew J, Shem K, Kim M, Kolakowsky-Hayner SA, Wright JA. Low Vitamin D Levels in Persons with Spinal Cord Injury and Increased Incidence of Venous Thromboembolic Events During Acute Inpatient and Rehabilitation Stay. PM&R 2013; 5(9):S140.

Williams L, Ajay P, Shem K. Persistent Autonomic Dysreflexia Due to Bowel Care in Spinal Cord Injured Men: A Case Series . Am J Phys Med Rehabil: 2014;93 Suppl 2: a36

Update on Diaphragm Pacing Publications in 2018 and a Call for Action to Address the Increasing Mortality Rate for Ventilator Dependent Spinal Cord Injured Patients

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Raymond Onders, MD
University Hospitals Cleveland Medical Center

CV:
CURRICULUM VITAE
2017

Raymond P. Onders, M.D., F.A.C.S.
Margaret and Walter Remen Chair of Surgical Innovation
Chief of General and Gastrointestinal Surgery
Director of Minimally Invasive Surgery
University Hospitals Cleveland Medical Center
Professor of Surgery
Case Western Reserve University School of Medicine
11100 Euclid Avenue
Cleveland, Ohio 44106-5047
216-844-5797
FAX: 216-983-3069

AWARDS:

1997: Awarded First Place in Clinical Category of the 1997 AORN Journal Writers Contest

June 2003: Runner up 2003 TIIME, Case Western Reserve University/Weatherhead Business School Business Launch Competition in the Bioscience Category for Synapse Biomedical Ltd.

September 2003: Received Northern Ohio Live Award of Achievement in Science and Technology

December 2003: Best in Show- 2003 Cleveland Growth Association/COSE Business Plan Challenge

December 2003: First Place- 2003 Cleveland Growth Association/COSE Business Plan Challenge: Startup Category

December 2003: Gold Electrode Award- Neurotech Reports

June 7, 2004: Maurice Saltzman Award is presented on behalf of the Mount Sinai Health Care Foundation for “a piece of work of signal value or merit to the health interests of the Greater Cleveland community.”

October 2005: Poster of Exceptional Merit from the American College of Surgeons during the 91st Annual Clinical Congress.

2003, 2004, 2005, 2006, 2007, 2008, 2009 and 2010, 2011, 2012, 2013: Castle-Connolly Medical Top Doctor: The Best in American Medicine. This has been published in the 3rd to the 9th Edition

December 2005: The ALS Association 2005 Vision Award

April 2006: Northern Ohio Live Top Doctors

June 2006: American Spinal Injury Association First Place as Best Paper Award at the 2006 Combined Scientific Meeting with ISCOA, Boston.

March 2008: Named one of Northeastern Ohio's "Top Doctors" in Cleveland Magazine's.

August 2008: Honored as Crain's Cleveland Business 2008 Health Care Heroes for Advancement in Health-Individual

2007-2008: Elected as one of Best Doctors in America

August 2008: Honored with Crain's Cleveland Business 2008 Health Care Heroes for Advancement in Health for Corporate Category for Founder of Synapse Biomedical

September 2008: Honored with Endowed Chair with the Margaret and Walter Remen Chair in Surgical Innovation

November 2008: Diaphragm Pacing was named the third most important Medical Innovation at the 6th Medical Innovation Summit at the Cleveland Clinic Foundation

2009, 2010 Recognized by Consumers Research Council of America As one of America's Top Surgeon in the 2009 Edition and in the 2010 Edition

2010 Recognized Cleveland Magazine as one of the Best Doctors

2010 Distinguished Alumni Award from Northeastern Ohio Universities College of Medicine

2013 Best Doctors in America recognition again.

2013 ALS Bob Feller Legacy Award presented at the 2013 Strike Out ALS at Progressive Field, Cleveland Ohio, June 8th, 2013

2013 Cornerstone of Recovery Award presented by the Jon Michael Moore Trauma Center during the Trauma Night of Recognition, West Virginia University, Morgantown West Virginia, October 10th, 2013.
2013 The Rescuer of Humanity Award presented by Project Love- Values in Action Foundation for using leadership to positively change the course of humanity. This was given in conjunction with NFL star Steve Gleason for their work and commitment to helping people with ALS live productive inspired lives.

Bibliography
45. Onders RP. Functional Electrical Stimulation: Restoration of Respiratory Function. Handbook Clinical Neurol. 2012;109:275-82. Doi: 10.1016/B978-0-444-52137-8.00017-6. PMID: 23098719

46. Perry KA, Linn JG, Eakin JL, Onders RP, Velanovich V, Melvin WS. Transoral incisionless fundoplication does not significantly increase morbidity of subsequent laparoscopic nissen fundoplication. J Laparoendoscopic Adv Surg Tech 2013;23:456-458. PMID: 23578416

47. Marks JM, Phillips MS, Tacchino R, Roberts K, Onders R, DeNoto G, S, Gecelter G, Rubach E, Rivas R, Islam A, Soper N, Paraskeva P, Rosemurgy A, Ross S, Shah S. Single-Incision Laparoscopic Cholecystectomy Is Associated with Improved Cosmesis Scoring at the Cost of Significantly Higher Hernia Rates: 1-Year Results of a Prospective Randomized, Multicenter, Single-Blinded Trial of Traditional Multiport Laparoscopic Cholecystectomy vs Single-Incision Laparoscopic Cholecystectomy. J Am Coll Surg 2013;16:1037-47 PMID: 23619321

48. Onders R, Elmo M, Kaplan C, Katirji B, Schilz R. Final Analysis of the Pilot Trial of Diaphragm Pacing in Amyotrophic Lateral Sclerosis with Long Term Follow-up: Diaphragm Pacing Positively Affects Diaphragm Respiration. Am J Surgery 2014;207:393-397.

49. Posluszny JA, Onders R, Kerwin AJ, Weinstein MS, Stein DM, Knight J, Lottenberg L, Cheatham ML, Khansarinia S, Dayal S, Byeno PM. Multicenter Review of Diaphragm Pacing in Spinal Cord Injury: Successful not only in weaning from ventilators but also in bridging to independent respiration. J Trauma Acute Care Surg 2014;76:303-310.

50. Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Extended Use of Diaphragm Pacing in Patients with Unilateral of Bilateral Diaphragm Dysfunction: A New Therapeutic Option. Surgery 2014;156:772-86. PMID 25239317

51. Onders R, Elmo MJ, Kaplan C, Katirji B, Schilz R. Identification of Unexpected Respiratory Abnormalities in Patients with Amyotrophic Lateral Sclerosis through Electromyographic Analysis Using Intramuscular Electrodes Implanted for Therapeutic Diaphragmatic Pacing. Am J Surg 2015;209(3):451-6. PMID: 25648901

52. Onders R. The Diaphragm How it affect my life and my career. The search for stability when the problem is instability. Am J Surg 2015;209(3):431-5. doi: 10.1016/j.amjsurg.2014.12.003. Epub 2014 Dec 18. PMID: 25637310

53. Smith BK, Fuller DD, Martin AD, Lottenberg L, Islam S, Lawson LA, Onders RP, Byrne B. Diaphragm Pacing as a Rehabilitative Tool for Patients with Pompe Disease who are ventilator-dependent: Case Series. Physical Therapy 2016; 96: 696-703. PMID: 26893511

54. Ito H, Kamei T, Odake S, Nakano M, Okeda R, Kohriki S, Kawachi J, Onders R, Yoshii F. An Autopsy Case of Amyotrophic Lateral Sclerosis with Diaphragm Pacing. Internal Med 2016;55:3511-13. PMID 27904119

55. Onders RP, Markowitz A, Ho VP, Hardacre J, Novitsky Y, Towe C, Elmo M, Kaplan C, Schilz R. Completed FDA feasibility trial of surgically placed temporary diaphragm pacing electrodes: A promising option to prevent and treat respiratory failure.Am J Surg. 2018 Mar;215(3):518-521. doi: 10.1016/j.amjsurg.2017.10.054. Epub 2017 Nov 11. PMID: 29195690

56. Onders RP, Elmo MJ, Kaplan C, Schilz R, Katirji B, Tinkoff G. Long-term experience with diaphragm pacing for traumatic spinal cord injury: Early implantation should be considered. Accepted Surgery 2018.

Presentations
348. “Changing the Paradigm of Chronic Ventilators in Children: Diaphragm Pacing can allow natural ventilation and improve integration into society” Presentation at the Association of Providers for Children with Complex Medical Needs, West Palm Beach, FL, November 7th, 2013
349. “From Bench to Bedside: The Diaphragm Pacing Story”. Keynote address at Northeastern Ohio Chapter of Association of Clinical Research Professionals Sixth Annual Conference “Promoting Clinical Research through Innovation and Technology”, Global Innovation Center, Cleveland, November 8th, 2013.
350. Conflict of Interest Panel Presenter at the Northeastern Ohio Chapter of Association of Clinical Research Professionals Sixth Annual Conference “Promoting Clinical Research through Innovation and Technology”, Global Innovation Center, Cleveland, November 8th, 2013.
351. “Real World FDA Experiences” Presentation at the Regulatory Affairs 101: Navigating the FDA Process with the Clinical and Translational Science Collaborative of Cleveland, November 12, 2013.
352. “Diaphragm Functional Analysis at the Upper and Lower Spectrum of Forced Vital Capacity (FVC) in ALS/MND: FVC Inadequately Assesses Diaphragm Function or Upper Motor Neuron Involvement for Stimulatability” Platform presentation at the 24th International ALS/MND Symposium, Milan, Italy December 8th, 2013.
353. “Urological management in Amyotrophic Lateral Sclerosis/Motor Neuron Disease(ALS/MND): Subrapubic catheters can improve quality of life but are underutilized.” Poster Presentation at the 24t International ALS/MND Symposium, Milan, Italy December 6th, 2013.
354. “Current Status of Diaphragm Pacing and the Launch of the Program in Japan” Grand Rounds at Shonan Fujisawa Takushukai Hospital, Tokyo, Japan January 8th, 2014.
355. “Diaphragm Pacing in ALS” Grand Rounds Presentation Department of Neurology, Penn State Hershey College of Medicine, January 31st, 2014.
356. “Report of Extended Use of Diaphragm Pacing in Patients with Unilateral or Bilateral Diaphragm Dysfunction: A New Therapeutic Option” Oral Podium Presentation at the 71st Annual Meeting of the Central Surgical Association, Indianapolis, Indiana, March 6th,2014.
357. “How to give a good talk”. In the Art of Scholarly Presentation during Career Development Symposium

at the SAGES 2014 Scientific Session and Postgraduate Course, Salt Lake City, Utah, April 2, 2014.
358. “Diaphragmatic pacing can subjectively improve symptoms and quality of life in patients with idiopathic diaphragmatic dysfunction” Vattipally V, Onders RP, Elmo MJ, Pauli EM. Poster Presentation at Society of American Gastrointestinal and Endoscopic Surgeons, Salt Lake City, UT April 5, 2014

359. “Understanding Diaphragm Pacing” Presentation at the ALS Association – Alabama Chapter, Huntsville, Alabama, April 28th, 2014.

360. “Management of Diaphragm Pacing after Spinal Cord Injury”. Presentation at the King Edward 7th Memorial Hospital, Hamilton, Bermuda, April 30th, 2014

361. “Diaphragm Pacing in ALS- Surgical and Post-operative Management” Review at the University of Texas Health Sciences San Antonio, Texas, May 2nd, 2014.

362. “Long Term Follow-up Diaphragm Pacing in Spinal Cord Injury Patients from the Initial FDA trial: Proven Durability.” Presentation at the 40th American Spinal Injury Association Annual Scientific Meeting, San Antonio Texas, May 17th, 2014.

363. “Changing the Paradigm of Ventilators in Children” Presentation at the Alyn Conference on Pediatric Rehabilitation- Pace, Rhythm and Tempo of Pediatric Rehabilitation: Bridging the Gap between the pace of rehabilitation and the tempo of modern life. Jerusalem, Israel, June 18th, 2014.

364. “Current Status of Diaphragmatic Pacing and its Role in Helping Ventilation” Visiting Professor and Lecturer at the Respiratory Institute Education Day: Respiratory Mangement of Neuromuscular Disorders”. Cleveland Clinic, Ohio July 9th, 2014

365. “Optimizing Management of Ventilator Dependent Spinal Cord Injured Patients” Presentation at the International Spinal Cord Society (ISCOS), Masstricht, The Netherlands, September 2nd-4th, 2014.
366. “Diaphragm Pacing: Early Utilization to decrease ventilators and improve recovery of respiration” Invited presentation at the 16th Spinal Research Network Meeting of the International Spinal Research Trust, London, England, September 5th, 2014
367. “Future of Diaphragm Pacing in Korea”. Presentation to University Neurology and Rehabilitation Groups, Seoul, Korea, October 2nd, 2014.
368. “Practical Applications of Diaphragm Pacing” Presentation at Chungnam National University Hospital, Daejeon, Korea, Oct3rd, 2014.
369. “Assessing Diaphragm Function in ALS: Could a standard inspiration chest x-ray with an additional relaxation view provide the answer?” Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.

370. “The Immediate Low Profile Button Gastrostomy: Patients Prefer It and We Should Provide It” Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.

371. “Long Term Survival of ALS/MND Patients with Diaphragm Pacing Implantation with Low Forced Vital Capacity below 45% Predicted.” Poster Presentation at the 25t International ALS/MND Symposium, Brussels, Belgium, December, 2014.
372. “Update on Diaphragm Pacing: What the Thoracic Surgeon needs to know” Presentation at the STS/AASTS Tech Con 2015, San Diego, CA January 25, 2015.
373. “The Surgical Innovator” Presentation during Innovation in the US-The future of Surgical Innovation” at the Surgical Spring Week SAGES 2015, Nashville, TN, April 15th, 2015.
374. “Laparoscopic Ultrasound in Clinical Practice” Presentation at the Ohio Chapter of American College of Surgeons, Dayton, OH May 9th, 2015.
375. “Development and Commercialization of the Networked Neuroprosthesis: Is the Future the Implantable Intranet over the Exoskeleton” Oral Presentation at the 4th International Spinal Cord Society (IsCoS) and American Spinal Cord Association (ASIA) meeting, Montreal, Canada May 15th, 2015.
376. “Diaphragm Pacing in SMA: Identifying Abnormalities of Respiratory Control and Successful Removal of Positive Pressure Tracheostomy Mechanical Ventilation”. Presentation at the 19th Annual SMA Researcher Meeting, Kansas City, June 18th, 2015.

377. “The immediate Low Profile Button Gastrostomy: Patients prefer it and we should provide it”. Poster presentation at th58th Annual Meeting of the Midwest Surgical Association, Grand Geneva, Wisconsin, July 26 to 29th, 2015
378. “Isn’t it Time to Encourage Diaphragm Pacing” Podium presentation at the 2015 Educational conference of the Academy of Spinal Cord Injury Professional, New Orleans, September 9th, 2015.
379. “Modern Management of Ventilator Dependent Spinal Cord Injured Patients” Presentation during the Spanish Society of Paraplegia Annual Meeting at the 50th Anniversary of the Guttmann Institute. Barcelona, Spain October 28th, 2105.
380. “Diaphragm Pacing: Replacing, reducing and delaying ventilators. Functional Electrical Stimulation to Maintain Diaphragm Physiology and Scientific Symposium of Life and Care: Weaning and Breathing. Swiss Paraplegic Centre Nottwil, Switzerland. November 27th, 2015.
381. “Multi-center diaphragm pacing post FDA approval study enrollment complete: Favorable procedural success, interim safety and survival findings” Podium presentation at the 26th International Symposium on ALS/MND, Orlando, December 11-13th, 2015.”
382. “Prospective FDA Feasibility Trial of Laparoscopically Placed Temporary Diaphragm Pacing Electrodes: A New Reversible Therapy to treat Respiratory Failure” Presentation at the Scientific Session of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)during Surgical Spring Week. Boston, March 17-18, 2016
383. “Multicenter Analysis of Operative Safety of Surgery in Patients with Amyotrophic Lateral Sclerosis: The Diaphragm Pacing Experience” Presentation at the Scientific Session of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) during Surgical Spring Week. Boston, March 17-18, 2016. *Poster of Distinction Presentation* from over 1200 abstracts
384. “Diaphragm Pacing can Decrease Weaning Time from Mechanical Ventilation” Oral Presentation at the 19th Annual Society of Trauma Nurse Conference, TraumaCon, Anaheim, California March 30th to April 2nd, 2016.
385. “Overcoming Respiratory Morbidity Of Abdominal Wall Reconstruction: Will Temporary Diaphragm Pacing Be the Solution?” Poster Presentation at the 17th Annual Hernia Repair Conference of the American Hernia Society. Washington, DC. March 30th to April 2, 2016.
386. “Diaphragm Pacing for Chronic Respiratory Insufficiency in Spinal Cord Injured Patients-Expanding the Utility in Improving Ventilation” Oral Presentation at the 2016 Annual Meeting of the American Spinal Injury Association. Philadelphia, PA. April 15, 2016
387. “Diaphragm Pacing: Present Role in Respiration” Keynote Address at ELATED Conference Econtro Latino Americano Sobre Terapia De Estimulacao Diafragmatica. Porto Alegre, Brazil May 13, 2016.
388. “Completed FDA Feasibility Trial of Surgically Placed Temporary Diaphragm Pacing Electrodes: A Promising Option to Prevent and Treat Respiratory Failure” Presentation at the 2016 American Thoracic Society International Conference. San Francisco, May 15-18, 2016
389. “Diaphragm Pacing can be used to successfully wean from Tracheostomy Mechanical Ventilation in SMA type 2” Presentation at the 2016 American Thoracic Society International Conference. San Francisco, May 15-18, 2016
390. “Diaphragm Pacing as Successful Salvage Therapy in Failure to wean Patients: Should this Novel Technology Be Used Earlier?” Presentation at the 2016 American Thoracic Society International Conference. San Francisco, May 15-18, 2016
391. “Current Status of Diaphragm Pacing” Presentation at the 38th Annual Meeting Japanese Society of Respiratory Care Medicine, Nogoya, Japan, July 17, 2016.
392. “Helping Veteran’s Breathe: Diaphragm Pacing in Spinal Cord Injury, Amyotrophic lateral Sclerosis and Diaphragm Dysfunction” Presentation at the Paralyzed Veterans of America Summit 2016: Delivering Excellence Achieving State of the Art Healthcare. Orlando, August 31st, 2016
393. “Laparoscopic Ultrasound Cholangiography in Laparoscopic Cholecystectomy” Presentation During GlobalCast Improving Safety in Laparoscopic Cholecystectomy, Octobert 6th, 2016
394. “How do novel technologies get from the surgeon’s garage to the operating room?” Presentation at the 2016 American College of Surgeons Annual Meeting –Challenges for the Second Century. Washington, DC, October 18th, 2016.
395. “Diaphragm Pacing: Survival Data for Patients Implanted since FDA Approval continues to show promising results” Poster Presentation at 27th International Symposium on ALS/MND. Dublin, Ireland, December 7th to 9th, 2016.
396. “Clinical Results of Diaphragm Pacing in Japanese Patients With Amyotrophic Lateral Sclerosis” Poster Presentation at 27th International Symposium on ALS/MND. Dublin, Ireland, December 7th to 9th, 2016.

397. “ALS/MND patients prefer low profile gastrostomy tubes: Analysis confirms safety” Poster Presentation at 27th International Symposium on ALS/MND. Dublin, Ireland, December 7th to 9th, 2016.
398. “Managing hydration in amyotrophic lateral sclerosis/motor neuron disease (ALS/MND): Are suprapubic urinary catheters the answer?” Poster Presentation at 27th International Symposium on ALS/MND. Dublin, Ireland, December 7th to 9th, 2016.
399. “Current Status of Diaphragmatic Pacing in Improving Ventilation” Presentation at the 3rd Annual Kuwait North American Neurology Conference, Kuwait, December 10th, 2016.
400. “Diaphragm Pacing Update: Replacing Mechanical Ventilation: Presentation at the University of Florida College of Medicine Department of Surgery Grand Rounds, Gainesville Florida, February 22nd, 2017.
401. “Diaphragm Pacing: Applications in Neurologic Conditions” Neurology Grand Rounds at Virginia Commonwealth University, Richmond, Virginia, March 30th, 2017
402. “Long-Term Outcomes of Diaphragm Pacing in Children with Spinal Cord Injury” Keynote Presentation at the Howard H. Steel Conference during the American Spinal Injury Association 2017 Annual Scientific Meeting Albuquerque New Mexico, April 26, 2017
403. “Diaphragm Pacing in Spinal Cord Injury Patients: Long-term follow up from the initial FDA trial” Award Poster Presentation at the American Spinal Injury Association 2017 Annual Scientific Meeting Albuquerque New Mexico, April 27, 2017
First Place Poster Award at Annual Meeting
404. “Diaphragm Pacing Applications from Spinal Cord Injury to the ICU” Grand Rounds at the University of New Mexico Department of Surgery Grand Rounds, Albuquerque, New Mexico, April 28th, 2017
405. “Diaphragm Pacing in Spinal Cord Injured Patients” Presentation at the Trauma Multidisciplinary Conference at Akron Children’s Hospital. Akron, May 16, 2017
406. “Diaphragm Pacing in Children: Current Indications”. Presentation at” Pulmonary Rounds at Akron Children’s Hospital, Akron May 16, 2017.
407. “Diaphragm Pacing as Successful Salvage Therapy in Failure to Wean Patients: Improving Diaphragm Muscle Strength” Presentation at Central Surgical Association Annual Meeting, Chicago August 1, 2017
408. “Completed FDA Feasibility Trial of Surgically Placed Temporary Diaphragm Pacing Electrodes : A Promising option to prevent and treat respiratory failure” Award Poster Presentation at the Midwest Surgical Association, Chicago July 31st, 2017
409. “Diaphragm Pacing an Update for Pediatric Surgeons” Presentation at 5th Annual Pediatric Surgery Update Course 2017: Highlighting New Trends that Should Change Your Practice, Akron August 10th, 2017
410. “Diaphragm Rehabilitation through Diaphragm Pacing-Not just for Ventilator Dependent Traumatic Tetraplegics” Presentation at the Paralyzed Veterans of America Summit 2017: Delivering Excellence Achieving State of the Art Healthcare, Washington, DC August 31, 2017
411. “Diaphragm Rehabilitation through Diaphragm Pacing-Not just for Ventilator Dependent Traumatic Tetraplegics” Presentation at the 56th ISCOS(International Spinal Cord Society) Annual Scientific Meeting, Dublin October 24-26, 2017
412. “Diaphragm Pacing in Spinal Cord Injury Patients: Long-Term follow up from the initial FDA trial Proves Durability” Presentation at the 56th ISCOS(International Spinal Cord Society) Annual Scientific Meeting, Dublin October 24-26, 2017
413. “Reviewing Studies of Diaphragm Pacing Results to Identify the Correct Phenotype of ALS/MND Patients for Which Diaphragm Pacing Could Help in Ventilation and in Which Patients Diaphragm Pacing Should not be Utilized: The Devil is in the Details” Presentation at the 28th International Symposium on ALS/MND Boston, December 2017
414. “Understanding the Complexity and Instability of Respiratory Control in ALS/MND Involves more than just Forced Vital Capacity”. Presentation at the 28th International Symposium on ALS/MND Boston, December 2017
415. “Addressing Quality of Life Concerns That Could Influence Survival through the Innovative Gadgetry of Tubes and Buttons That Help Manage the Inflow and Outflow” Presentation at the 28th International Symposium on ALS/MND Boston, December 2017
416. “Addressing Diaphragm Dysfunction in Cardiac Surgery Patients: Successful Therapeutic Use with Current Technology and Future Prophylactic Use of Temporary Diaphragm Pacing Utilizing Intramuscular Electrodes” Presentation at the 54th Annual Meeting Society of Thoracic Surgeons, Fort Lauderdale, Florida January 27-31, 2018.
417. “Diaphragm Pacing to Replace and Decrease Mechanical Ventilators” ICU Rehabilitation Symposium 2018, Cambridge Rehabilitation Center, United Arab Emirates, February 17th, 2018.
418. “Decreasing Weaning Times with Mechanical Ventilation” Presentation at Ventilacion Mecanica Mexico,

Queretaro, Mexico, February 23, 2018.
419. “Long Term Experience with Diaphragm Pacing for Traumatic Spinal Cord Injury: Early Implantation Post Injury is More Beneficial” Podium Presentation at Central Surgical Association Annual Meeting, Columbus Ohio March 15th, 2018.
420. “Reviewing Studies of Diaphragm Pacing Results to Identify the Correct Phenotype of ALS/MND Patients for Which Diaphragm Pacing Could Help in Ventilation and in Which Patients Diaphragm Pacing Should not be Utilized: The Devil is in the Details” Oral Communication and Poster Presentation at the JIVD and European Respiratory Care Association 15th International Conference on Home Mechanical Ventilations, Lyon France March 16th- 17th, 2018.
421. “Diaphragm Pacing in Complex Pediatric Respiratory Care Can Have a Significant Role in Treating Respiratory Failure From Spinal Cord Injury to multiple other diseases including Spinal Muscle Atrophy, Pompe’s, Congenital Central Hypoventilation and select Acute Flaccid Myelitis patients” Oral Communication and Poster Presentation at the JIVD and European Respiratory Care Association 15th International Conference on Home Mechanical Ventilations, Lyon France March 16th- 17th, 2018.

422. “Long Term Experience with Diaphragm Pacing for Traumatic Spinal Cord Injury: Early Implantation Post Injury Allows Greater Freedom from Invasive Tracheostomy Mechanical Ventilation” Oral Communication and Poster Presentation at the JIVD and European Respiratory Care Association 15th International Conference on Home Mechanical Ventilations, Lyon France March 16th- 17th, 2018.

423. “Addressing Diaphragm Dysfunction in Cardiac Surgery Patients: Successful Therapeutic Use with Current Technology and Future Prophylactic Use of Temporary Diaphragm Pacing Utilizing Intramuscular Electrodes” Poster Presentation at the JIVD and European Respiratory Care Association 15th International Conference on Home Mechanical Ventilations, Lyon France March 16th- 17th, 2018.

424. “Current Status of Diaphragm Pacing” Invited Presentations at the Ohio Chapter of American College of Surgeons, Cincinnati, April 7, 2018
425. “Long Term Experience with Diaphragm Pacing for Traumatic Spinal Cord Injury: Early Implantation Post Injury is More Beneficial” Presentation at the 2018 Annual Scientific Meeting of the American Spinal Injury Association. Rochester, Minnesota, May 4th, 2018.
426. “Analysis of Function and Survival in ALS patients with Diaphragm Pacing Using Virtual Controls” Poster Presentation at the 2018 Midwest Surgical Association Annual Meeting, Mackinac Island, MI, August 6, 2018
427. “Addressing Quality of Life Concerns in Veterans: Innovative Gadgetry to Manage the Inflow and Outflow” Podium presentation for the Paralyzed Veterans of America Healthcare Summit: Delivering Excellence –Achieving State-of-the-Art Healthcare, Dallas, Texas August 28, 2018
428. “Airway Management in Spinal Cord Injury: Preventing and Decreasing Tracheostomy” Presentation at the 2018 Educational Conference of the Academy of Spinal Cord Injury Professionals. New Orleans. September 5, 2018.
429. “Helping Children Breath: The Important Role of Diaphragm Pacing” Podium presentation at the Howard H. Steel Course on Pediatric Spinal Cord Injury, Sydney Australia, September 12. 2018
430. “Diaphragm Pacing Leads to Improved Airway Management in Spinal Cord Injury- Decreasing the Need for Tracheostomies thereby decreasing Morbidity” Podium Presentation at the 57th Annual Spinal Cord Society Annual Meeting. Sydney Australia September 13-15, 2018.
431. “Diaphragm Pacing to Decrease Mechanical Ventilators and Improve Breathing” Key Note presentation at the National Congress of Thoracic Surgery, Barranquilla, Columbia Oct 4th, 2018
432. “Addressing Diaphragm Dysfunction in Cardiac Surgery Patients: Successful Therapeutic Use with Current Technology and Future Prophylactic Use of Temporary Diaphragm Pacing Utilizing Intramuscular Electrodes”. Oral Poster Presentation at the 31st Annual Meeting of the European Society of Intensive Care Medicine during the Acute Respiratory Failure and Mechanical Ventilation Clinical Studies Session, Paris France October 20-24th.
433. “Reporting the Largest Long Term Experience with Diaphragm Pacing for Traumatic Spinal Cord Injury: Successfully Decreasing Mechanical Ventilation” Oral Presentation at the 31st Annual Meeting of the European Society of Intensive Care Medicine during the Trauma Care Session(Sited as one of the top abstracts), Paris France October 22nd, 2018.
434. “Diaphragm Pacing in Complex Pediatric Respiratory Care Can Have a Significant Role in Treating Respiratory Failure From Spinal Cord Injury to multiple other diseases including Spinal Muscle Atrophy,

Pompe's and Acute Flaccid Myelitis." Oral Poster Presentation at the 31st Annual Meeting of the European Society of Intensive Care Medicine, at Pediatrics and Safety Session, Paris France October 23th, 2018.
435. "Respiratory Management after Spinal Cord Injury" Invited Presentation at the American Academy of Physical Medicine and Rehabilitation Annual Meeting, Orlando October 25-28, 2018.

MaryJo Elmo, ACNP
University Hospitals Cleveland Medical Center

(no CV uploaded)

A novel model of outpatient rehabilitation incorporating advanced rehabilitation technology into a non-profit clinical environment: a case report.

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Craig Newsam, PT, DPT
Mount Saint Mary's University

CV:
CRAIG J. NEWSAM, PT, DPT

Work Experience
10/13 – present ASSOCIATE PROFESSOR
NEUROMUSCULAR CURRICULUM COORDINATOR
Mount Saint Mary's University Doctor of Physical Therapy Program

7/12 – 7/13 CLINICAL TRAINING SPECIALIST
Ekso Bionics, Inc

2/12 – 7/12 DIRECTOR OF REHABILITATION
Aegis Therapies, Sherman Oaks Health & Rehab Center

11/10 – 2/12 DIRECTOR OF THERAPY SERVICES
Hollywood Presbyterian Medical Center

10/06 – 7/10 RESEARCH & EDUCATION MANAGER
Memorial Rehabilitation, Long Beach Memorial Medical Center

8/05 – 10/09 ASSISTANT RESEARCH COORDINATOR
5/95 – 12/03 Mount Saint Mary's College Department of Physical Therapy

1/05 – 10/06 SENIOR PROJECT MANAGER
Los Amigos Research and Education Institute
Rancho Los Amigos National Rehabilitation Center
Pathokinesiology Laboratory

7/91 – 10/06 SENIOR RESEARCH PHYSICAL THERAPIST
Los Amigos Research and Education Institute
Rancho Los Amigos National Rehabilitation Center
Pathokinesiology Laboratory

10/89 – 6/91 PHYSICAL THERAPIST I
Spinal Cord Injury Service
Rancho Los Amigos Medical Center

Awards and Honors
"Neurological Patient Management Video Library". Title V Mount Saint Mary's University. 2015 – 2016.

"The Walking Recovery Program" (Grant Writer). Craig H. Neilsen Foundation, $45,000; 2010.

"Addressing Transportation Needs of Older Adults" (Grant Writer). American Occupation Therapy Association Mini-Grant through the National Traffic Highway Safety Administration. $3,000; 2009

Quantification of manual wheelchair use over a 12-hour period among individuals with paraplegia. Best

Poster Award, American Spinal Injury Association 34th Annual Scientific Meeting, 2008

“Strengthening Exercises to Reduce Shoulder Pain in Person with Tetraplegia”. Foundation for Physical Therapy. $40,000; 2006

Effect of seat position on shoulder joint demand during manual wheelchair propulsion: A preliminary report. Best Paper Award, American Spinal Injury Association 29th Annual conference, 2003.

“Recovery from Exertional Exercise in Person with Post-Polio Syndrome”. California Physical Therapy Fund. $2,500; 2000-2001.

Publications
Books and Book Chapters (past 5 years only)
Lee A, Newsam CJ. Aging Skin. In: Lewis CB Chui KK, Gray DL, Huber GM, eds. Physical Therapy for the Older Adult. Philadelphia PA: Wolters Kluwer: 2017

Baker LL, Wederich C, McNeal D, Newsam CJ, Waters RL. NeuroMuscular Electrical Stimulation: A Practical Guide, 4th ed. Downey, CA: Los Amigos Research & Educational Institute, Inc: 2000 (5th edition in preparation)

Perry J, Newsam CJ. Hamstring function in cerebral palsy gait. In: Sussman MD ed. The Diplegic Child. Rosemont, IL: American Academy of Orthopaedic Surgeons: 1992

Manuscripts (past 5 years only)
Bisson T, Newsam CJ. Short-duration, high intensity bouts of physical therapy to increase confidence and mobility in an individual with incomplete spinal cord injury: a case report. Physiother Theory Prac 2017; 33:888-895.

Newsam CJ. Exercise considerations for persons living with a spinal cord injury (SCI): lecture and experiential learning activities. In: A Compendium for Teaching Professional Level Physical Therapy Neurologic Content v2016 – Prevention and Wellness. Academy of Neurologic Physical Therapy. http://www.neuropt.org/education/compendium/comp-docu

Newsam CJ. Equipment recommendations and movement optimization for preservation of upper limb function following spinal cord injury. Spinal Cord Injury SIG Newsletter 2015 Spring/Summer: 9-11.

Selected Presentations (past 5 years only)
Satisfaction survey of end-users of wearable robotic exoskeletons. Poster presentation at California Physical Therapy Association annual conference. Santa Clara, CA, September 22, 2018

Criterion validity of the plantar flexor single limb heel rise test (SLHRT): role of upper extremity support, examiner vantage point, and use of metronome. Poster presentation at California Physical Therapy Association annual conference. San Diego, CA, September 17, 2017

Vibration tilt-table improves training performance in a wearable robotic exoskeleton: two case observations for individuals with severe lower extremity spasticity. Poster presentation at Combined Sections meeting, American Physical Therapy Association, San Antonio, TX February 18, 2017.

Isn’t there an app for that? Technology to measure function in the clinic. California Physical Therapy Association annual conference, Santa Clara CA October 2016

Promoting physical activity in persons with neurological disability: Using personal exercise experiences as a learning tool for entry-level DPT students. California Physical Therapy Association annual conference, Pasadena, CA September 2015

A high-intensity, periodic model of physical therapy care-delivery for an individual with incomplete spinal

cord injury. NEXT conference, American Physical Therapy Association, Baltimore, MD June 2015

Maria Gruvstedt, PT
Bridging Bionics Foundation

(no CV uploaded)

Noninvasive Neuromodulation of Cardiovascular Control Following Experimental Spinal Cord Injury

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

Rahul Sachdeva, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

CV:
A. Personal Statement
I am presently a postdoctoral research fellow in laboratory of Dr. Andrei Krassioukov, at the International Collaboration on Repair Discoveries (ICORD), University of British Columbia in Vancouver, Canada. The overarching objective of my research is to understand and improve autonomic function after spinal cord injury (SCI).
Broadly, my animal research involves (1) investigation of morphological changes in central and peripheral autonomic pathways after SCI, (2) understanding how cardio-autonomic dysfunction is associated with cognitive decline, and (3) development of clinically relevant treatment strategies for structural and functional recovery after SCI. I routinely use complete and incomplete SCI at 3rd thoracic segment to model decentralized sympathetic control in order to study the SCI-associated deficits and to test promising therapies such as peripheral nerve grafts and chondroitinase treatment, pharmacological neuroprotection, rehabilitation by passive cycling exercise, and electrical neuromodulation. Our most recent findings show that peripheral nerve grafts and chondroitinase treatment lead to significant regeneration-mediated reduction in severity of autonomic dysreflexia, a debilitating condition characterized by rapid uncontrolled bursts in blood pressure in response to stimuli of daily routine e.g. a full bladder. Our recent data also shows that impaired cardio- and cerebrovascular control is associated with cognitive impairment in rats with SCI. Promoting cognitive recovery by improving cardiovascular function is of interest in future studies.
Clinical component of my research also focuses on cognitive impairment in individuals with SCI. My recent systematic review of clinical literature from 1946 – 2017 concludes that cognitive impairment is a serious issue in individuals with SCI and certainly cardiovascular dysfunction is a significant contributor. I am involved in a project funded by Heart and Stroke Foundation that is focused on studying cognitive function in SCI population susceptible to cardiovascular dysfunction i.e. with injury at T6 or above.
In addition to conducting my research, I mentor junior collogues (undergraduate, graduate and MD students) in the laboratory as well as facilitate multiple courses at the university. I am also a member of the American Spinal Injury Association.
With a multi-dimensional approach targeted towards improving the autonomic function following SCI, my long-term objective is to lead a multidisciplinary research laboratory that addresses clinically-relevant questions using appropriate pre-clinical models.

B. Positions and Honors
Positions
2015 –present Craig H Neilsen Postdoctoral Fellow, ICORD, University of British Columbia (UBC), Vancouver, BC, Canada.
2010 – 2015 Doctor of Philosophy (PhD) Candidate, Drexel University, Philadelphia, PA, USA.
2009 – 2010 Biotech Industrial Training Program (BITP) trainee, Auroprobe laboratories, UP, India.
2009 Undergraduate Trainee, New Drug Discovery Research Unit, Ranbaxy laboratories limited, Gurgaon, Haryana, India.
2005 – 2009 Bachelor of Technology (B. Tech.)- Biotechnology student, Padmashree Dr. D. Y. Patil University, Navi Mumbai, Maharashtra, India.
Honors/Awards
2018/05 2nd Place for Best Poster Presentation, 16th Annual Genomics Forum “Advancing Health Outcomes”, Genome British Columbia, Vancouver, BC, Canada - C$ 300
2018/05 Dr. Krassioukov International Autonomic Award, Eighth Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, BC, Canada – C$ 200
2018/05 Best overall Podium Presentation, Eighth Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, Canada – C$50
2018/05 Dr. Krassioukov International Autonomic Award, ICORD Trainee Symposium, Vancouver, BC,

Canada – C$ 1000
2018/05 2nd place for Best Oral Presentation, American Spinal Injury Association, Rochester, MN, USA- C$190 (USD 150)
2018/03 Travel Award: BC Regeneration Medicine Network (BCREGMED). – C$ 750
2018/03 Gordon Hiebert Award for Best Postdoctoral Fellow Poster, ICORD Annual Research Meeting, Vancouver, Canada. - C$ 750
2018/03 Honorable Mention: Dr. Chris Willie Graduate Prize for excellence in research, Okanagan Cardiovascular and Respiratory Symposium, Vernon, Canada.
2017/12 Best Poster Presentation: UBC Postdoc Research Day, Vancouver, Canada. –C$ 75
2017/06 Best Postdoctoral Fellow Poster: ICORD Annual Trainee Symposium, Vancouver, Canada. –C$ 250
2017/05 Best Postdoctoral Fellow Poster: Seventh Annual G.F. Strong Rehabilitation Centre Rehabilitation Research Day, Vancouver, Canada. –C$ 50
2017/04 Best Oral Presentation: Experimental Biology Annual Meeting 2017, Chicago, USA.
2017/02 2nd Best Oral Presentation: 4th International Autonomic Symposium, Vancouver, Canada. –C$ 200

2016/10 Trainee Travel Award: International Collaboration on Repair Discoveries (ICORD), Vancouver, Canada. –C$ 1000
2013/12 ISNR Student Travel Award - 15th International Symposium on Neural Regeneration, Pacific Grove, CA, USA. –C$ 505 (USD400)
2013/03 Graduate Student Association Travel Award: Drexel University, Philadelphia, USA. –C$ 950 (USD 750)
2010/02 University Gold Medal for academic excellence (Shivshankar Bhau Patil Shegaon Medal), Navi Mumbai, Maharashtra, India.
2008/12 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2008/05 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2007/12 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
2007/05 Merit Scholarship (Cash prize for highest grade), Pd. Dr. D Y Patil University, Navi Mumbai, Maharashtra, India. –C$ 115 (INR 6000)
C. Contributions to Science
1) Cognitive impairment after SCI: We have recently completed a systematic literature review to evaluate the current incidence of cognitive impairment following SCI as well as identify the contributing and confounding factors. It is evident that impaired cardio- and cerebrovascular control, which is responsible for cognitive decline in able-bodied population is also one of the major factors leading to similar cognitive deficits in SCI population. We are also involved in both clinical and pre-clinical studies aimed towards understanding the role of cardio- and cerebrovascular dysfunction in cognitive impairment.
• Sachdeva R, Gao F, Chan CCH, Krassioukov AV. (2018). Cognitive Function After Spinal Cord Injury: A Systematic Review. Neurology (Impact factor: 8.3) In Press.

• Phillips AA, Matin N, Jia M, Squair JW, Monga A, Zheng MMZ, Sachdeva R, Yung A, Hocaloski S, Elliott S, Kozlowski P, Dorrance AM, Laher I, Ainslie PN, Krassioukov AV. Transient Hypertension after Spinal Cord Injury Leads to Cerebrovascular Endothelial Dysfunction and Fibrosis. J. Neurotrauma. (Impact factor: 5.2) 2018 Feb 1;35(3):573-581. PMID: 29141501

2) First in vivo evidence of the potential for intra-axonal protein synthesis in adult central nervous system (CNS) neurons after SCI: Our publication in the Journal of Neuroscience challenged the long-standing opinion that mature CNS axons contain negligible amounts of local (i.e. intra-axonal) mRNAs and translation machinery and therefore lack the intrinsic ability for regeneration. We are the first to show the axonal localization of several mRNA transcripts and protein synthesis machinery components when CNS neurons are provided with a growth-supportive substrate such as a nerve graft. This paper provides a new model to study local translation in vivo, identifies an exciting therapeutic target and opens up a promising avenue for future SCI research.
We further demonstrated that local translation potential is strongly associated with the regenerative effort of axons in vivo and that this phenomenon can be harnessed to promote regeneration after SCI. This study is an important finding as it strengthens the premise that intra-axonal protein synthesis is involved in

regeneration. We also reviewed this exciting new research avenue in context of promoting axonal regeneration following injury.

• Kalinski AL*, Sachdeva R*, Gomes C, Lee SJ, Shah Z, Houle JD, Twiss JL. mRNAs and Protein Synthetic Machinery Localize into Regenerating Spinal Cord Axons When They Are Provided a Substrate That Supports Growth. The Journal of Neuroscience (Impact factor: 6.34) 2015 Jul 15;35(28):10357-70. PMID: 26180210 *equal contribution. Citations = 6
Featured as Journal Cover| Recommended by F1000 prime| Editorial mention by The Neuroscientist

• Sachdeva R, Farrell K, McMullen MK, Twiss JL, Houle JD. Dynamic Changes in Local Protein Synthetic Machinery in Regenerating Central Nervous System Axons after Spinal Cord Injury. Neural Plasticity (Impact factor:3.6) 2016;2016:4087254. Epub 2016 Jun 7. PMID: 27375904 Citations = 6

• Twiss JL, Kalinski AL, Sachdeva R, Houle JD. Intra-axonal protein synthesis - a new target for neural repair? Neural Regeneration Research (Impact factor: 1) 2016 Sep;11(9):1365-1367. Review. PMID: 27857722 Citations = 7

3) Post-injury exercise enhances regeneration from CNS neurons into peripheral nerve grafts after acute SCI. This study was the first to directly show the pro-regenerative effects of exercise from a mechanistic standpoint, and provides the foundation for understanding benefits of exercise for promoting regeneration and recovery after SCI. We combined neuronal tracing and quantitative fluorescent in situ hybridization techniques to demonstrate that exercise increases the mRNA levels of regeneration associated genes and the actual number of CNS neurons regenerating into the peripheral nerve grafts. We also reviewed the pertinent literature in context of exercise as a non-invasive strategy for regeneration post SCI.

• Sachdeva R, Theisen CC, Ninan V, Twiss JL, Houlé JD. Exercise dependent increase in axon regeneration into peripheral nerve grafts by propriospinal but not sensory neurons after spinal cord injury is associated with modulation of regeneration-associated genes. Experimental Neurology (Impact factor: 4.65) 2015 Sep 12. pii: S0014-4886(15)30086-8. PMID: 26366525 Citations = 7

• Theisen CC, Sachdeva R, Austin S, Kulich D, Kranz V, Houlé JD. Exercise and Peripheral Nerve Grafts as a Strategy to Promote Regeneration after Acute or Chronic Spinal Cord Injury. J. Neurotrauma. (Impact factor: 5.2) 2017 May 15;34(10):1909-1914. Review. PMID: 28437223 Citations = 3

4) Using a triple combination approach to promote cardio-autonomic recovery following SCI. This ongoing study currently funded by Craig H. Neilsen Foundation, is focused at combining regeneration (nerve grafts and chondroitinase) and rehabilitation (passive exercise) to mitigate the severity of autonomic dysreflexia. Our results show that the combination approach can reduce the severity of autonomic dysreflexia by over 50%. Histological analyses are aimed at identifying the neuroanatomical correlates of recovery.

• R Sachdeva, R Gopaul, M Jia, A Monga, M Ramer, AV Krassioukov. A Triple Combination Approach Involving Nerve Transplantation, Glial Scar Digestion and Passive Exercise Promotes Cardiovascular Recovery after Spinal Cord Injury. The FASEB Journal 31 (1 Supplement), 1077.7-1077.7

D. Research Support
2019 – 2020 Bluma Tischler Postdoctoral Fellowship, University of British Columbia – C$ 20,400
Neuroprotective and Regenerative Strategies to Restore Supraspinal Control and Improve Vascular-Cognitive Impairment after Spinal Cord Injury. Principal Applicant.
2018 - 2021 Canadian Institutes of Health Research (CIHR) Project Grant –C$ 267,750
Transient Hypertension and Vascular-Cognitive Impairment after Spinal Cord Injury: Benefit of Passive Exercise. Co-applicant. (PI: Dr. Andrei V. Krassioukov)
2017 - 2019 Craig H. Neilsen Foundation Postdoctoral Fellowship –C$ 192,000 (USD 150,000) Regenerative Strategies for Autonomic Recovery After Spinal Cord Injury. Principal Applicant.
2016 - 2017 International Collaboration on Repair Discoveries (ICORD) Seed Grant –C$ 20,000 Combined neuroprosthetic and neuroprotective approach to promote restoration and recovery of autonomic circuitry. Co-applicant. (PI: Dr. Andrei V. Krassioukov)
2009 - 2010 Trainee Scholarship- Biotech Consortium India Limited, Govt. of India –C$ 740 (INR 39000)

Utilization of COBAS® AMPLICOR for the quantitation of HCV viral load in clinical specimens. Principal Applicant.

Kiran Pawar, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Arshdeep Marwaha, BSc
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), University of British Columbia

(no CV uploaded)

Burst fracture patterns associated with neurological recovery in thoracolumbar traumatic spinal cord injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Jean-Marc Mac-Thiong, MD, PhD
Hôpital Du Sacré-Coeur De Montréal

CV:
Positions and Employment
2017-... Director of research, Division of orthopedic surgery, Université de Montréal, Canada
2011-... Orthopedic spine surgeon, Montreal Shriners Hospital, Canada
2010-... Chair, Medtronic Research Chair in spinal trauma, Université de Montréal, Canada
2010-... Chief Medical Officer, Spinologics Inc., Canada
2008-... Associate Professor, Department of Surgery, Université de Montréal, Canada
2008-... Orthopedic spine surgeon and researcher, Hôpital du Sacré-Coeur de Montréal, Canada
2008-... Orthopedic spine surgeon and researcher, CHU Sainte-Justine, Canada
2008-... Spine surgery fellowship director, Hôpital du Sacré-Coeur de Montréal, Canada

Other Experience and Professional Memberships
2018-... Member, Operational & Scientific Access Committee, International Spinal Cord Injury Biobank
2017-... Chair, Spine and Acute Trauma Committee, American Spinal Injury Association
2017-21 Member, Morbidity & Mortality Committee, Scoliosis Research Society
2017-20 Reviewer, Education and Program Committee, Scoliosis Research Society
2017- Member, Expert Committee, 2017 Grants for Canada Foundation for Innovation
2017-... Organizer and scientific director, Research Day of the Division of Orthopedic Surgery of Université de Montréal
2015-... Associate Member, Minimize Implants Maximize Outcomes (MIMO) Study Group
2015-... Member, iLab-Spine (Laboratoire international – Imagerie et biomécanique du rachis)
2014-... Member, Harms Study Group
2013-... Reviewer for funding sources (Fonds de recherche du Québec – Santé, Canada Foundation for Innovation, Swiss National Science Foundation, MENTOR program of Canadian Institutes of Health Research)
2012-... Member, American Spinal Injury Association
2010-... Reviewer for journals: Journal of Neurotrauma, Spinal Cord, Canadian Medical Association Journal, PLoS One, Spine, Spine Journal, Scoliosis
2009-... Member, Scientific Committee, International Research Society of Spinal Deformities
2008-... Member, Scoliosis Research Society

Honors
2015 Ansys Hall of Fame 2015 Best in Show: Corporate
2015 Pierre-H. Labelle Prize for best presentation, Annual Meeting of the Quebec Scoliosis Society (also winner in 2012, 2011, 2009, 2008, 2006, and 2000)
2014 Best New Technology for Spine Care in 2014 (Diagnostic and Imaging)
2012 Travel Award – Institute Community Support of the Canadian Institutes of Health Research
2011 Scoliosis Research Society Traveling Fellowship
2010 Best presentation (Treatment), 8th International Research Society of Spinal Deformities Meeting
2009 Louis A. Goldstein Award for best clinical presentation, Scoliosis Research Society 44th Annual Meeting

2009 Edgar Dawson Traveling Fellowship of the Scoliosis Research Society
2008-... Salary award for clinician-scientists, Fonds de recherche du Québec – Santé
2008 Dean's list, Ph.D. Biomedical Sciences, Université de Montréal
2007 Dean's list, Residency in orthopedic surgery, Université de Montréal
2001 Dean's list, M.S. Biomedical Sciences, Université de Montréal
Publications
H-index: 29 i10-Index: 63

List (N=137) of Published Work in Pubmed: https://www.ncbi.nlm.nih.gov/pubmed/?term=mac-thiong
Peer-reviewed publications on spinal cord injury

• Goulet J, Richard-Denis A, Thompson C, Mac-Thiong J-M. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. Accepted in Am J Phys Med Rehabil
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Quality of life in the sub acute period following a cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective study. Accepted in Spinal Cord
• Richard-Denis A, Nguyen B-H, Mac-Thiong J-M. The impact of early spasticity on the intensive functional rehabilitation phase and community reintegration following traumatic spinal cord injury. Accepted in J Spinal Cord Med
• Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong J-M. Early predictors of global functional outcome after traumatic spinal cord injury: a systematic review. Accepted in J Neurotrauma
• Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong J-M. The use of classification tree analysis to assess the influence of surgical timing on neurological recovery following traumatic complete cervical spinal cord injury. Spinal Cord 2018 Feb 26 [Epub ahead of print] (Featured paper)
• Facchinello Y, Beauséjour M, Richard-Denis A, Thompson C, Mac-Thiong J-M. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 Oct 25 [Epub ahead of print]
• Cheng CL, Noonan VK, Shurgold J, Chen J, Rivers CS, Hamedani HK, Humphreys S, Bailey C, Attabib N, Mac-Thiong J-M, Goytan M, Paquet J, Fox R, Ahn H, Kwon BK, Fourney DR, RHSCIR network. Geomapping of traumatic spinal cord injury in Canada and factors related to triage pattern. J Neurotrauma 2017 Mar 22 [Epub ahead of print]
• Richard-Denis A, Erhmann-Feldman D, Thompson C, Mac-Thiong J-M. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2017 Feb 15 [Epub ahead of print]
• Fradet L, Cliche F, Petit Y, Mac-Thiong J-M, Arnoux P-J. Strain rate dependent behavior of the porcine spinal cord under transverse dynamic compression. Proc Inst Mech Eng H 2016 Jun 23 [Epub ahead of print]
• Richard-Denis A, Feldman DE, Thompson C, Parent S, Mac-Thiong J-M. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med 2017 Jul 19 [Epub ahead of print]
• Richard-Denis A, Feldman D, Thompson C, Albert M, Mac-Thiong J-M. The impact of a specialized cord injury center as compared with non-specialized centers on the acute respiratory management of patients with complete tetraplegia: an observational study. Spinal Cord 2018;56:142-150
• Thompson C, Feldman DE, Mac-Thiong J-M. Surgical management of patients following traumatic spinal cord injury: identifying barriers to early surgery in a specialized spinal cord injury center. J Spinal Cord Med 2018;41:142-148
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Reply to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14:885
• Squair JW, Bélanger LM, Tsang A, Ritchie L, Mac-Thiong J-M, Parent S, Christie S, Bailey C, Dhall S, Street J, Ailon T, Paquette S, Boyd M, Dea N, Fisher CG, Dvorak MF, West CR, Kwon BK. Spinal cord perfusion pressure predicts neurological recovery in acute spinal cord injury. Neurology 2017;89:1660-1667
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a new 2-level scale based on the Spinal Cord Independence Measure. Int J Phys Med Rehabil 2017;5:4
• Facchinello Y, Wagnac É, Ung B, Pradhan P, Peyrache L-M, Mac-Thiong J-M. The development of an instrumented spinal cord surrogate using optical fibers: a feasibility study. Med Eng Phys 2017;48:212-216
• Kaminski L, Cordemans V, Cernat E, M'Bra KI, Mac-Thiong J-M. Functional outcome prediction after traumatic spinal cord injury based on acute clinical factors. J Neurotrauma 2017;34:2027-2033
• Streijger F, Skinnider M, Rogalski JC, Balshaw R, Shannon CP, Prudova A, Bélanger LM, Ritchie L, Tsang A, Christie S, Parent S, Mac-Thiong J-M, Bailey C, Urquhart J, Ailon T, Paquette SJ, Boyd MC, Street J, Fisher CG, Dvorak MF, Borchers CH, Foster LJ, Kwon BK. A targeted proteomis Analysis of cerebrospinal fluid after acute human spinal cord injury. J Neurotrauma 2017;34:2054-2068
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison

with the use of a gel mattress. Int Wound J 2017;14:874-881
• Richard-Denis A, Ehrmann Feldman D, Thompson C, Bourassa-Moreau E, Mac-Thiong J-M. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: the impact of early transfer to specialized acute SCI center. Am J Phys Med Rehabil 2017;96:449-456 (CME article)
• Wu Y, et al. Parallel metabolomic profiling of cerebrospinal fluid and serum for identifying biomarkers of injury severity after acute human spinal cord injury. Sci Rep 2016;6:38718
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Do patients with complete spinal cord injury benefit from early surgical decompression? Analysis of neurological improvement in a prospective cohort study. J Neurotrauma 2016;33:301-6
• Richard-Denis A, et al., Mac-Thiong J-M. Does the acute care spinal cord injury settings predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehabil 2016;95:300-8
• Thompson C, et al., Mac-Thiong J-M. The changing demographics of traumatic spinal cord injury: an 11-year study of 831 patients. J Spinal Cord Med 2015;38:214-23
• Berube M, et al., Mac-Thiong J-M. Development of theory-based knowledge translation interventions to facilitate the implementation of evidence-based guidelines on the early management of adults with traumatic spinal cord injury. J Eval Clin Pract 2015;21:1157-68
• Petit Y, et al., Mac-Thiong JM. Simulation of high energy vertebral fractures on complete porcine specimens. Conf Proc IEEE Eng Med Biol Soc 2015;2015:3901-4
• Dvorak MF, et al. Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma 2014;31:1540-47
• Boisclair D, Mac-Thiong J-M, et al. Compressive loading of the spine may affect the spinal canal encroachment of burst fractures. J Spinal Disord Tech 2013;26:342-6
• Bourassa-Moreau É, Mac-Thiong J-M, et al. Non-neurological outcomes following complete traumatic spinal cord injury: The impact of surgical timing. J Neurotrauma 2013;30:1596-601
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Complications in acute phase hospitalization of traumatic spinal cord injury: does surgical timing matter? J Trauma Acute Care Surg 2013;74:849-54
• Mac-Thiong J-M, et al. Does timing of surgery affect hospitalization costs and length of stay for acute care following a traumatic spinal cord injury? J Neurotrauma 2012;29:2816-22
Parent S, Mac-Thiong J-M, et al. Spinal cord injury in the pediatric population: a systematic review of the literature. J Neurotrauma 2011;28:1515-24

Julien Goulet, MD
Hôpital Du Sacré-Coeur De Montréal

(no CV uploaded)

Underlying Osteomyelitis in Chronic Non-healing Pressure Injuries in Patients with Spinal Cord Injuries: a Case Series

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Tiffany Wong, MD
Mount Sinai

CV:
CURRICULUM VITAE

Tiffany Wong, MD

Business Address:
1 Gustave L Levy Place
New York, NY 10029

Email: tiffanywon@gmail.com

Education

7/1/2010- 5/30/2014 Tulane University School of Medicine, New Orleans, LA
Doctor of Medicine

8//12004 - 5/30/2008 University of California, Berkeley, Berkeley, CA
BA French, BS Chemistry

9/1/2007-12/31/2007 University of Grenoble, Grenoble, France
Education Abroad Program, Fall 2007

Graduate Medical Education

7/1/2014 - 6/30/2018 Resident Physician, Physical Medicine and Rehabilitation
Louisiana State Health Sciences Center, New Orleans, LA

7/1/2018 - Current Fellow Physician, Spinal Cord Injury
Mt. Sinai Hospital Spinal Cord Injury Program, New York, NY
Leadership

2015- 2017 Committee Member, Graduate Medical Education Committee
Representative voice of house officers at LSUHSC

2011-2013 Leader, SMILE, New Orleans, LA
Co-leader of volunteer group that pairs a pediatric oncology patient with a medical student “buddy” to help provide patients with emotional support.
Teaching

2014 - present Teach and supervise medical students and residents

Bibliography

Risk factor analysis and cost effectiveness of screening for deep vein thrombosis in patients with traumatic spinal cord injuries on admission to inpatient rehabilitation. Raj M, Glynn G, Bloom M, Carimi A, Clevenger S, Faciane J, Hicks B, Paulk K, Sterne E, Wong T. Abstract, AAPM&R’s 2017 Annual Assembly

Scapulothoracic Joint Pathology, Schlosser CE, Kishner S, Laborde JM, Wong TK. Medscape.

http://emedicine.medscape.com/article/1261716-overview

Rehab in Review - contributing author, 7/2014- 6/2018

Research

2011- 2012 Research Assistant, Tulane University, New Orleans, LA
Developed antibody staining protocol for in vitro models of neurite growth.

2009 Research Assistant, Affymetrix, Inc., Santa Clara, CA
Developed a novel hybridization assay for full genomic analysis.

2008 - 2009 Research Technician, Massachusetts General Hospital, Boston, MA
Synthesized and purified peptides used for the development of AIDS vaccines.

2006 - 2008 Undergraduate Researcher, Trauner Research Group, UC Berkeley
Developed methodologies for syntheses of bioactive natural products.
Lectures

2017 Small Joint Injections: Ankle
2016 Integrative Medicine in Rehabilitation
2015 Acupuncture in the treatment of Pain
2014 Psoriatic Arthritis

Volunteer Experience

2016 ACCESS Foundation's Boofest, Covington, LA
Participated in Halloween fundraiser to raise money for DME for pediatric PM&R patients

2010 - 2012 Don't Weight To Lose, New Orleans, LA
Counseled and educated obese participants on how to lose weight and achieve a healthier lifestyle.

2010 UCSF Children's Hospital, San Francisco, CA
Provided emotional and psychological support for pediatric patients and their families through reading, games, and activities

2010 Boys and Girls Club, Palo Alto, CA
Mentored and tutored low-income and underprivileged middle school and high school students.

2005 - 2006 Oakland Asian Students Educational Services, Oakland, CA
Tutored poverty-level and low-income students living in Chinatown. Assisted students in building oral and written communication skills.

Yodit Tefera, MD
Ny Presbyterian

(no CV uploaded)

Swapna Johnson-Kunjukutty, MD
James J Peters Vamc

(no CV uploaded)

Stephen Kornfeld, DO
James J Peters Vamc

(no CV uploaded)

Gang Li, MD
James J Peters Vamc

(no CV uploaded)

Marinella Galea, MD
James J Peters Vamc

(no CV uploaded)

Peripheral Nervous System Changes Below the Level of Spinal Cord Injury: a systematic review

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Elissa Zakrasek, MD
Palo Alto Va Health Care System

CV:
Publications & Presentations
Peer Reviewed articles:

Zakrasek E, Yurkiewicz S, Dirklove B, Pence TB, Crew J. “Use of Nonsteroidal Anti-inflammatory Drugs to prevent Heterotopic Ossification After Spinal Cord Injury: a retrospective chart review.” Manuscript accepted 8/30/18 in Spinal Cord, pending publication.

Zakrasek E, Nielson J, Kosarchuk J, Crew J, Ferguson A, McKenna S. “Pulmonary outcomes following specialized respiratory management for acute cervical spinal cord injury: a retrospective analysis.” Spinal Cord. 2017; 55(6): 559-565.

Zakrasek E, Creasey G, Crew J. “Pressure ulcers in people with spinal cord injury in developing nations.” Spinal Cord. 2015; 53 (1): 7-13.

Briggs E, Nguyen T, Wall M, Macdonald K. “Oral Antimicrobial Use in Outpatient Cystic Fibrosis Pulmonary Exacerbation Management; a Single Center Experience.” Clinical Respiratory Journal. 2011 2012; 6 (1), 56-64.

Briggs E, Wessel G. “In the beginning… Animal fertilization and sea urchin development.” Developmental Biology. 2006; 300, 15-26.

Abstracts:
Wall M, Briggs E, Mccullar B. Improving care for long distance patients: A web based system for home monitoring and early intervention: 446. Pediatric Pulmonology. 2011; 46(34): 403-404.

McDonald KD, Briggs EC, Nguyen T, Wall MA. Patient Factors Associated with Failure of Oral Antibiotic Therapy in Cystic Fibrosis Pulmonary Exacerbation. Pediatric Pulmonology. 2010: 403-404

Allada G, Briggs E, Nguyen T, Gold J. The Distribution of Vancomycin Mean Inhibitory Concentrations in Cystic Fibrosis Patients with MRSA. Pediatric Pulmonology. 2010: 354-355.

Digital publications:
Karadikar N, Zakrasek E. Brachail Plexopathy: Differential Diagnosis and Treatment. PM&R Knowledge Now, article update 08/16/2017. (https://now.aapmr.org/brachial-plexopathy-differential-diagnosis-and-treatment-2/)

Podium Presentations:
American Spinal Cord Injury Association Annual Meeting – Rochester, MN (April 2018)
“Heterotopic Ossification after SCI: Best Practice for Prevention and Management.” Co-presented by James Crew, Jennifer Hastings and Elissa Zakrasek.

Poster Presentations:
American Spinal Cord Injury Association Annual Meeting – Rochester, MN (April 2018)
1) Zakrasek E, Kiratli J. “Indoor Rock Climbing After Spinal Cord Injury.”
2) Zakrasek E, Yurkiewicz S, Dirklove B, Pence TB, Crew J. “Use of NSAIDs to Prevent Heterotopic Ossification After Spinal Cord Injury.”

American Spinal Cord Injury Association Annual Meeting – Albuquerque, NM (April 2017)
1) Zakrasek E, Crew J, Elliott C. “Characterizing Urinary Tract Infections During Acute Rehabilitation.”

International Spinal Cord Society Annual Meeting – Vienna, Austria (September 2016)
1) Zakrasek E. “Rock Climbing After Spinal Cord Injury.”

American Spinal Cord Injury Association Annual Meeting – Philadelphia, PA (April 2016)
1) Zakrasek E, Crew J, Elliott C. “Should All Patients Transitioning from Indwelling Catheters to Intermittent Catheterization Receive Antibiotic Prophylaxis?”
2) Zakrasek E, Kosarchuk J, Crew J, McKenna S. “Ventilator Weaning in High Cervical Spinal Cord Injury: A Retrospective Review.”
3) Nielson J, Kosarchuk J, Zakrasek E, Crew J, Ferguson A, McKenna, S. “A Principal Component Analysis of Theophylline Use for Ventilator Weaning in Patients with High Cervical Spinal Cord Injury.”

International Spinal Cord Society Annual Meeting – Istanbul, Turkey (October 2013)
1) Zakrasek E, Creasey G, Crew J. “The Prevalence of Pressure Ulcers as a Chronic Complication of Spinal Cord Injury in the Developing World.”

American Medical Society for Sports Medicine Conference – San Diego, CA (April 2013)
1) Zakrasek E, Cassaza G, Waite B. “Understanding and improving awareness of the Female Athlete Triad in California high school running programs.”

Using modeling and simulation to predict muscle and joint demands during forward and reverse wheelchair propulsion

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Jeffery Rankin, PhD
Rancho Los Amigos National Rehabilitation Center

CV:
Biographical Sketch
Name: Jeffery W. Rankin, PhD
Position Title: Associate Director, Pathokinesiology Laboratory and Co-director of Rehabilitation Engineering, Rancho Los Amigos National Rehabilitation Center, Downey, CA, USA
A. Personal Statement
My main research aims to improve our understanding of how the musculoskeletal and neuromuscular systems interact to accomplish movement goals by addressing questions such as: Which muscles contribute to task completion? How does morphology influence movement capability (i.e., how does form relate to function)? How do changes in task requirements/morphology influence the neuromuscular controls and other biomechanical variables of interest, such as bone or muscle stress? Does the neuromuscular system use the most efficient method for completing a task? If not, how and why do solutions differ? These questions can be either basic in nature (e.g., trying to elucidate general underlying movement principles) or applied to specific problems (e.g., investigating how changing wheelchair propulsion technique influences upper extremity demand). Ultimately, answering these questions provides a huge benefit to human quality of life, leading to improvements in device design and rehabilitation techniques for pathological populations as well as providing ideas for bioinspired robotics and human enhancement devices.
To address these questions I have developed extensive expertise in developing detailed human and animal musculoskeletal models and simulations. Indeed, I have found that, in many cases, a combined experimental and modeling approach is necessary to address my primary research questions about neuromuscular control and musculoskeletal function. The two approaches are complementary – dynamic simulations of movement that accurately reproduce key experimental biomechanical quantities can provide additional muscle-specific quantities (e.g., muscle force, tendon energy) that are difficult to obtain empirically, but may greatly influence movement performance and neuromuscular control.
One of my primary avenues of research is in improving manual wheelchair use in order to reduce overuse injury and improve patient quality of life. To this end, I have developed a detailed adult upper extremity model and simulations of adult wheelchair propulsion to provide critical new data required for improving clinical outcomes. I used these data to determine causal relationships between propulsion technique and specific measures of limb demand (e.g., muscle force, stress and work) and highlight how changes in propulsion technique may influence overuse injury. My wheelchair modeling framework has also been used by others to investigate aspects of wheelchair fitting. I am also using a combined modeling and simulation approach to address a number of questions related to pediatric wheelchair propulsion such as “How does physical maturity influence propulsion technique?” and “What are key factors in properly fitting a wheelchair to a pediatric patient?”. Within the Pathokinesiology Laboratory current wheelchair focused projects aim to improve welfare through novel devices (e.g., the Rowheel) or interventions.
Although my ultimate aim is to improve human quality of life, understanding animal movement is also an important branch of my research: insights gained from comparative biomechanics studies can highlight underlying movement principles and provide a general framework for understanding and improving human movement. For example, animals with widely varying morphologies – and thus widely varying constraints – can have similar walking and running capabilities. However, the manner in which these animals accomplish perform the movement (i.e., muscle coordination pattern) may be very different (e.g., humans versus ostriches). Regardless of the animal, all neuromuscular systems likely use similar guiding principles to accomplish a wide variety of movements (e.g., minimize muscle work or joint contact forces). Identifying and understanding these key principles is of great interest in human biomechanics: as we better understand these guiding principles we unlock our ability to improve human device design and rehabilitation techniques for both healthy and pathological populations.
B. Positions and Honors
Positions

2007-2010 Research Assistant, Neuromuscular Biomechanics Laboratory, The University of Texas at Austin, Austin, TX, USA
2010-2016 Postdoctoral Fellow, Structure and Motion Group, The Royal Veterinary College, London, UK
2016-2017 Postdoctoral Fellow, Department of Biological Sciences, University of Idaho, Moscow, ID
2018-present Associate Director, Pathokinesiology Laboratory, Rancho Los Amigos National Rehabilitation Center
2018-present Co-Director, Rehabilitation Engineering, Rancho Los Amigo National Rehabilitation Center

Honors/Awards
2007-2010 Recipient, John M. Stemmons Graduate Fellowship in Engineering, Univ. Texas Austin
2009-2010 Recipient, Houston Endowed Excellence Fellowship, Univ. Texas Austin
2010 Recipient, Student Travel Fund, International Shoulder Group
2010-2011 Recipient, Vice Principal of Research Fellowship, The Royal Veterinary College
2013, 2016 Recipient, Foreign Travel Fund Bursary, The Royal Veterinary College

Professional Memberships
2003-present Member, Tau Beta Pi engineering honor society
2002-present Member, American Society of Mechanical Engineering
2008-present Member, American Society of Biomechanics
2010-present Member, Society of Experimental Biology
2013-present Member, Society of Integrative and Comparative Biology

C. Contributions to Science – full citation list available at: http://tinyurl.com/RankinScholar

1. Advancing device design to improve human-device interactions. I have a long long-held interest in modifying devices to increase our capacity for movement in both sport and rehabilitation/clinical contexts. I have investigated how changes in bicycle design might improve competitive cycling performance. By combining musculoskeletal modeling, optimization theory and forward dynamic simulations to optimize different aspects of bicycle setup (including chainring shape and seat position), I was able to relate bicycle design parameters to components of muscle function such as activation-deactivation dynamics, fiber operating lengths. As a first step to improving wheelchair use, I utilized modeling and simulation techniques to generate foundational data for understanding how the musculoskeletal system is coordinated to meet propulsion demands. This work identified underlying mechanisms associated with traditional wheelchair propulsion mechanics as well as how changing propulsion technique influences upper extremity demand. This basic knowledge has helped guide my current wheelchair work, which is focused on understanding how the use of Rowheels and other non-traditional propulsion devices influence upper extremity demand.

a) Rankin, J. W. and R. R. Neptune (2008). A Theoretical Analysis of an Optimal Chainring Shape to Maximize Crank Power during Isokinetic Pedaling. Journal of Biomechanics 41 (7): 1494-1502.

b) Rankin, J. W. and R. R. Neptune (2010). The Influence of Seat Configuration on Maximal Average Crank Power during Pedaling: A Simulation Study. Journal of Applied Biomechanics 26 (4): 493-500.

c) Rankin, J. W. and R. R. Neptune (2008). The Influence of Muscle Activation-Deactivation Dynamics on the Chainring Shape that Maximizes Average Crank Power. North American Congress on Biomechanics (NACOB). August 5-9, Ann Arbor, MI, USA.

d) Haubert, L.L., Mulroy, S.J., Requejo, P.S., Rankin, J.W., et al (2018, under revision). Effect of reverse manual wheelchair propulsion on shoulder kinematics, kinetics and muscular activity in person with paraplegia. The Journal of Spinal Cord Medicine.

e) Morrow, M.M., Rankin, J.W., Neptune, R.R. and K.R. Kaufman (2014). A Comparison of Static and Dynamic Optimization Muscle Force Predictions during Wheelchair Propulsion. Journal of Biomechanics 47 (14), 3459-3465.

f) Rankin, J.W., Kwarciak, A.M., Richter, W.M. and R.R. Neptune (2012). The Influence of Wheelchair Propulsion Technique on Upper Extremity Muscle Demand: A Simulation Study. Clinical Biomechanics 27 (9): 879-886

g) Rankin, J.W., Richter, W.M. and R.R. Neptune (2011). Individual Muscle Contributions to Push and Recovery Subtasks during Wheelchair Propulsion. Journal of Biomechanics 44 (7): 1246-1252

2. Understanding the relationships between leg design and locomotion. My recent non-human studies have focused on understanding how leg design (i.e., morphology) influences walking, jumping, and obstacle avoidance. My work has helped to answer a number of outstanding questions about avian bipedal gait. For example, I have helped quantify the biomechanical properties of broiler chicken legs across ontogeny, which will allow us to understand how extremely rapid growth and obesity influences walking capacity and stability. I have also developed a model of the ostrich pelvic limb to generate ostrich walking and running

simulations that provide an alternative dataset to human walking data in order to generate new insights into bipedal gait. Ongoing non-human work is specifically focused on how ostrich and kangaroo rat muscle-tendon design influences walking capability and jumping performance, respectively. Both will provide a comparative basis for gaining novel insights into human muscle-tendon function.
a) Rankin, J.W. and C.P. McGowan (2018). Individual Muscle Functional Roles during Jumping in the Desert Kangaroo Rat: A Modeling and Simulation Approach. 8th World Congress on Biomechanics, July 8-12, Dublin, Ireland
b) Rankin, J.W., Doney, K, and CP McGowan (2018). Functional Capacity of Kangaroo Rat Hindlimbs: Adaptations for Locomotor Performance. Journal of the Royal Society Interface. 15(144). doi: 10.1098/rsif.2018.0303
c) Rankin, J.W., Rubenson, J. and J.R. Hutchinson (2016). Inferring Muscle Functional Roles of the Ostrich Pelvic Limb during Walking and Running using Computer Optimization. Journal of the Royal Society Interface 13: 20160035. DOI: 10.1098/rsif.2016.0035
d) Hutchinson, J.R., Rankin, J.W., Rubenson, J., Rosenbluth K.H., Siston, R.A. and S.L. Delp (2015). Musculoskeletal Modeling of an Ostrich (Struthio camelus) Pelvic Limb: Influence of Limb Orientation on Muscular Capacity during Locomotion. PeerJ. 3:e1001 (12). DOI: 10.7717/peerj.1001
e) Gordon, J.C., Rankin, J.W., and M.A. Daley (2015). How Do Speed and Terrain Visibility Influence Neuromuscular Control of Bipedal Locomotion? Journal of Experimental Biology. 218 (19), 3010-3022.
f) Paxton, H., Tickle, P.G., Rankin, J.W., Codd, J.R. and J.R. Hutchinson (2014). Anatomical and Biomechanical Traits of Broiler Chickens Across Ontogeny. Part II. Body Segment Inertial Properties and Muscle Architecture of the Pelvic Limb. PeerJ 2: e473
D. Research Support
Ongoing Research Support
Project#: DP180100220 PI: Christopher Clemente Funding Agency: Australian Research Council
Title: Understanding evolution in natural systems using robotic models
Grant Dates: 2018-2020 Role: Principal Investigator

Project#: 695517 PI: John Hutchinson Funding Agency: European Research Council
Title: Testing the Locomotor Superiority Hypothesis for Early Dinosaurs (DAWNDINOS)
Grant Dates: 2015-2021 Role: Expert Advisor

Project#: P20GM103408 Awardee: Kaden Facer Funding Agency: IDeA (NIH)
Title: Biomechanics of Pediatric Wheelchair Users Throughout Development
Grant Dates: 2016-2017 Role: Student Co-Supervisor

Project#: NA PI: Kirk McKenzie Funding Agency: Univ. of Idaho
Title: Muscle Contributions to Pediatric Wheelchair Propulsion: A Modeling and Simulation Study
Grant Dates: 2017-2019 Role: Student Co-Supervisor

Lisa Haubert, PT
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Philip Requejo, PhD
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Sara Mulroy, PhD, PT
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Abstract

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Christiana Cheng, PhD
Rick Hansen Institute

CV:
Publications:
1. Fehlings M, Noonan V, Atkins D, Burns A, Cheng C, Singh A, Dvorak M. Optimizing clinical decision making in acute traumatic SCI. J Neurotrauma. 2017; 34:2841-2.
2. Santos A, Fallah N, Lewis R, Dvorak M, Fehlings M, Burns A, Noonan V, Cheng C, et al. Methodology of the access to care and timing simulation model for traumatic SCI care. J Neurotrauma. 2017; 34:2843-7.
3. Noonan V, Chan E, Santos A, Soril L, Lewis R, Singh A, Cheng C, et al. Traumatic SCI care in Canada: a survey of Canadian centres. J Neurotrauma. 2017; 34:2848-55.
4. Cheng C, Noonan V, Shurgold J, Chen J, Rivers C, Hamedani H, et al. Geomapping of traumatic SCI in Canada and factors related to triage pattern. J Neurotrauma. 2017; 34:2856-66.
5. Cheng C, Plashkes T, Shen T, Fallah N, Humphreys S, O'Connell C, et al. Does specialized inpatient rehabilitation affect whether or not people with traumatic SCI return home? J Neurotrauma. 2017; 34:2867-76.
6. Glennie R, Batke J, Fallah N, Cheng C, Rivers C, Noonan V, et al. Rural and urban living in persons with SCI and comparing environmental barriers, their health, and quality-of-life outcomes. J Neurotrauma. 2017; 34:2877-82.
7. Marion T, Rivers C, Kurban D, Cheng C, Fallah N, Batke J, et al. Previously identified common post-injury adverse events in traumatic SCI-validation of existing literature and relation to selected potentially modifiable comorbidities: a prospective Canadian cohort study. J Neurotrauma. 2017; 34:2883-91.
8. White B, Dea N, Street J, Cheng C, Rivers C, Attabib N, et al. The economic burden of urinary tract infection and pressure ulceration in acute traumatic SCI admissions: evidence for comparative economics and decision analytics from a matched case-control study. J Neurotrauma. 2017; 34:2892-900.
9. Truchon C, Fallah N, Santos A, Vachon J, Noonan V, Cheng C. Impact of therapy on recovery during rehabilitation in patients with traumatic spinal cord injury. J Neurotrauma. 2017; 34:2901-9.
10. Burns A, Santos A, Cheng C, Chan E, Fallah N, Atkins D, et al. Understanding length of stay after SCI: insights and limitations from the Access to Care and Timing project. J Neurotrauma. 2017; 34:2910-6.
11. Ahn H, Lewis R, Santos A, Cheng C, Noonan V, Dvorak M, et al. Forecasting financial resources for future traumatic SCI care using simulation modeling. J Neurotrauma. 2017; 34:2917-23.
12. Dvorak M, Cheng C, Fallah N, Santos A, Atkins D, Humphreys S, et al. SCI clinical registries: improving care across the SCI care continuum by identifying knowledge gaps. J Neurotrauma. 2017; 34:2924-33.
13. Fehlings M, Cheng C, Chan E, Thorogood N, Noonan V, Ahn H, et al. Using evidence to inform practice and policy to enhance the quality of care for persons with traumatic SCI. J Neurotrauma. 2017; 34:2934-40.

Conference Presentations:
1. Cheng C, Plashkes T, Shen T, Fallah N, Humphreys S, Noonan V, et al. Effect of specialized inpatient rehabilitation on returning home for people with traumatic SCI. National SCI Conference. Niagara Falls, ON; Nov 2017. (Podium, first place in Knowledge Generation category)
2. Morin C, Harris A, Cheng C, Aspinall A, Plashkes T, Noonan V. Interim results of implementation of the spinal cord independence measure (SCIM III) into clinical practice in SCI rehabilitation programs across Canada. National SCI Conference. Niagara Falls, ON; Nov 2017. (Poster)
3. Cheng C, Fehlings M, Noonan V, Burns A, Singh A, Dvorak M. Access to care and timing for traumatic SCI in Canada. Canadian Spinal Cord and Ontario SCI Research Network Meeting. Toronto, ON; May 2017. (Podium)
4. Noonan V, Cheng C, Shurgold J, Chen J, Hamedani H, Humphreys S, et al. Geomapping of traumatic SCI in Canada and factors related to triage pattern. Canadian Spine Society Annual Scientific Conference. Montreal, QC; Feb 2017. (Podium)
5. Cheng C, Urquhart S, Jacobson E, Bélanger L, Noonan V, Dvorak M, Schuetz M. Access to care and timing for SCI: a survey of processes in an Australian and Canadian spine centre. The International Spinal Cord Society (ISCoS) Annual Scientific Meeting. Vienna, Austria; Sep 2016. (Poster)

6. Cheng C, Fehlings M, Burns A, Atkins D, Noonan V, Dvorak M. Access to care and timing simulation model – Moving research into practice and policy. Praxis Conference; Vancouver, BC; Apr 2016. (Poster)
7. Marion T, Rivers C, Kurban D, Cheng C, Noonan V, Dvorak M, et al. The relationship between pre-existing comorbidities and post-injury adverse events in traumatic SCI: a prospective Canadian cohort study focusing on potentially modifiable conditions. Canadian Spine Society Annual Scientific Conference. Whistler, BC; Feb 2016. (Poster)
8. Burns A, Truchon C, Graveline C, Moore L, Craven C, ACT Indicator National Working Group. Using Canadian registry data to identify key community indicators after traumatic SCI. ASIA and ISCoS Joint Scientific Meeting. Montreal, QC; May 2015. (Poster)
9. Cheng C, Fallah N, Santos A, Vachon J, Noonan V, Truchon C. Impact of therapy on recovery during rehabilitation in patients with traumatic SCI. ICORD Annual Research Meeting. Vancouver, BC; Mar 2014. (Podium)

Aidin Abedi, MD
University of Southern California

(no CV uploaded)

Aurelian Anghelescu, MD, PhD
Teaching Emergency Hospital "Bagdasar-Arseni"

(no CV uploaded)

Fin Biering-Sørensen, MD, DMSc
University of Copenhagen

(no CV uploaded)

Harvinder Chhabra, MBBS, MS (ORTHO)
Indian Spinal Injuries Centre

(no CV uploaded)

Angel Gil-Agudo, MD, PhD
National Hospital for Paraplegics

(no CV uploaded)

Júlia Greve, MD, PhD
Medical School University of São Paulo

(no CV uploaded)

Nasser Mehrab Khan, MBBS
Hamad General Hospital

(no CV uploaded)

Kenny Kwan, BMBCh, FRCSEd, FHKCOS, FHKAM

The University of Hong Kong

(no CV uploaded)

Nan Liu, MD
Peking University Third Hospital

(no CV uploaded)

James Middleton, MBBS, PhD, GradDipExSpSci, FAFRM, FACRM
The University of Sydney

(no CV uploaded)

Sasa Moslavac, MD, PhD
Special Hospital for Medical Rehabilitation

(no CV uploaded)

Alpesh Patel, MBChB, FRACS
Middlemore Hospital

(no CV uploaded)

Jean-Gabriel Prévinaire, MD
Centre Calvé-Fondation Hopale

(no CV uploaded)

Vafa Rahimi-Movaghar, MD
Tehran University of Medical Sciences

(no CV uploaded)

Rowan Schouten, MBChB, FRACS
Burwood Spinal Unit

(no CV uploaded)

Giorgio Scivoletto, MD, PhD
Irccs Santa Lucia Foundation

(no CV uploaded)

Susan Urquhart, MBBS; FAFRM
Queensland Spinal Cord Injuries

(no CV uploaded)

Aki Vainionpää, MD, PhD
Oulu University Hospital

(no CV uploaded)

Vanessa Noonan, MSc PhD PT
Rick Hansen Institute

(no CV uploaded)

The use of classification tree analysis to evaluate the influence of surgical timing on neurological recovery following severe thoracolumbar traumatic spinal cord injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Jean-Marc Mac-Thiong, MD, PhD
Hôpital Du Sacré-Coeur De Montréal

CV:
Research and professional experience:
Positions and Employment
2017-... Director of research, Division of orthopedic surgery, Université de Montréal, Canada
2011-... Orthopedic spine surgeon, Montreal Shriners Hospital, Canada
2010-... Chair, Medtronic Research Chair in spinal trauma, Université de Montréal, Canada
2010-... Chief Medical Officer, Spinologics Inc., Canada
2008-... Associate Professor, Department of Surgery, Université de Montréal, Canada
2008-... Orthopedic spine surgeon and researcher, Hôpital du Sacré-Coeur de Montréal, Canada
2008-... Orthopedic spine surgeon and researcher, CHU Sainte-Justine, Canada
2008-... Spine surgery fellowship director, Hôpital du Sacré-Coeur de Montréal, Canada
Other Experience and Professional Memberships
2018-... Member, Operational & Scientific Access Committee, International Spinal Cord Injury Biobank
2017-... Chair, Spine and Acute Trauma Committee, American Spinal Injury Association
2017-21 Member, Morbidity & Mortality Committee, Scoliosis Research Society
2017-20 Reviewer, Education and Program Committee, Scoliosis Research Society
2017- Member, Expert Committee, 2017 Grants for Canada Foundation for Innovation
2017-... Organizer and scientific director, Research Day of the Division of Orthopedic Surgery of Université de Montréal
2015-... Associate Member, Minimize Implants Maximize Outcomes (MIMO) Study Group
2015-... Member, iLab-Spine (Laboratoire international – Imagerie et biomécanique du rachis)
2014-... Member, Harms Study Group
2013-... Reviewer for funding sources (Fonds de recherche du Québec – Santé, Canada Foundation for Innovation, Swiss National Science Foundation, MENTOR program of Canadian Institutes of Health Research)
2012-... Member, American Spinal Injury Association
2010-... Reviewer for journals: Journal of Neurotrauma, Spinal Cord, Canadian Medical Association Journal, PLoS One, Spine, Spine Journal, Scoliosis
2009-... Member, Scientific Committee, International Research Society of Spinal Deformities
2008-... Member, Scoliosis Research Society
Honors
2015 Ansys Hall of Fame 2015 Best in Show: Corporate
2015 Pierre-H. Labelle Prize for best presentation, Annual Meeting of the Quebec Scoliosis Society (also winner in 2012, 2011, 2009, 2008, 2006, and 2000)
2014 Best New Technology for Spine Care in 2014 (Diagnostic and Imaging)
2012 Travel Award – Institute Community Support of the Canadian Institutes of Health Research
2011 Scoliosis Research Society Traveling Fellowship
2010 Best presentation (Treatment), 8th International Research Society of Spinal Deformities Meeting
2009 Louis A. Goldstein Award for best clinical presentation, Scoliosis Research Society 44th Annual Meeting

2009 Edgar Dawson Traveling Fellowship of the Scoliosis Research Society
2008-... Salary award for clinician-scientists, Fonds de recherche du Québec – Santé
2008 Dean's list, Ph.D. Biomedical Sciences, Université de Montréal
2007 Dean's list, Residency in orthopedic surgery, Université de Montréal
2001 Dean's list, M.S. Biomedical Sciences, Université de Montréal
Publications
H-index: 29 i10-Index: 63
List (N=137) of Published Work in Pubmed: https://www.ncbi.nlm.nih.gov/pubmed/?term=mac-thiong

Peer-reviewed publications on spinal cord injury

- Goulet J, Richard-Denis A, Thompson C, Mac-Thiong J-M. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. Accepted in Am J Phys Med Rehabil
- Richard-Denis A, Thompson C, Mac-Thiong J-M. Quality of life in the sub acute period following a cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective study. Accepted in Spinal Cord
- Richard-Denis A, Nguyen B-H, Mac-Thiong J-M. The impact of early spasticity on the intensive functional rehabilitation phase and community reintegration following traumatic spinal cord injury. Accepted in J Spinal Cord Med
- Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong J-M. Early predictors of global functional outcome after traumatic spinal cord injury: a systematic review. Accepted in J Neurotrauma
- Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong J-M. The use of classification tree analysis to assess the influence of surgical timing on neurological recovery following traumatic complete cervical spinal cord injury. Spinal Cord 2018 Feb 26 [Epub ahead of print] (Featured paper)
- Facchinello Y, Beauséjour M, Richard-Denis A, Thompson C, Mac-Thiong J-M. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 Oct 25 [Epub ahead of print]
- Cheng CL, Noonan VK, Shurgold J, Chen J, Rivers CS, Hamedani HK, Humphreys S, Bailey C, Attabib N, Mac-Thiong J-M, Goytan M, Paquet J, Fox R, Ahn H, Kwon BK, Fourney DR, RHSCIR network. Geomapping of traumatic spinal cord injury in Canada and factors related to triage pattern. J Neurotrauma 2017 Mar 22 [Epub ahead of print]
- Richard-Denis A, Erhmann-Feldman D, Thompson C, Mac-Thiong J-M. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2017 Feb 15 [Epub ahead of print]
- Fradet L, Cliche F, Petit Y, Mac-Thiong J-M, Arnoux P-J. Strain rate dependent behavior of the porcine spinal cord under transverse dynamic compression. Proc Inst Mech Eng H 2016 Jun 23 [Epub ahead of print]
- Richard-Denis A, Feldman DE, Thompson C, Parent S, Mac-Thiong J-M. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med 2017 Jul 19 [Epub ahead of print]
- Richard-Denis A, Feldman D, Thompson C, Albert M, Mac-Thiong J-M. The impact of a specialized cord injury center as compared with non-specialized centers on the acute respiratory management of patients with complete tetraplegia: an observational study. Spinal Cord 2018;56:142-150
- Thompson C, Feldman DE, Mac-Thiong J-M. Surgical management of patients following traumatic spinal cord injury: identifying barriers to early surgery in a specialized spinal cord injury center. J Spinal Cord Med 2018;41:142-148
- Richard-Denis A, Thompson C, Mac-Thiong J-M. Reply to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14:885
- Squair JW, Bélanger LM, Tsang A, Ritchie L, Mac-Thiong J-M, Parent S, Christie S, Bailey C, Dhall S, Street J, Ailon T, Paquette S, Boyd M, Dea N, Fisher CG, Dvorak MF, West CR, Kwon BK. Spinal cord perfusion pressure predicts neurological recovery in acute spinal cord injury. Neurology 2017;89:1660-1667
- Richard-Denis A, Thompson C, Mac-Thiong J-M. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a new 2-level scale based on the Spinal Cord Independence Measure. Int J Phys Med Rehabil 2017;5:4
- Facchinello Y, Wagnac É, Ung B, Pradhan P, Peyrache L-M, Mac-Thiong J-M. The development of an instrumented spinal cord surrogate using optical fibers: a feasibility study. Med Eng Phys 2017;48:212-216
- Kaminski L, Cordemans V, Cernat E, M'Bra KI, Mac-Thiong J-M. Functional outcome prediction after traumatic spinal cord injury based on acute clinical factors. J Neurotrauma 2017;34:2027-2033
- Streijger F, Skinnider M, Rogalski JC, Balshaw R, Shannon CP, Prudova A, Bélanger LM, Ritchie L, Tsang A, Christie S, Parent S, Mac-Thiong J-M, Bailey C, Urquhart J, Ailon T, Paquette SJ, Boyd MC, Street J, Fisher CG, Dvorak MF, Borchers CH, Foster LJ, Kwon BK. A targeted proteomis Analysis of cerebrospinal fluid after acute human spinal cord injury. J Neurotrauma 2017;34:2054-2068
- Richard-Denis A, Thompson C, Mac-Thiong J-M. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. Int Wound J 2017;14:874-881

• Richard-Denis A, Ehrmann Feldman D, Thompson C, Bourassa-Moreau E, Mac-Thiong J-M. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: the impact of early transfer to specialized acute SCI center. Am J Phys Med Rehabil 2017;96:449-456 (CME article)
• Wu Y, et al. Parallel metabolomic profiling of cerebrospinal fluid and serum for identifying biomarkers of injury severity after acute human spinal cord injury. Sci Rep 2016;6:38718
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Do patients with complete spinal cord injury benefit from early surgical decompression? Analysis of neurological improvement in a prospective cohort study. J Neurotrauma 2016;33:301-6
• Richard-Denis A, et al., Mac-Thiong J-M. Does the acute care spinal cord injury settings predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehabil 2016;95:300-8
• Thompson C, et al., Mac-Thiong J-M. The changing demographics of traumatic spinal cord injury: an 11-year study of 831 patients. J Spinal Cord Med 2015;38:214-23
• Berube M, et al., Mac-Thiong J-M. Development of theory-based knowledge translation interventions to facilitate the implementation of evidence-based guidelines on the early management of adults with traumatic spinal cord injury. J Eval Clin Pract 2015;21:1157-68
• Petit Y, et al., Mac-Thiong JM. Simulation of high energy vertebral fractures on complete porcine specimens. Conf Proc IEEE Eng Med Biol Soc 2015;2015:3901-4
• Dvorak MF, et al. Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma 2014;31:1540-47
• Boisclair D, Mac-Thiong J-M, et al. Compressive loading of the spine may affect the spinal canal encroachment of burst fractures. J Spinal Disord Tech 2013;26:342-6
• Bourassa-Moreau É, Mac-Thiong J-M, et al. Non-neurological outcomes following complete traumatic spinal cord injury: The impact of surgical timing. J Neurotrauma 2013;30:1596-601
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Complications in acute phase hospitalization of traumatic spinal cord injury: does surgical timing matter? J Trauma Acute Care Surg 2013;74:849-54
• Mac-Thiong J-M, et al. Does timing of surgery affect hospitalization costs and length of stay for acute care following a traumatic spinal cord injury? J Neurotrauma 2012;29:2816-22
• Parent S, Mac-Thiong J-M, et al. Spinal cord injury in the pediatric population: a systematic review of the literature. J Neurotrauma 2011;28:1515-24

Julien Goulet, MD
Hôpital Du Sacré-Coeur De Montréal

(no CV uploaded)

Compresssive Peripheral Neuropathy as Prolonged Bedrest after Flap Surgery in a Patient with Paraplegia from Chronic Spinal Cord Injury: Case Report

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Min Kim, DO
Va Palo Alto Spinal Cord Injury Center

CV:
A. IDENTIFYING DATA
Name Min Jee Kim,D.O.

B. ACADEMIC HISTORY
Colleges and Universities Attended
1998 A.A., De Anza Community College, Cupertino, CA
2001 B.S., Bioengineering, University of California, Berkeley, CA
2007 D.O., Doctor of Osteopathic Medicine, Western University of Health Sciences, College of Osteopathic Medicine of Pacific Pomona, CA

Residency and Fellowship Training
2011 – 2012 Internship, Traditional Internship Program Arrowhead Regional Medical Center, Colton, CA
2012 – 2015 Residency, Physical Medicine and Rehabilitation Stanford University, Palo Alto, CA
2015 – 2016 Clinical Fellowship, Spinal Cord Injury Medicine Stanford University/Palo Alto VA, Palo Alto, CA

Board Certification
2016 Physical Medicine and Rehabilitation
2016 Spinal Cord Injury Medicine

C. Employment
September 2016 to Present Staff Physician
Spinal Cord Injury Service VA Palo Alto Health Care System Palo Alto, California

D. Teaching and Clinical Care

Clinical Teaching Responsibilities
2016-present Spinal Cord Injury Ward Attending Physical Medicine and Rehabilitation Resident supervision in inpatient 5 days/week
Physical Medicine and Rehabilitation Resident supervision in consultation 5 days/week
Physical Medicine and Rehabilitation Resident and Spinal Cord Injury Medicine supervision on half day per week at SCI Functional Extremity Clinic
Spinal Cord Injury Medicine Fellow supervision in inpatient 5 days/week
Other Teaching Experience
2016-present Mock oral exam for preparation for Stanford PM&R residents part II board certification in physical medicine and rehabilitation
2017 Ventilator Weaning after Spinal Cord Injury - Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Respiratory Management after Spinal Cord Injury - Stanford Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Cardiovascular Complications in Spinal Cord Injury. - Stanford Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Ventilator/Respiratory Management after Spinal Cord Injury: Skyline College Respiratory Therapy Program Community College. Guest speaker. Palo Alto VA, Palo Alto, CA
2017 Putting the Pieces Together: Collaborative Care for an Acute Spinal Cord Injury Patient - Multidisciplinary Rounds – Medical Services and Department of Medicine. Palo Alto VA, Palo Alto, CA
2016 Maggot Therapy for Wound Care- Stanford Spinal Cord Injury Fellowship Didactics
2016 Multiple Sclerosis Management as Physiatrists – Stanford Spinal Cord Injury Fellowship Didactics. Palo

Alto VA, Palo Alto, CA
2016 Spinal Cord Injury Orthosis- Stanford University PM&R Residency Didactics

Hospital or Affiliated Institution Appointments
2016-present Staff physician, Spinal Cord Injury Service, VA Palo Alto Health Care System, Palo Alto, California
Major Administrative Responsibilities or Committee Assignments
2017-present Faculty Development Committee- Stanford PM&R residency program
2016-present Fellowship Selection Committee, Spinal Cord Injury Service, VA Palo Alto Health Care System, Palo Alto, California

E. Other Study and Research Opportunities
Past:
2015 – 2016 Title: Monitoring Pressure Relief Patterns in Wheelchair Users: Validation Study
Role: Investigator
2001 – 2002 Title: A Retrospective Chart Review of Infection and Complications of Electrodiagnostic Nerve Conduction and Electromyography Studies in an Adult Ambulatory Care Setting
Role: Co-Investigator

Present/Pending:
2016 – present Title: Exoskeletal-Assisted Walking in Persons with SCI: Impact on Quality of Life – CSP #2003
Role: Co-Investigator

F. Bibliography

POSTER PRESENTATIONS
2017 Respiratory Failure from Syringomyelia Extending to Brain Stem in an Individual with Chronic Spinal Cord Injury
Academy of Spinal Cord Injury Professionals, Inc 2017 Educational Conference
2017 Delayed Diagnosis of Clostridium difficile Infection
Academy of Spinal Cord Injury Professionals, Inc 2016 Educational Conference
2016 Survey of Attitudes, Concerns and Knowledge on Maggot Wound Therapy
Academy of Spinal Cord Injury Professionals, Inc 2016 Educational Conference
2016 Spontaneous Ejaculation Induced by Use of a Standing Frame in a Person with Paraplegia and Spasticity
Association of Academic Physiatrists 2016 Annual Meeting
2016 A Retrospective Chart Review of Infection and Complications of Electrodiagnostic Nerve Conduction and Electromyography Studies in an Adult Ambulatory Care Setting
Association of Academic Physiatrists Annual Meeting
2016 Fulminant Sciatic Neuropathy Secondary to Heroin Use Delivered by an Injection Technique Known as "Skin Popping:" A Case Report
Association of Academic Physiatrists Annual Meeting
2016 The Case of Mr. K.: Electrodiagnostic Studies Spared Patient Unnecessary Neurosurgery
Association of Academic Physiatrists Annual Meeting
2015 Utility of Sonography In Differentiating Neurofibromatosis from Familial Lipomatosis: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2014 Neck and Upper Back Posture Education and Home Exercises Program
Association of Academic Physiatrists
2013 Reversed Deficits Following Cranioplasty in Treatment of Motor Trephine Syndrome: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2013 Radiculopathy Due to a Large Lumbar Zygopophysial Joint Synovial Cyst with Complete Symptom Resolution Despite the Lack of Radiologic Resolution: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2013 Use of IV Bisphosphonate as Alternative Therapy for Heterotopic Ossification: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly

G. Quality Improvement Projects
2016 Survey of Attitudes, Concerns and Knowledge on Maggot Wound Therapy – Palo Alto VA, Palo Alto, CA

2016 Standard Work Flow - Intrathecal Baclofen Pump Management - Palo Alto VA, Palo Alto, CA
2015-2016 Patient/Family Education: Baclofen Pump –Santa Clara Valley Medical Center, San Jose, CA
2015 Neck/Upper Back Postural Education - Palo Alto VA, Palo Alto, CA

H. Volunteering
2018. 3 PyeongChang 2018 Paralympic as Doping Control Chaperone

Multidisciplinary Approach to Elective Transfemoral Amputation for Pain in an individual with Paraplegia from Chronic Spinal Cord Injury: Case Report

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Min Kim, DO
Va Palo Alto Spinal Cord Injury Center

CV:
A. IDENTIFYING DATA
Name Min Jee Kim,D.O.

B. ACADEMIC HISTORY
Colleges and Universities Attended
1998 A.A., De Anza Community College, Cupertino, CA
2001 B.S., Bioengineering, University of California, Berkeley, CA
2007 D.O., Doctor of Osteopathic Medicine, Western University of Health Sciences, College of Osteopathic Medicine of Pacific Pomona, CA

Residency and Fellowship Training
2011 – 2012 Internship, Traditional Internship Program Arrowhead Regional Medical Center, Colton, CA
2012 – 2015 Residency, Physical Medicine and Rehabilitation Stanford University, Palo Alto, CA
2015 – 2016 Clinical Fellowship, Spinal Cord Injury Medicine Stanford University/Palo Alto VA, Palo Alto, CA

Board Certification
2016 Physical Medicine and Rehabilitation
2016 Spinal Cord Injury Medicine

C. Employment
September 2016 to Present Staff Physician
Spinal Cord Injury Service VA Palo Alto Health Care System Palo Alto, California

D. Teaching and Clinical Care

Clinical Teaching Responsibilities
2016-present Spinal Cord Injury Ward Attending Physical Medicine and Rehabilitation Resident supervision in inpatient 5 days/week
Physical Medicine and Rehabilitation Resident supervision in consultation 5 days/week
Physical Medicine and Rehabilitation Resident and Spinal Cord Injury Medicine supervision on half day per week at SCI Functional Extremity Clinic
Spinal Cord Injury Medicine Fellow supervision in inpatient 5 days/week
Other Teaching Experience
2016-present Mock oral exam for preparation for Stanford PM&R residents part II board certification in physical medicine and rehabilitation
2017 Ventilator Weaning after Spinal Cord Injury - Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Respiratory Management after Spinal Cord Injury - Stanford Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Cardiovascular Complications in Spinal Cord Injury. - Stanford Spinal Cord Injury Fellowship Didactics Palo Alto VA, Palo Alto, CA
2017 Ventilator/Respiratory Management after Spinal Cord Injury: Skyline College Respiratory Therapy Program Community College. Guest speaker. Palo Alto VA, Palo Alto, CA
2017 Putting the Pieces Together: Collaborative Care for an Acute Spinal Cord Injury Patient - Multidisciplinary Rounds – Medical Services and Department of Medicine. Palo Alto VA, Palo Alto, CA
2016 Maggot Therapy for Wound Care- Stanford Spinal Cord Injury Fellowship Didactics
2016 Multiple Sclerosis Management as Physiatrists – Stanford Spinal Cord Injury Fellowship Didactics. Palo

Alto VA, Palo Alto, CA
2016 Spinal Cord Injury Orthosis- Stanford University PM&R Residency Didactics

Hospital or Affiliated Institution Appointments
2016-present Staff physician, Spinal Cord Injury Service, VA Palo Alto Health Care System, Palo Alto, California
Major Administrative Responsibilities or Committee Assignments
2017-present Faculty Development Committee- Stanford PM&R residency program
2016-present Fellowship Selection Committee, Spinal Cord Injury Service, VA Palo Alto Health Care System, Palo Alto, California

E. Other Study and Research Opportunities
Past:
2015 – 2016 Title: Monitoring Pressure Relief Patterns in Wheelchair Users: Validation Study
Role: Investigator
2001 – 2002 Title: A Retrospective Chart Review of Infection and Complications of Electrodiagnostic Nerve Conduction and Electromyography Studies in an Adult Ambulatory Care Setting
Role: Co-Investigator

Present/Pending:
2016 – present Title: Exoskeletal-Assisted Walking in Persons with SCI: Impact on Quality of Life – CSP #2003
Role: Co-Investigator

F. Bibliography

POSTER PRESENTATIONS
2017 Respiratory Failure from Syringomyelia Extending to Brain Stem in an Individual with Chronic Spinal Cord Injury
Academy of Spinal Cord Injury Professionals, Inc 2017 Educational Conference
2017 Delayed Diagnosis of Clostridium difficile Infection
Academy of Spinal Cord Injury Professionals, Inc 2016 Educational Conference
2016 Survey of Attitudes, Concerns and Knowledge on Maggot Wound Therapy
Academy of Spinal Cord Injury Professionals, Inc 2016 Educational Conference
2016 Spontaneous Ejaculation Induced by Use of a Standing Frame in a Person with Paraplegia and Spasticity
Association of Academic Physiatrists 2016 Annual Meeting
2016 A Retrospective Chart Review of Infection and Complications of Electrodiagnostic Nerve Conduction and Electromyography Studies in an Adult Ambulatory Care Setting
Association of Academic Physiatrists Annual Meeting
2016 Fulminant Sciatic Neuropathy Secondary to Heroin Use Delivered by an Injection Technique Known as "Skin Popping:" A Case Report
Association of Academic Physiatrists Annual Meeting
2016 The Case of Mr. K.: Electrodiagnostic Studies Spared Patient Unnecessary Neurosurgery
Association of Academic Physiatrists Annual Meeting
2015 Utility of Sonography In Differentiating Neurofibromatosis from Familial Lipomatosis: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2014 Neck and Upper Back Posture Education and Home Exercises Program
Association of Academic Physiatrists
2013 Reversed Deficits Following Cranioplasty in Treatment of Motor Trephine Syndrome: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2013 Radiculopathy Due to a Large Lumbar Zygopophysial Joint Synovial Cyst with Complete Symptom Resolution Despite the Lack of Radiologic Resolution: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly
2013 Use of IV Bisphosphonate as Alternative Therapy for Heterotopic Ossification: A Case Report
American Academy of Physical Medicine and Rehabilitation Annual Assembly

G. Quality Improvement Projects
2016 Survey of Attitudes, Concerns and Knowledge on Maggot Wound Therapy – Palo Alto VA, Palo Alto, CA

2016 Standard Work Flow - Intrathecal Baclofen Pump Management - Palo Alto VA, Palo Alto, CA
2015-2016 Patient/Family Education: Baclofen Pump –Santa Clara Valley Medical Center, San Jose, CA
2015 Neck/Upper Back Postural Education - Palo Alto VA, Palo Alto, CA

H. Volunteering
2018. 3 PyeongChang 2018 Paralympic as Doping Control Chaperone

Spinal cord stimulation for autonomic recovery after spinal cord injury: a systematic review

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Karina Chornenka, Student
Faculty of Medicine, University of British Columbia

CV:
Personal Statement

I am currently a third year medical student at the University of British Columbia and relatively early in my clinical experience and research endeavours. My previous research experience includes my involvement in a summer research studentship at the Hospital for Sick Children in Toronto, Ontario where I helped create an in vitro model to test p53 functional restoration following CRISPR/Cas9 repair of heterozygous TP53 mutations in Li-Fraumeni Syndrome patient-derived fibroblasts. Currently, I am supervised by Dr. Krassioukov at the International Collaboration On Repair Discoveries. Previously I was involved in a project that studied the long-term cognitive and cerebrovascular consequences of spinal cord injury, which I had the opportunity to present in the form of a poster at The American Spinal Injury Association Conference in May 2018 at the Mayo Clinic in Rochester, Minnesota. Currently, I am collaborating with a colleague on synthesizing systematic literature review of pre-clinical and clinical studies that evaluate the effects of spinal cord stimulation on autonomic recovery after spinal cord injury. I am very excited to continue to incorporate research into my medical training and future clinical career.

Short CV

POSITIONS:

January 2017-present
Research Assistant, International Collaboration On Repair Discoveries (ICORD), Faculty of Medicine, University of British Columbia - supervised by Dr. Krassioukov

June 2016-August 2016
Summer Research Student, Institute of Medical Sciences, University of Toronto – supervised by Dr. David Malkin, The Hospital for Sick Children, Toronto, Ontario, Canada

PRESENTATIONS:

Chornenka, K., Jia, M., Phillips, A.A., Wang, S., Yung, A., Zheng, MMZ, Leong, S., Kozlowski, P., Fan, F., Roman, R.J., Krassioukov, A.V. Cerebrovascular reactivity and cognitive function are impaired following chronic high-thoracic spinal cord injury. American Spinal Injury Association Research Meeting. May 1-4 2018. Vancouver BC.

Chornenka, K., Jia, M., Phillips, A.A., Wang, S., Yung, A., Zheng, MMZ, Leong, S., Kozlowski, P., Fan, F., Roman, R.J., Krassioukov, A.V. Cerebrovascular reactivity and cognitive function are impaired following chronic high-thoracic spinal cord injury. ICORD Annual Research Meeting. March 12 2018. Vancouver BC.

Chornenka, K., Jia, M., Golbidi, S., Zi Zheng, M.M., Laher I., Phillips A.A., Krassioukov A.V. Endothelial Health in Femoral Artery is Improved with Long-term Passive Exercise in High- thoracic Spinal Cord Injury. FLEX Activity Day. January 22 2018. Vancouver BC.

Chornenka, K., Jia, M., Golbidi, S., Zi Zheng, M.M., Laher I., Phillips A.A., Krassioukov A.V. Endothelial Health in Femoral Artery is Improved with Long-term Passive Exercise in High- thoracic Spinal Cord Injury. ICORD Trainee Symposium. June 12 2017. Vancouver BC.

Chornenka, K., Tran, J., Malkin, D. A sensitive assay for measuring p53 pathway induction for CRISPR/Cas9 mediated gene repair in Li-Fraumeni Syndrome patient-derived broblasts. UBC Students in Health Annual

Research Conference. October 17 2016. Vancouver BC.

Chornenka, K., Tran, J., Malkin, D. A sensitive assay for measuring p53 pathway induction for CRISPR/Cas9 mediated gene repair in Li-Fraumeni Syndrome patient-derived broblasts. Institute of Medical Sciences Summer Undergraduate Research Program Research Day. August 17 2016. Toronto ON.

Chornenka, K., Tran, J., Malkin, D. A sensitive assay for measuring p53 pathway induction for CRISPR/Cas9 mediated gene repair in Li-Fraumeni Syndrome patient-derived broblasts. The SickKids Summer Research Program Poster Symposium. August 10 2016. Toronto ON.

AWARDS

2017
Summer Student Research Program Award, Faculty of Medicine, University of British Columbia, Vancouver, BC

2016
Undergraduate Research Opportunity Program (UROP) Award, Institute of Medical Science, University of Toronto, Toronto, ON

Chris Shamatutu, Student
Faculty of Medicine, University of British Columbia

CV:
My research looks at the autonomic dysregulation in the SCI population. It is focused on the cardiovascular, respiratory and urinary effects in individuals following injury. I am especially interested in understanding how different modalities can improve autonomic dysregulation.

Our research examines the work of spinal cord stimulation to improve autonomic functioning in individuals with SCI. WE are trying to determine what work has been done prior as well as understand what gaps in knowledge are present with regards to spinal cord stimulation. We are looking at epidural, transcutaneous, and direct stimulation of the stimulation cord and it's subsequent effect of cardiovascular and urinary functioning.

AWARDS
Academic Leadership in Residence Award (2016)

Inducted into the Residence Life Professional Association (RLPA) Leadership Society (2016)

Chancellor's Citation Award (2012-2016)

University of Alberta: Faculty of Science Academic Excellence Scholarship (2012)

University of Alberta: Academic Excellence Scholarship (2012)

Faculty of Science, Dean's List Honor Roll (2012-2016)

SELECTED WORK EXPERIENCE
Research Assistant, ICORD
(2016-present):
1) Assisting with aPWV, Orthostatic Tilt-test, 24HR BP monitoring, Cardiac Ultrasound, VO2peak test, Sympathetic skin response, DXA scan, History taking, questionnaires

2) Conducting both BWSTT and ACET training which includes blood pressure monitoring, supervising participant and volunteer gait patterns, and training data collection

3) Data analysis, data entry, and manuscript writing.

Rahul Sachdeva, PhD
University of British Columbia

(no CV uploaded)

Tom Nightingale, PhD
University of British Columbia

(no CV uploaded)

Andrei Krassioukov, MD, PhD, FRCPC
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Assessment of shoulder pain and pathology during the first year after spinal cord injury

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Elizabeth Felix, PhD
University of Miami

CV:
A. Personal Statement
The emphasis of my early training centered on the investigation of somatosensory function in healthy human participants as well as in pain patient populations. This work led to an increased interest in the mechanisms of pain, measurement methods for pain, and the impact of chronic pain on physical, emotional, and social functioning.
I currently hold joint appointments at the University of Miami, Department of Physical Medicine & Rehabilitation and at the Miami VA, Research Service, and perform government-funded research at both of these institutions. My primary research expertise is in the measurement of clinical pain and experimentally-evoked pain. My work has been focused on understanding the contributions of both somatosensory dysfunction and psychosocial risk-factors to the development and maintenance of chronic pain conditions, as well as investigating the impact of pain on general health and other quality of life outcomes in persons with neurologic injuries or diseases. I have over 20 years of experience in psychophysical techniques used to study somatosensory function (i.e., quantitative sensory testing), including tactile, thermal, and pain sensations, in both healthy populations and in a variety of patient samples, including those with chronic pain syndromes (temporomandibular joint disorder, post-stroke pain, neuropathic pain) and in individuals with physical and cognitive disabilities (spinal cord injury, traumatic brain injury).
I am the Project Director/PI of the South Florida Spinal Cord Injury Model System Center, funded through the National Institute on Disability, Independent Living, and Rehabilitation Research. I have a long record of collaborative, multidisciplinary research, and have published over 40 peer-reviewed journal articles as first- or co-author. I am Co-chair of the “Measurement of Pain and its Impact” special interest group of the American Pain Society, and am a voting member of the IRB, Scientific Review committee, and the Research & Development committee at the Miami VA, as well as a member of the “Awards Committee” of the American Spinal Injury Association.

B. Positions and Honors
Positions and Employment
2000-2004 Postdoctoral Fellow; Biomedical Sciences Department, Baltimore College of Dental Surgery, University of Maryland; Baltimore, MD
2004-2007 Postdoctoral Fellow; The Miami Project to Cure Paralysis, University of Miami Miller School of Medicine; Miami, FL
2007-2016 Research Assistant Professor; Department of Physical Medicine & Rehabilitation, University of Miami Miller School of Medicine; Miami, FL
2008-present Research Health Scientist; Research Service, Miami VA Healthcare System; Miami, FL
20016-present Research Associate Professor; Department of Physical Medicine & Rehabilitation, University of Miami Miller School of Medicine; Miami, FL

Other Experience and Professional Memberships
1999-present Member, American Pain Society
2000-present Member, International Association for the Study of Pain
2004-present Member, American Spinal Injury Assocation
2005-2009 Member, American Paraplegia Society
2005-present Member, Neuropathic Pain Special Interest Group of the International Association for the Study of Pain
2007 Pain subcommittee – American Spinal Injury Association Committee to Assess Outcome Measures in SCI
2007-present Elected department representative: Medical Faculty Council; University of Miami, Miller School of Medicine.
2010-present Ad-hoc reviewer, Institutional Review Board; Miami Veterans Administration Healthcare

System
2013-present Member, Research & Development Committee; Miami Veterans Administration Healthcare System
2014 Scientific review panel member for Field Initiated Projects submitted to the National Institute on Disability and Rehabilitation Research
2015-present Co-chair, American Pain Society, Measurement of pain and its impact Special Interest Group
2016 Scientific review panel member for Rehabiliation Research and Training Center Projects submitted to the National Institute on Disability, Independent Living, and Rehabalitation Research

Honors
1994 Dashiell-Thurstone Prize in Psychology for Best Undergraduate Senior Honors Thesis, The University of North Carolina at Chapel Hill
1999 Harriet L. Rheingold Predoctoral Research Award, Department of Psychology, The University of North Carolina at Chapel Hill
2000 James McKeen Cattell Award for an outstanding dissertation in Psychology, New York Academy of Sciences
2001–2003 National Institutes of Health Individual Ruth L. Kirschstein Postdoctoral National Research Service Award (5 T32 DE 07309-04)
2004-2006 National Institutes of Health Clinical Loan Repayment Program
2005 American Pain Society Travel Award, 24th Annual Scientific Meeting
2009 Paralyzed Veterans of America Travel Scholarship, Congress on Spinal Cord Medicine and Rehabilitation
2009 Honorable Mention Poster Award, Miami VA Research Awareness Day
2011 Outstanding Poster Award, Miami VA Research Awareness Day (co-author)
2014 Best Paper Award, American Spinal Injury Association annual meeting (co-author)

C. Contribution to Science
1. Vibratory stimulation can effectively reduce sensitivity to pain and involves central processing for some conditions.
My dissertation work focused on the potential analgesic properties of vibratory stimulation using three models of pain: two experimentally-induced pain sensory experiences, and a chronic clinical pain condition. Although the ability of vibration to reduce pain report had been shown before, we were the first to use a signal-detection approach to this phenomenon in order to assess whether decreases in pain report were likely due to shifts in sensitivity to pain or due to shifts in attention or criterion for reporting pain. We also showed that vibratory stimulation presented unilaterally could reduce pain present on the contralateral side as well, suggesting that central interactions of tactile and nociceptive pathways were at least partially contributing to this phenomenon.
a. Hollins M., Roy EA, Crane SA. Vibratory antinociception: Effects of vibration amplitude and frequency. The Journal of Pain;4:381-391, 2003.
b. Roy EA, Hollins M, Maixner W. Reduction of clinical pain by high-frequency vibration: A spatial and temporal analysis. Pain;101:267-274, 2003.

2. Biopsychosocial approach to pain in persons with spinal cord injury: Different symptom profiles and individual characteristics influence severity and impact of pain in this complex patient group.
Our group delineated different factors that affect the severity and impact of chronic pain on function in persons with spinal cord injury. Utilizing a biopsychosocial approach, which included analyses involving injury characteristics, psychological state, and social support, among other factors, we were able to show that: 1) Various pain profiles exist in patients with chronic spinal cord injury and the majority of these patients experience two or more types of pain; and 2) Differing underlying pain pathophysiology (i.e., nociceptive vs. neuropathic chronic pain), along with different pain coping strategies and social support networks, significantly contribute to the severity and impact of pain in patients with spinal cord injuries.
a. Felix ER, Cruz-Almeida Y, and Widerström-Noga EG. Chronic pain after spinal cord injury: What characteristics make some pains more disturbing than others? Journal of Rehabilitation Research and Development;44:703-16, 2007.
b. Widerström-Noga EG, Felix ER, Cruz-Almeida Y, Turk DC. Psychosocial subgroups in persons with spinal cord injuries and chronic pain. Archives of Physical Medicine and Rehabilitation;88:1628-1635, 2007.

c. Cruz-Almeida Y, Felix ER, Martinez-Arizala A, Widerström-Noga EG. Pain symptom profiles in persons with spinal cord injury. Pain Medicine;10:1246-1259, 2009.
d. Widerström-Noga EG, Cruz-Almeida Y, Felix ER, Adcock JP. Relationship between pain characteristics and pain adaptation type in persons with SCI. Journal of Rehabilitation Research and Development;46:43-56, 2009.
e. Widerström-Noga E, Felix ER, Adcock JP, Escalona M, Tibbett J. Multidimensional neuropathic pain phenotypes after spinal cord injury. Journal of Neurotrauma;33:482-492, 2016.

3. A variety of measurement methods for capturing targeted pain characteristics are necessary for different groups of patients. I have published papers on the validity and reliability of the spatial quantification of clinical pain and of using quantitative sensory testing in subjects with neuropathic pain related to spinal cord injury. In addition, I have contributed to efforts aimed at providing guidelines for clinical researchers studying pain in spinal cord injury.
a. Pain Committee: Bryce, TN, Norrbrink Budh, C, Cardenas, DD, Dijkers, M, Felix, ER, Finnerup, NB, Kennedy, P, Lundeberg, T, Richards, JS, Rintala, DH, Siddall, P, Widerström-Noga, E. Pain after spinal cord injury: An evidence-based review for clinical practice and research. Report of the National Institute on Disability and Rehabilitation Research Spinal Cord Injury Measures Meeting. Journal of Spinal Cord Medicine;30:421-440, 2007.
b. Felix ER, Galoian KA, Aarons C, Brown MD, Kearing SA, Heiss U. Utility of quantitative computerized pain drawings in a sample of spinal stenosis patients. Pain Medicine;11:382-389, 2010.
c. Felix ER. Chronic Neuropathic Pain in SCI: Evaluation and Treatment. Physical Medicine & Rehabilitation Clinics of North America;25:545-571, 2014.

4. Heightened sensitivity in spared nociceptive pathways is related to greater pain severity and increased levels of glial activation in central pain networks in patients with spinal cord injury and neuropathic pain. Through my collaborative work, our SCI pain group has published results indicating that increased glial markers, and decreased neuronal markers, in both the anterior cingulate cortex and the thalamus, are present in patients with more severe and disabling neuropathic pain due to SCI. This is consistent with previously published results indicating a significant role of glial cells in other chronic pain conditions. In addition, we have found positive correlations between these central markers and increased function within dysfunctional, but spared, nociceptive sensory processing pathways.
a. Felix ER, Widerström-Noga EG. Reliability and validity of quantitative sensory testing in persons with spinal cord injury and neuropathic pain. Journal of Rehabilitation Research and Development;46:69-83, 2009.
b. Cruz-Almeida Y, Felix ER, Martinez-Arizala A, Widerström-Noga EG. Decreased spinothalamic and dorsal column medial lemniscus-mediated function is associated with neuropathic pain after spinal cord injury. J Neurotrauma;29:2706-15, 2012.
c. Widerström-Noga E, Pattany PM, Cruz-Almeida Y, Felix ER, Perez S, Cardenas DD, Martinez-Arizala A. Metabolite concentrations in the anterior cingulate cortex predict high neuropathic pain impact after spinal cord injury. Pain;154:204-12, 2013.
d. Widerström-Noga E, Cruz-Almeida Y, Felix ER, Pattany PM. Somatosensory phenotype is associated with thalamic metabolites and pain intensity after spinal cord injury. Pain;156:166-74, 2015.

5. Maladaptive peripheral and central nociceptive processing contributes to symptoms of pain in persons with idiopathic “dry eye” syndrome. Dry eye syndrome, a prevalent condition characterized by symptoms of eye discomfort, visual disturbances, and/or heightened sensitivity to light or wind, has traditionally been thought to be caused by tear dysfunction. But, for many patients with dry eye symptoms, there is no evidence of impaired tear quantity or quality to support the severity of their self-reported ocular symptoms. During the past 5 years, our collaborative group of investigators at the Miami VA has been investigating the potential links between dysfunction within the peripheral and central nociceptive system and symptoms of dry eye. We have published several papers utilizing various methodology to support the assertion that the pain symptoms associated with idiopathic dry eye may be neuropathic in nature, and that their characteristics follow many of the same patterns as other chronic neuropathic pain conditions.
a. Kalangara JP, Galor A, Levitt RC, Felix ER, Alegret R, Sarantopoulos CD. Burning Eye Syndrome: Do Neuropathic Pain Mechanisms Underlie Chronic Dry Eye? Pain Med:17;746-55, 2016.
b. Spierer O, Felix ER, McClellan A, Parel JM, Gonzalez A, Feuer WJ, Sarantopoulos CD, Levitt RC, Ehrmann K, Galor A. Corneal mechanical pain thresholds are associated with dry eye and ocular pain symptoms.

Investigative Ophthalmology & Visual Science;57:617-625, 2016.
c. Galor A, Levitt RC, McManus KT, Kalangara JP, Seiden BE, Park JJ, Covington DB, Sarantopoulos CD, Felix ER. Assessment of somatosensory function in patients with idiopathic dry eye symptoms. JAMA Ophthalmol:134;1290-1298, 2016.
d. Crane AM, Feuer W, Felix ER, Levitt RC, McClellan AL, Sarantopoulos KD, Galor A. Evidence of central sensitisation in those with dry eye symptoms and neuropathic-like ocular pain complaints: incomplete response to topical anaesthesia and generalised heightened sensitivity to evoked pain. Br J Ophthalmol:101;1238-1243, 2017.
e. Levitt AE, Galor A, Chowdhury AR, Felix ER, Sarantopoulos CD, Zhuang GY, Patin D, Maixner W, Smith SB, Martin ER, Levitt RC. Evidence that Dry Eye Represents a Chronic Overlapping Pain Condition. Mol Pain. 2017 Jan-Dec;13:1744806917729306.
f. Ong ES, Felix ER, Levitt RC, Feuer WJ, Sarantopoulos CD, Galor A. Epidemiology of discordance between symptoms and signs of dry eye. Br J Ophthalmol. 2017 Aug 18. [Epub ahead of print]

D. Research Support
Ongoing Research Support
NIDILRR SCI Model Systems (90SI5023) Felix (PI) 10/2016-09/2021
South Floridal Spinal Cord Injury Model System
Project Director and PI of site-specific project

DOD (W81XWH-16-1-0114) Widerström-Noga (PI) 04/2016-04/2019
Utility of magnetic resonance spectroscopy brain biomarkers of pain phenotypes after traumatic brain injury
Co-Investigator

VA CSR&D (I01CX001089) Galor (PI) 01/2016-12/2019
Neuropathic pain: A critical missing piece in dry eye?
Co-Investigator

NIH, NICHD (1 R01 HD075542) Chae (PI) 09/2013-08/2018
Randomized controlled trial of implanted peripheral nerve stimulation for shoulder pain in stroke
Co-Investigator

Recent support
NIDILRR TBI Model Systems (90DP0046) Johnson-Greene (PI) 10/2012-09/2017
South Florida Traumatic Brain Injury Model System
Co-Director of SFTBIMS and PI of site-specific pilot study

Diana Cardenas, MD, MHA
University of Miami

(no CV uploaded)

Rachel Cowan, PhD
University of Alabama - Birmingham

(no CV uploaded)

Kevin Dalal, MD
University of Miami

(no CV uploaded)

Robert Irwin, MD

University of Miami

(no CV uploaded)

Cases of ambiguous motor level determination according to the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) - Need for clarification of the current motor level definition

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Christian Schuld, MSc
Heidelberg University Hospital - Spinal Cord Injury Center

CV:
BIOGRAPHICAL SKETCH

NAME OF APPLICANT: Christian Schuld
POSITION TITLE: Research Associate

INSTITUTION AND LOCATION DEGREE START END FIELD OF STUDY
Hoechst AG Apprenticeship 09/95 07/97 IT specialist
University Heidelberg, Germany Diploma (M.Sc.) 10/98 03/05 Medical Informatics

PERSONAL STATEMENT
My long term research interests involve human gait analysis with focus on gait deviations resulting from spinal cord injury (SCI). Beyond analysis, I am also interested in gait therapy and restoration using novel approaches like putting the patient in loop and provide real-time feedback from the running gait analysis. In order to be able to validly and reliably measure the benefits, clinical outcome measured are of utmost importance. In the field of SCI medicine, the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) stands out as “the” internationally accepted tool to quantify the location and severity of a SCI. Starting as the database developer of the European Multicenter Study about Spinal Cord Injury (EMSCI) I have become involved in ISNCSCI research resulting in multiple publications on ISNCSCI training, the ISNCSCI calculators and studies simulating the effects of possible revisions using modified calculators and large datasets.
POSITIONS AND EMPLOYMENT

ACTIVITY START END FIELD COMPANY SUPERVISOR
IT specialist 07/97 06/98 IT support Celanese GmbH Thomas Huschke

Research associate 05/05 12/09 rehabilitation engineering Stiftung Orthopädische Universitätsklinik Rüdiger Rupp

Research associate 01/10 present rehabilitation engineering Heidelberg University Hospital, Spinal Cord Injury Center

OTHER EXPERIENCES AND PROFESSIONAL MEMBERSHIPS
2013- American Spinal Injury Association (ASIA)
2011- International Spinal Cord Society (ISCos)

CONTRIBUTION TO SCIENCE

https://www.researchgate.net/profile/Christian_Schuld

Last 5 years:

Seeger JB., Schikschneit JP., Schuld C., Rupp R., Jäger S., Schmitt H., Maier GS., Clarius M. Change of gait in patients with lateral osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty. Knee Surg Sports Traumatol Arthrosc. 2015 Jul;23(7):2049-54. doi: 10.1007/s00167-014-2944-2. Epub 2014 Mar 27.

Schließmann D., Nisser M., Schuld C., Gladow T., Derlin S., Heutehaus L., Weidner N., Smolenski U., Rupp R. Trainer in a pocket - proof-of-concept of mobile, real-time, foot kinematics feedback for gait pattern normalization in individuals after stroke, incomplete spinal cord injury and elderly patients. Journal of NeuroEngineering and Rehabilitation. https://doi.org/10.1186/s12984-018-0389-4

Warner FM., Cragg JJ., Jutzeler CR., Röhrich F., Weidner N., Saur M., Maier DD., Schuld C.; EMSCI Sites., Curt A., Kramer JK.. Early Administration of Gabapentinoids Improves Motor Recovery after Human Spinal Cord Injury. Cell Rep. 2017 Feb 14;18(7):1614-1618. doi: 10.1016/j.celrep.2017.01.048.

Franz S., Schuld C., Wilder-Smith E., Heutehaus L., Lang S., Gantz S., Schuh-Hofer S., Treede RD., Bryce T., Wang H., Weidner N. Spinal Cord Injury Pain Instrument and PainDETECT questionnaire: linguistic validation and convergent construct validity in a German cohort of individuals with Spinal Cord Injury. Eur J Pain. 2017 Nov;21(10):1642-1656. doi: 10.1002/ejp.1069. Epub 2017 Jun 27.

Hommelsen M., Schneiders M., Schuld C., Keyl P., Rupp R. Sensory Feedback Inter-feres with Mu Rhythm Based Detection of Motor Commands from Electroencephalographic Signals. Frontiers in Human Neuroscience. 2017 Nov. 01. doi: 10.3389/fnhum.2017.00523. . [Epub ahead of print]

Cragg JJ, Haefeli J, Jutzeler CR, Röhrich F, Weidner N, Saur M, Maier DD, Kalke YB, Schuld C, Curt A, Kramer JK. Effects of Pain and Pain Management on Motor Recov-ery of Spinal Cord-Injured Patients: A Longitudinal Study. Neurorehabil Neural Repair. 2016 Sep;30(8):753-61. doi: 10.1177/1545968315624777. Epub 2016 Jan 7.

Maurer-Burkhard B, Smoor I, von Reumont A, Deckstein G, Stierle I, Rupp R, Schuld C. Validity and reliability of a locomotor stage-based functional rating scale in spinal cord injury. Spinal Cord. 2016 Aug;54(8):619-25. doi: 10.1038/sc.2015.223. Epub 2016 Jan 12.

Franz S, Kirshblum SC, Weidner N, Rupp R, Schuld C; EMSCI study group. Motor levels in high cervical spinal cord injuries: Implications for the International Standards for Neurological Classification of Spinal Cord Injury. J Spinal Cord Med. 2016 Sep;39(5):513-7. doi: 10.1080/10790268.2016.1138602. Epub 2016 Feb 25.

Schuld C, Franz S., Brüggemann K., Heutehaus L., Weidner N., Kirshblum SC., Rupp R.; EMSCI study group. International standards for neurological classification of spinal cord injury: impact of the revised worksheet (revision 02/13) on classification performance. J Spinal Cord Med. 2016 Sep;39(5):504-12. doi: 10.1080/10790268.2016.1180831. Epub 2016 Jun 14.

Schuld C., Franz S., van Hedel HJA., Moosburger J., Maier D., Abel R., van de Meent H., Curt A., Weidner N., EMSCI study group, Rupp R. International standards for neurological classification of spinal cord injury: classification skills of clinicians versus computational algorithms, Spinal Cord. 2015 Apr;53(4):324-31. doi: 10.1038/sc.2014.221. Epub 2014 Dec 9.

Rupp R., Schließmann D., Plewa H., Schuld C., Gerner HJ, Weidner N., Hofer EP., Knestel M. Safety and Efficacy of At-Home Robotic Locomotion Therapy in Individuals with Chronic Incomplete Spinal Cord Injury: A Prospective, Pre-Post Intervention, Proof-of-Concept Study. PLoS One. 2015 Mar 24;10(3):e0119167. doi: 10.1371/journal.pone.0119167. eCollection 2015. Erratum in: PLoS One. 2015;10(4):e0126999.

Seeger JB., Schikschneit JP., Schuld C., Rupp R., Jäger S., Schmitt H., Maier GS., Clarius M. Change of gait in patients with lateral osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty. Knee Surg Sports Traumatol Arthrosc. 2015 Jul;23(7):2049-54. doi: 10.1007/s00167-014-2944-2. Epub 2014 Mar 27.

Schließmann D., Schuld C., Schneiders M., Derlien S., Glöckner M., Gladow T., Weidner N. and Rupp R. (2014). Feasibility of visual instrumented movement feedback therapy in individuals with motor incomplete spinal cord injury walking on a treadmill. Front. Hum. Neurosci. 8:416. doi: 10.3389/fnhum.2014.00416

Schuld C., Wiese J., Franz S., Putz C., Stierle I., Smoor I., Weidner N., EMSCI Study Group and Rupp R.:

Effect of formal training in scaling, scoring and classification of the International Standards for Neurological Classification of Spinal Cord Injury. Spinal Cord. 2013 Apr;51(4):282-8. doi: 10.1038/sc.2012.149. Epub 2012 Nov 27.

Kamradt, T., Rasch C., Schuld C., Böttinger M., Mürle B., Hensel C., Fürstenberg H., Weidner N., Rupp R., Hug A.: Spinal cord injury: Association with axonal peripheral neuropathy in severely paralyzed limbs, Eur J Neurol. 2013 May;20(5):843-8. doi: 10.1111/ene.12082. Epub 2013 Jan 11.

Jäger S., Seeger JB., Schuld C., Bitsch RG., Clarius M., Tibial Cementing in UKA: A Three-Demensional Analysis of the Bone Cement Implant Interface and the Effect of Bone Lavage, J Arthroplasty. 2013 Oct;28(9 Suppl):191-4. doi: 10.1016/j.arth.2013.05.014.

Steffen Franz, MD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Laura Heutehaus, BSc
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Norbert Weidner, MD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Rüdiger Rupp, PhD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

---

iManage-SCI: Developing a web-based symptom-monitoring/self-management system for psychosocial health in individuals with SCI.

Thursday, April 04, 2019 01:25 PM - 02:25 PM

David Tulsky, PhD
University of Delaware

CV:
Presentations - Past 5 years
122. Tulsky, D.S. Developing Nee Outcomes Measures for Indvidiuals with Spinal Cord Injury. Keynote Lecture. International Spinal Cord Society (ISCoS). London, UK, September, 2012.

123. Tulsky, D.S. Validation of the NIH Toolbox in rehabilitation populations. Invited Talk, The NIH Toolbox Conference, Bethesda, MD, September, 2012.

124. Weintraub, S., Tulsky, D.S., Heaton, R. The Cognitive Health Battery of the NIH Toolbox. Workshop, The NIH Toolbox Conference, Bethesda, MD, September, 2012.

125. Tulsky, D.S., Kratz, AL, Kalpakjian, CZ, & Kolakowsky-Hayner, SA. Validation of new measures of patient reported outcomes for rehabilitation medicine. Chair, Symposium. American Congress of Rehabilitation Medicine. Vancouver, Canada, October, 2012.

126. Jette, A, Coster, W. Tulsky, D, Noonan, V. Development and initial evaluation of the SCI-CAT functional assessment instrument. Symposium. American Congress of Rehabilitation Medicine. Vancouver, Canada, October, 2012.

127. Tulsky, D.S., Hicks, R., Okonkwo, D.O., & DeGraba, T.J. Putting TBI common data elements into practice. Chair, Symposium. American Congress of Rehabilitation Medicine. Vancouver, Canada, October, 2012.

128. Tulsky, D.S., Weintraub, S, Gershon, R, & Heaton, R.K. Get to know the NIH Toolbox: A common currency for measuring neurological and behavioral functioning. Invited Workshop. International Neuropsychological Society. Waikoloa, Hawaii, February, 2013.

129. Tulsky, D.S., Weintraub, S, Gershon, R, & Heaton, R.K. Get to know the NIH Toolbox: A common currency for measuring neurological and behavioral functioning. Invited Workshop. International Neuropsychological Society. Waikoloa, Hawaii, February, 2013.

130. Tulsky, D.S., Gershon, R. McClintock, S., Heinemann, A., & Bigler, E. Validation of the NIH toolbox in Individuals with Neurological Impairments and Disabilities. Symposium (D. Tulsky Chair). Presented at the International Neuropsychological Society Mid-Year Meeting, Amsterdam, July, 2013.

131. Tulsky, D.S., Heinemann, A., Magasi, S., & Gershon, R. Development of the NIH Toolbox for Neurological and Behavioral Functioning: Implications for Rehabilitation Research and Practice. CE Workshop. American Congress of Rehabilitation Medicine, Orlando, FL November, 2013.

132. Kisala, P, Tulsky, D.S., Heinemann, A., & Slavin, M. New Developments in the SCI-QOL/SCI-FI Measurement System. Featured Symposium (Kisala & Tulsky Co-Chairs). American Congress of Rehabilitation Medicine, Orlando, FL November, 2013.

133. Heinemann, A., Tulsky, D.S., & Warchausky, S. Featured Symposium Research Recommendations from the State of the Science Conference on Outcome Measurement in Medical Rehabilitation. Rehabilitation Psychology: 16th Annual Mid-Year Division 22 Meeting. San Antonio, TX, February, 2014.\

134. Mulcahey, M.J, Jette, A., Tulsky, DS, & Kisala, PA. Featured Course. Innovations in Measuring Physical

Functioning Post Spinal Cord Injury. Presentation at the American Spinal Injury Association. San Antonio, TX. May, 2014.

135. Tulsky, D.S., Gershon, R. McClintock, S., & Heinemann, A. Further Validation and New Research on the NIH Toolbox in Individuals with Neurological Impairments. Invited Symposium (D. Tulsky Chair). Presented at the International Neuropsychological Society Meeting, Denver 2015.

136. Tulsky, D.S., Carlozzi, N, & Blackstone-Casaletto, K. NIH Toolbox: Current Status, Future Directions, and Validation in Individuals with TBI. Featured Workshop (D. Tulsky, Chair). Presented at the American Psychological Association Division 22 Rehabilitation Psychology Mid-year Meeting. San Diego, 2015.

137. Tulsky, D.S., Kisala, PA, Jette, A, Tate, D, Heinemann, AW, & Charlifue, S. Using the Spinal Cord Injury Quality of Life (SCI-QOL) Item Banks to Detect Change in Research and Clinical Practice. Featured Symposium (D. Tulsky, Chair). Presented at the 4th ISCoS and ASIA Joint Scientific Meeting. Montreal, 2015.

138. Tulsky, D.S. New PROMIS Based Measures: SCI-FI and SCI-QOL. Potential applications in clinical trials. Presentation in featured symposium (D. Tate, Chair: The Use of quality of life measures in spinal cord injury clinical trials). Presented at the 4th ISCoS and ASIA Joint Scientific Meeting. Montreal, 2015.

139. Tulsky, DS, Heinemann, A, Kisala, PA, Jerousek, S, Lai, J, Carlozzi, N & Semik, P. (2015). New PRO scale to measure Economic Quality of Life. In Heinemann et al. Symposium: Quality of Life folloiwng stroke, traumatic brain injury and spinal cord injury: Influences of person and environmental factors. International Society of Quality of Life meeting in Vancouver, October, 2015

140. Tulsky, DS & Holdnack, JA. Using the NIH Toolbox in Rehabilitation Populations: Evaluation of Individuals with Traumatic Brain Injury, Stroke, and Spinal Cord Injury. Invited CE Workshop. National Academy of Neuropsychology. Austin Texas, November, 2015.

141. Tulsky, DS, Holdnack, JA, Carlozzi, NE, Wong, A, Cohen, ML, & Heinemann, AW. Confirmatory Factor Analyses of the NIH Toolbox Cognitive Battery Among Individuals with Acquired Brain Injury. INS 44th Annual meeting, Boston, MA, February, 2016.

142. Holdnack, JA, Tulsky, DS, Slotkin, J, Gershon, R, Heinemann, AW. Estimating Premorbid Functioning Using the NIH Toolbox Oral Reading Test. INS 44th Annual meeting, Boston, MA, February, 2016.

143. Holdnack, JA, Tulsky, DS, Iverson, GL, Brooks, BL, Slotkin, J, Gershon, R, & Heinemann, AW. Multivariate Base Rates for Interpretation of NIH Toolbox Cognition Tests: Application to Individuals with TBI and Stroke. INS 44th Annual meeting, Boston, MA, February, 2016.

144. Tulsky, DS, Testing the NIH Toolbox Cognitive Battery in Individuals with Traumatric Brain Injury, Spinal Cord Injury, and Stroke. In American Psychological Association 124th Annual Conference CE Workshop: Gershon, R, Wagster, M, Nowinski, C, & Tulsky, DS. The NIH Toolbox: State-of-the-Art Outcomes Measures for Clinical Practice and Research. Denver, CO August 4, 2016.

145. Cohen, ML, Holdnack, JA, Carlozzi, NE, Heinemann, AW, Wong, A, Heaton, RK, Kisala, PA, & Tulsky, DS (presenter). Assessment of Cognition after Spinal Cord Injury with the NIH Toolbox - Cognitive Battery. 55th ISCOS Annual Scientific Meeting, Vienna, Austria, Sept. 14th - 16th, 2016.

Publications - Past 5 Years

59. Carlozzi, N.E., Gade, V, Rizzo, A, & Tulsky, D.S. Using virtual reality driving simulators in person with spinal cord injury. Disability and Rehabilitation: Assistive Technology. 8(2), 176-180, 2013.

60. Weintraub, S., Dikmen, S, Heaton, R., Tulsky, D., Zelazo, P, Bauer, P, Carlozzi, N, Slotkin, J, Blitz, D, Wallner-Allen, K, Fox, N, Beaumont, J, Mungas, D, Nowinski, C, Richler, J, Deocampo, J, Anderson, J, Manly, J, Borosh, B, Havlik, R, Conway, K, Edwards, E., Freund, L, King, J, Moy, C., Witt, E, & Gershon, RC., Cognition Assessment Using the NIH Toolbox, Neurology, 80 (Suppl 3), S54-S64, 2013.

61. Carlozzi, N. E., & Tulsky, D. S. Identification of Health-Related Quality of Life (HRQOL) Issues Relevant to Individuals with Huntington Disease. The Journal of Health Psychology. 18(2), 212-225. 2013.

62. Tulsky, D.S., Carlozzi, N., Chevalier, N., Espy, K., Beaumont, J., & Mungas, D. NIH Toolbox Cognitive Function Battery (CFB): Measuring working memory. Monographs of the Society for Research in Child Development. 78(4), 70-87. 2013.

63. Carlozzi, N., Tulsky, D.S., Kail, R., & Beaumont, J. NIH Toolbox Cognitive Function Battery (CFB): Measuring Processing Speed. Monographs of the Society for Research in Child Development. 78(4), 88-102. 2013.

64. Mungas, D., Widaman, K, Zelazo, PD, Tulsky, DS, Heaton, RK, Slotkin, J, Blitz, DL, & Gershon, RC. NIH Toolbox Cognitive Health Battery (CFB): Factor Structure for 3 to 15-year olds. Monographs of the Society for Research in Child Development. 78(4), 103-118. 2013.

65. Akshoomoff, N., Heaton, R., Tulsky, et al., NIH Toolbox Cognitive Function Battery (CFB): Composite scores of crystallized, fluid, and overall cognition. Monographs of the Society for Research in Child Development, 78 (4), 119-132. 2013.

66. Weintraub, S, Bauer, PJ, Zelazo, PD, Wallner-Allen, K., Dikmen, SS, Heaton, RK, Tulsky, DS, Slotkin, J, Blitz, D, Carlozzi, N, Havlik, R., Beaumont, JL, Mungas, D, Manly, JJ, Borosh, B, Nowinski, C, & Gershon, RC. The NIH Toolbox Cognition Battery (CB): Introduction and pediatric data. Monographs of the Society for Research in Child Development. 78(4), 1-15. 2013.

67. Carlozzi, N., Grech, J., & Tulsky, D.S. Memory functioning in individuals with traumatic brain injury: An examination of the Wechsler Memory Scales – Fourth Edition (WMS-IV). Journal of Clinical and Experimental Neuropsychology, 35(9), 906-914, 2013.

68. Alonso J, Bartlett SJ, Rose M, Aaronson NK, Chaplin JE, Efficace F, Leplège A, Lu A, Tulsky DS, Raat H, Ravens-Sieberer U, Revicki D, Terwee CB, Valderas JM, Cella D, Forrest CB. The case for an international patient-reported outcomes measurement information system (PROMIS) initiative. Health and quality of Life Outcomes, 11, 210. 2013.

69. Kratz, AL, Slavin, MD, Mulcahey, MJ, Jette, AM, Tulsky, DS, & Haley, SM. An Examination of the PROMIS® Pediatric Instruments to Assess Mobility in Children with Cerebral Palsy. Quality of Life Research, 22(10), 2865-2876, 2013.

70. Carlozzi, N, Fyffe, D, Morin, KG, Byrne, R, Tulsky, DS, Victorson, D, Lai, JS, Wecht, J. Impact of Blood Pressure Dysregulation on Health-Related Quality of Life in Persons With Spinal Cord Injury: Development of a Conceptual Model. Archives of Physical Medicine and Rehabilitation, 94(9), 2013.

71. Heinemann, AW, Dijkers, MP, Ni, P, Tulsky, DS, & Jette, A. Measurement Properties of Spinal Cord Injury – Functional Index (SCI-FI) Short Forms. Archives of Physical Medicine and Rehabilitation. 95, 1289-1297, 2014.

72. Carlozzi, NE, Victorson, D, Sung, V, Beaumont, JL, Cheng, W, Gorin, B, Sheng Duh, M, Samuelson, D, Tulsky, D, Gutierrez, S, Nowinski, CJ, Mueller, A, Shen, V, & Frank, S. HD-PRO-TRIAD™ Validation: a Patient-Reported Instrument for the Symptom Triad of Huntington Disease. Tremor & Other Hyperkinetic Movements. 4 (2014): 223. PMC. Web. 22 Nov. 2014.

73. Heaton, RK, Akshoomoff, N, Tulsky, D, Mungas, D, Weintraub, S, Dikmen, S, Beaumont, J, Casaletto, KB, Conway, K, Slotkin, J, & Gershon, R. Reliability and Validity of Composite Scores from the NIH Toolbox Cognition Battery in Adults. JINS: the Journal of International Neuropsychological Society, 20, 588-598, 2014.

74. Mungas, D, Heaton, RK, Tulsky, D, Zelazo, P., Slotkin, J, Blitz, D, Lai, Jin-Shei, & Gershon, R. Factor

Structure, Convergent Validity, and Discriminant Validity of the NIH Toolbox Cognitive Health Battery (NIHTB-CHB) in Adults. JINS: the Journal of International Neuropsychological Society, 20, 579-587, 2014.

75. Victorson, D, Carlozzi, NE, Frank, S, Beaumont, JL, Cheng, W, Gorin, B, Sheng Duh, M, Samuelson, D, Tulsky, D, Gutierrez, S, Nowinski, CJ, Mueller, A, Shen, V, & Sung, V (In Press). Identifying Motor, Emotional-Behavioral, and Cognitive Deficits that comprise the triad of HD symptoms from patient, caregiver, and provider perspectives. Tremor & Other Hyperkinetic Movements. 4 (2014): 224. PMC. Web. 22 Nov. 2014.

76. Carlozzi, N, Tulsky, D, Chiaravalloti, ND, Beaumont, J, Weintraub, S., Conway, K, & Gershon, R. NIH Toolbox Cognitive Battery (NIHTB-CB): The NIHTB Pattern Comparison Processing Speed Test. JINS: Journal of International Neuropsychological Society. 20, 630-641, 2014.

77. Weintraub, S., Dikmen, SS., Heaton, RK, Tulsky, DS, Zelazo, PD, Slotkin, J, Carlozzi, NE, Bauer, PJ, Wallner-Allen, K, Fox, N, Havlik, R, Beaumont, JL, Mungas, D, Manly, JJ, Moy, C, Conway, K, Edwards, E, Nowinski, CJ, & Gershon, R. The Cognition Battery of the NIH Toolbox for Assessment of Neurological and Behavioral Function: Validation in an Adult Sample. JINS: Journal of International Neuropsychological Society. 20, 576-578, 2014.

78. Tulsky, DS, Carlozzi, N, Chiaravalloti, ND, Beaumont, JL, Kisala, PA, & Mungas, D., Conway, K, & Gershon, R. NIH Toolbox Cognition Battery (NIHTB-CB): The List Sorting Test to Measure Working Memory. JINS: Journal of International Neuropsychological Society, 20, 599-610, 2014.

79. Tian, F., Ni, P, Mulcahey, M, Hambleton, R, Tulsky, DS, & Haley, SM, & Jette, AM. Tracking Functional Status Across the Lifespan: Linking SCI Patient Reported Outcomes Scores. Archives of Physical Medicine and Rehabilitation. 95, 2078-2085, 2014.

80. Tulsky, DS, Kisala, PA, Lai, J-S, Carlozzi, N, Hammel, J, & Heinemann, AW. Developing an Item Bank to Measure Economic Quality of Life for Individuals with Disabilities. Archives of Physical Medicine and Rehabilitation. 96(4), 604-613, 2015.

81. Heinemann, AW, Magasi, S, Hammel, J, Carlozzi, NE, Garcia, SF, Hahn, EA, Lai, JS, Tulsky, D, Gray, DB, Hollingsworth, H, & Jersousek, S. Environmental Factors Item Development for Persons with Stroke, Traumatic Brain Injury, and Spinal Cord Injury. Archives of Physical Medicine and Rehabilitation. 96(4), 589-595, 2015.

82. Hammel, J., Magasi, S., Heinemann, AW., Gray, DB, Stark, S., Kisala, P., Carlozzi, N., Tulsky, D.S., Garcia, S.F., & Hahn, E.A. Environmental Barriers & Supports to Everyday Participation: A Qualitative Insider Perspective from People with Disabilities. Archives of Physical Medicine and Rehabilitation. 96(4), 578-588, 2015.

83. Carlozzi, NE, Kratz, A., Sander, A., Austin, A., Brickell, T., Chiaravalloti, N., Lange, R., Miner, J., & Tulsky, DS. Health-Related Quality of Life in Caregivers of Individuals with Traumatic Brain Injury: Development of a Conceptual Model. Status: Archives of Physical Medicine and Rehabilitation, 2015, 96, 105-113.

84. Tulsky, DS & Kisala, PA. The Spinal Cord Injury – Quality of Life measurement system: Development, psychometrics, and item bank calibration. Journal of Spinal Cord Medicine. 38(3). 251-256. 2015.

85. Tulsky, DS, Kisala, PA, Victorson, D, Tate, DG, Heinemann, AW, Charlifue, S, Kirshblum, SC, Fyffe, D, Gershon, R, Spungen, AM, Bombardier, CH, Dyson-Hudson, TA, Amtmann, D, Kalpakjian, C, Choi, S, Jette, A, Forchheimer, M, & Cella, DF Overview of the Spinal Cord Injury – Quality of Life (SCI-QOL) Measurement System. Journal of Spinal Cord Medicine. 38(3). 257-269. 2015.

86. Tulsky, DS, Kisala, PA, Victorson, D, Choi, S, Gershon, R, Heinemann, AW, & Cella, DF. Development and Calibration Methodology of the SCI-QOL Measurement System. Journal of Spinal Cord Medicine. 38(3). 270-287. 2015.

87. Tulsky, DS, Kisala, PA, Kalpakjian, C, Bombardier, CH, Pohlig, R, Heinemann, AW, Carle, A, & Choi, SW. Measuring Depression after Spinal Cord Injury: Development and Psychometric Characteristics of the SCI-QOL Depression Item Bank and Linkage with PHQ-9. 38(3). 335-346. 2015.

88. Tulsky, DS, Kisala, PA, Tate, DG, Spungen, AM, & Kirshblum, S. Development and Psychometric Characteristics of the SCI-QOL Bladder Management Difficulties and Bowel Management Difficulties Item Banks and Short Forms and the SCI-QOL Bladder Complications Scale. Journal of Spinal Cord Medicine. 38(3). 288-302. 2015.

89. Kisala, PA, Tulsky, DS, Kalpakjian, C, Heinemann, AW, Pohlig, R, Carle, A, & Choi, SW. Measuring Anxiety after Spinal Cord Injury: Development and Psychometric Characteristics of the SCI-QOL Anxiety Item Bank and Linkage with GAD-7. Journal of Spinal Cord Medicine. 38(3). 315-325. 2015.

90. Kisala, PA, Tulsky, DS, Choi, S, & Kirshblum, S. Development of Item Banks to Measure Subject Experience and quality of health following skin breakdown and pressure ulcers in Individuals with SCI. Journal of Spinal Cord Medicine. 38(3). 303-314. 2015.

91. Jette, AM, Slavin, M, Ni, P, Kisala, P, Tulsky, DS, Heinemann, A, Charlifue, S, Fyffe, D, Tate, D, Morse, L, Marino, R, Smith, I, & Williams, S. Development and Initial Evaluation of the SCI-FI/AT. Journal of Spinal Cord Medicine. 38(3). 409-417. 2015.

92. Victorson, D, Tulsky, DS, Kisala, PA, Kalpakjian, C, Weiland, B, & Choi, SW. Measuring Resilience after Spinal Cord Injury: Development, Validation and Psychometric Characteristics of the SCI-QOL Resilience Item Bank and Short Form. Journal of Spinal Cord Medicine. 38(3). 366-376. 2015.

93. Kalpakjian, CZ, Tulsky, DS, Kisala, PA, & Bombardier, CH. Measuring Grief and Loss after Spinal Cord Injury: Development, Validation, and Psychometric Characteristics of the SCI-QOL Grief and Loss Item Bank and Short Form. Journal of Spinal Cord Medicine. 38(3). 347-355. 2015.

94. Kisala, PA, Victorson, D., Choi, S., Heinemann, AW, Pace, N., & Tulsky, DS. Measuring Psychological Trauma after Spinal Cord Injury: Development, Validation and Psychometric Characteristics of the SCI-QOL Trauma Item Bank and Short Form. Journal of Spinal Cord Medicine. 38(3). 326-334. 2015.

95. Bertisch, H, Kalpakjian, CZ, Kisala, PA, & Tulsky, DS. Measuring Positive Affect & Well-Being after Spinal Cord Injury: Development and Psychometric Characteristics of the SCI-QOL Positive Affect & Well-Being Item Bank and Short Form. Journal of Spinal Cord Medicine. 38(3). 356-365. 2015.

96. Kalpakjian CZ, Tate, DG, Kisala P, & Tulsky, DS. Measuring Self-Esteem after Spinal Cord Injury: Development, Validation and Psychometric Characteristics of the SCI-QOL Self-Esteem Item Bank and Short Form. The Journal of Spinal Cord Medicine. 38(3). 377-385. 2015.

97. Kisala, PA, Tulsky, DS, Pace, N, Victorson, D, Choi, SW, Heinemann, AW, Victorson, D, Choi, S & Tulsky, DS. Measuring Stigma after Spinal Cord Injury: Development and Psychometric Characteristics of the SCI-QOL Stigma Item Bank and Short Form. Journal of Spinal Cord Medicine. 38(3). 386-396. 2015.

98. Heinemann, AW, Kisala, PA, Hahn, B, & Tulsky, DS. Development of Item Banks to Measure Ability to Participation and Satisfaction with Social Roles and Activities in Individuals with SCI. Journal of Spinal Cord Medicine. 38(3). 397-408. 2015.

99. Sherer, M., Sander, A.M., Nick, T.G., Melguizo, M.S., Tulsky, D., Kisala, P., Hanks, R., AND Novack, T. Key Dimensions of Impairment, Self-report, and Environmental Supports in Persons with TBI. Rehabilitation Psychology. Rehabilitation Psychology, 60(2), 138-146, 2015.

100. Sinha, R, Slavin, MD, Kisala, PA, Ni, P, Tulsky, DS, & Jette, AM. Functional Ability Level Development and Validation: Providing Clinical Meaning for Spinal Cord Injury Functional Index Scores. Archives of Physical Medicine and Rehabilitation, 96, 1448-1457, 2015.

101. Carlozzi, NE, Beaumont, J, Tulsky, DS, & Gershon, RC. The NIH Toolbox Pattern Comparison Processing Speed Test: Normative Data. Archives of Clinical Neuropsychology, 30, 359-368, 2015.

102. Carlozzi, NE, Kirsch, NL, Kisala, PA, & Tulsky, DS. An Examination of the Wechsler Adult Intelligence Scales, Fourth Edition (WAIS-IV) in individuals with complicated mild, moderate, & Severe traumatic brain injury (TBI). The Clinical Neuropsychologist. 29 (1), 21-37, 2015.

103. Tulsky, DS, Kisala, P, Victorson, D, Carlozzi, N, Bushnik, T, Sherer, M, Choi, S, Heinemann, A, Chiaravalloti, ND, Sander, A, Englander, J, Hanks, R, Kolakowsky-Hayner, S., Roth, E., Gershon, R, Wood, K, Rosenthal, M., & Cella, D. TBI-QOL: Development and Calibration of item banks to measure patient reported outcomes following traumatic brain injury. Journal of Head Trauma Rehabilitation, 31 (1), 40-51, 2016.

104. Toyinbo, PA, Vanderploeg, RD, Donnell, A, Mutolo, SA, Cook, KF, Kisala, PA, & Tulsky, DS Development of and Initial Validation of Military Deployment-Related TBI Quality-of-Life Item Banks. Journal of Head Trauma Rehabilitation, 31 (1), 52-61, 2016.

105. Lange, R.T., Brickell, TA, Bailie, J, Tulsky, DS, & French, LM. Clinical Utility and Psychometric Properties of the Traumatic Brain Injury Quality of Life (TBI-QOL) Scale in U.S. Military Service Members. Journal of Head Trauma Rehabilitation, 31 (1), 62-78, 2016.

106. Mulcahey, MJ, Haley, SM, Slavin, MD, Kisala, PA, Ni, P, Tulsky, DS, & Jette, AM. Ability of PROMIS Pediatric Measures to Detect Change in Children with Musculoskeletal Surgery. J Pediatr Orthop, 36(7), 749-756, 2016.

107. Sherer, M, Nick, TG, Sander, AM, Melguizo, M, Hanks, R, Novack, TA, Tulsky, DS, Kisala, P, Luo, C., & Tang, X. Groupings of Persons with TBI: A New Approach to Classifying TBI in the Post-acute Period. Journal of Head Trauma Rehabilitation. J Head Trauma Rehabil. 32(2):125-133. 2017.

108. Reeve, BB, Thissen, D, DeWalt, DA, Huang, IC, Liu, Y, Magnus, B., Quinn, H, Gross, HE, Kisala, PA, Ni, P, Haley, S., Mulcahey, MJ, Charlifue, S, Hanks, R, Slavin, S, Jette, A, Tulsky, DS. Linkage between the PROMIS Pediatric and Adult emotional distress Measures. Qual Life Res. 25(4):823-33. 2016.

109. Fyffe, DC, Kalpakjian, C, Slavin, MD, Kisala, PA, Ni, P, Kirshblum, S, Tulsky, DS, & Jette, AM. Clinical interpretation of the Spinal Cord Injury Functional Index (SCI-FI). J Spinal Cord Med. 39(5):527-534, 2016.

110. Heinemann, AW, Lai, J, Wong, A, Dashner, J, Magasi, S, Hahn, EA, Carlozzi, NE, Tulsky, DS, Jerousek, S, Semik, P, Miskovic, A, Gray, DB, & Tulsky, DS. Using the ICF's Environmental factors framework to develop an item bank measuring built and natural environment features affecting persons with disabilities. Qual Life Res. 25(11):2775-2786. 2016

111. Charlifue, SB, Botticello, A, Kolakowski-Hayner, SA, Richards, JS, Tulsky, DS. Family Caregivers of Individuals with Spinal Cord Injury: Exploring the Stresses and Benefits. Spinal Cord. 54(9):732-6, 2016.

112. Coster, WJ, Ni, P, Slavin, M, Kisala, P, Nandakumar, R, Mulcahey, MJ, Tulsky, D, Jette, A. Differential item functioning in Patient Reported Outcomes Measurement Information System pediatric short forms in a sample of youth with cerebral palsy. Dev Med Child Neurol. 58(11):1132-1138. 2016.

113. Slavin MD, Ni P, Tulsky DS, Kisala PA, Heinemann AW, Charlifue S, Fyffe DC, Graves DE, Marino RJ, Morse LR, Rosenblum D, Tate D, Worobey LA, Dawson MB, Jette AM. Spinal Cord Injury-Functional Index/Assistive Technology Short Forms. Arch Phys Med Rehabil. 97(10):1745-1752.e7. 2016.

114. Heinemann, AW, Miskovic, A, Semik, P, Wong, A, Dashner, J, Baum, C, Magasi, S, Hammel, J, Tulsky, DS, Garcia, SF, Jerousek, S, Lai, JS, Carlozzi, NE, Gray, DB. (In Press). Measuring Environmental Factors: Unique and Overlapping ICF Coverage of Five Instruments. Arch Phys Med Rehabil, 97(12):2113-2122,

2016.

115. Carlozzi NE, Brickell TA, French LM, Sander A, Kratz AL, Tulsky DS, Chiaravalloti ND, Hahn EA, Kallen M, Austin AM, Miner JA, Lange RT. Caring for our wounded warriors: A qualitative examination of health-related quality of life in caregivers of individuals with military-related traumatic brain injury. J Rehabil Res Dev. 2016;53(6):669-680. doi: 10.1682/JRRD.2015.07.0136. PMID: 27997672.

116. Cohen, ML, Kisala, PA, Dyson-Hudson, T, & Tulsky, DS. Measuring Pain Phenomena after Spinal Cord Injury: Development and Psychometric Properties of the SCI-QOL Pain Interference and Pain Behavior Assessment Tools. Journal of Spinal Cord Medicine. 10:1-14. 2017.

117. Baum, CM. Wolf, TJ., Wong, AWK., Chen, CH, Walker, K, Carlozzi, NE, Tulsky, DS, Heaton, RK, & Heinemann, AW. Validation and Clinical Utility of the Executive Function Performance Test in Persons with Traumatic Brain Injury. Neuropsychol Rehabil., 27(5):603-617. 2017.

118. Tulsky, D.S. & Heinemann, A.W. The Clinical Utility and Construct Validity of the NIH Toolbox Cognition Battery (NIHTB-CB) in Individuals With Disabilities. Rehabilitation Psychology, 62 (4), 409-412, 2017.

119. Tulsky, DS, Carlozzi, NE, Holdnack, JA, Heaton, RK, Wong, A, Goldsmith, A., & Heinemann, AW. Using the NIH Toolbox Cognition Battery (NIHTB-CB) in Individuals With Traumatic Brain Injury. Rehabilitation Psychology, 62 (4), 413-424, 2017.

120. Cohen, ML, Tulsky, DS, Holdnack, JA, Carlozzi, NE, Wong, A, Magasi, S, Heaton, RK, & Heinemann, AW. Cognition Among Community-Dwelling Individuals With Spinal Cord Injury, Rehabilitation Psychology, 62 (4), 425-434, 2017.

121. Tulsky, DS, Holdnack, JA, Cohen, ML, Heaton, RK, Carlozzi, NE, Wong, AWK, Boulton, AJ, & Heinemann, AW. Factor Structure of the NIH Toolbox Cognition Battery in Individuals With Acquired Brain Injury. Rehabilitation Psychology, 62 (4), 435-442, 2017.

122. Carlozzi, NE, Tulsky, DS, Wolf, TJ, Goodnight, S, Heaton, RK, Casaletto, KB, Wong, AWK, Baum, CM, Gershon, RC, and Heinemann, AW. Construct Validity of the NIH Toolbox Cognition Battery in Individuals With Stroke. Rehabilitation Psychology, 62 (4), 443-454, 2017.

123. Magasi, S., Harniss, M, Tulsky, DS, Cohen, ML, Heaton, RK, & Heinemann, AW. Test Accommodations for Individuals With Neurological Conditions Completing the NIH Toolbox—Cognition Battery: An Evaluation of Frequency and Appropriateness. Rehabilitation Psychology, 62 (4), 455-463, 2017.

124. Carlozzi, NE, Goodnight, S, Umlauf, A, Heaton, RK, Heinemann, AW, Schalet, BD, Gershon, RC, and Tulsky, DT. Motor-Free Composites From the National Institutes of Health Toolbox Cognition Battery (NIHTB-CB) for People With Disabilities. Rehabilitation Psychology, 62 (4), 464-473, 2017.

125. Holdnack, JA, Iverson, GL, Silverberg, ND, Tulsky, DS, & Heinemann, AW. NIH Toolbox Cognition Tests Following Traumatic Brain Injury: Frequency of Low Scores. Rehabilitation Psychology, 62 (4), 474-484, 2017.

126. Nitsch, KP, Casaletto, KB, Carlozzi, NE, Tulsky, DS, Heinemann, AW, & Heaton, RK. Uncorrected Versus Demographically-Corrected Scores on the NIH Toolbox Cognition Battery in Persons With Traumatic Brain Injury and Stroke. Rehabilitation Psychology, 62 (4), 485-495, 2017.

127. Holdnack, JA, Tulsky, DS, Slotkin, J, Tyner, CE, Gershon, R, Iverson, GL, & Heinemann, AW. NIH Toolbox Premorbid Ability Adjustments: Application in a Traumatic Brain Injury Sample. Rehabilitation Psychology, 62 (4), 496-508, 2017.

128. Carlozzi, NE, Goodnight, S., Casaletto, KB, Goldsmith, A, Heaton, RK, Wong, AWK, Baum, CM, Gershon, R, Heinemann, AW, & Tulsky, DS. (In Press). Validation of the NIH Toolbox (NIHTB) in individuals

with neurologic disorders. Archives of Clinical Neuropsychology. 2017. 32(5), 555-573.

129. Holdnack, JA, Tulsky, DS, Brooks, BL, Slotkin, J, Gershon, R., Heinemann, AW, Iverson, GL. Interpreting patterns of low scores on the NIH Toolbox Cognition Battery. Archives of Clinical Neuropsychology. 2017, 32(5), 574-584.

130. Sherer M, Poritz JMP, Tulsky D, Kisala P, Leon-Novelo L, Ngan E. Conceptual Structure of Health Related Quality of Life for Persons with Traumatic Brain Injury: Confirmatory Factor Analysis of the TBI-QOL. Arch Phys Med Rehabil. 2017 May 17. pii: S0003-9993(17)30311-8. doi: 10.1016/j.apmr.2017.04.016. [Epub ahead of print]

131. Wong AWK, Ng S, Dashner J, Baum MC, Hammel J, Magasi S, Lai JS, Carlozzi NE, Tulsky DS, Miskovic A, Goldsmith A, Heinemann AW. Relationships between environmental factors and participation in adults with traumatic brain injury, stroke, and spinal cord injury: a cross-sectional multi-center study. Qual Life Res. 2017, 26(10), 2633-2645.

132. Bertisch, H, Rivara, FP, Kisala, PA, Wang, J, Yeates, KO, Durbin, D, Zonfrillo, MR, Belle, MJ, Temkin, N, & Tulsky, DS. Psychometric evaluation of Pediatric and parent-proxy patient reported outcomes measurement information system and the neurology and traumatic brain injury quality of life measurement item banks in pediatric traumatic brain injury. Qual Life Res. 2017, 26(7). 1887-1899.

133. Cohen, ML, Holdnack, JA, Kisala, PA, & Tulsky, DS. A Comparison of PHQ-9 and TBI-QOL depression measures among individuals with traumatic brain injury. Rehabilitation Psychology. In Press

134. Mulcahey, MJ, Slavin, MD, Ni, P, Kratz, A, Kisala, PA, Tulsky, DS, & Jette, AM. Examination of the PROMIS Pediatric upper extremity measures in youth with cerebral palsy. British Journal of Occupational Therapy. Under Review.

135. Magasi, S., Wong, A, Tulsky, D, Miskovic, A, & Heinemann, AW. Mobility device quality impacts participation outcomes among people with disabilities: A structural equation modeling analysis. Archives of Physical Medicine and Rehabilitation. 2018, 99(1), 1-8.

136. Hahn, EA, Wong, A, Magasi, SR, Tulsky, DS, Carlozzi, NE, Garcia, SF, Lai, JS, Hammel, J, Miskovic, A, Jerousek, S, Goldsmith, A, Nitsch, & Heinemann. Health and functional literacy in physical rehabilitation patients. Journal of Health Literacy. Under Review.

137. Jones LAT, Bryden A, Wheeler TL, Tansey KE, Anderson KD, Beattie MS, Blight A, Curt A, Field-Fote E, Guest JD, Hseih J, Jakeman LB, Kalsi-Ryan S, Krisa L, Lammertse DP, Leiby B, Marino R, Schwab JM, Scivoletto G, Tulsky DS, Wirth E, Zariffa J, Kleitman N, Mulcahey MJ, Steeves JD. Spinal Cord. 2017 Dec 28. doi: 10.1038/s41393-017-0015-5. [Epub ahead of print] Review. PMID: 29284795

138. Poritz JMP, Sherer M, Kisala PA, Tulsky D, Leon-Novelo L, Ngan E. Responsiveness of the Traumatic Brain Injury - Quality of Life (TBI-QOL) Measurement System. Arch Phys Med Rehabil. 2018 Jan 30. pii: S0003-9993(18)30043-1. doi: 10.1016/j.apmr.2017.11.018. [Epub ahead of print] PMID: 29407517

Pamela Kisala, MA
University of Delaware

(no CV uploaded)

David Victorson, PhD
Northwestern University

(no CV uploaded)

Jerry Slotkin, PhD
University of Delaware

(no CV uploaded)

Jerry Slotkin, PhD
University of Delaware

(no CV uploaded)

Communication regarding neuropathic pain after SCI: Provider perspectives

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

Eva Widerstrom-Noga, DDS, PhD
The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine

CV:
A. Personal Statement
I am a Professor of Neurological Surgery, Rehabilitation Medicine, Health Scientist at the Veterans Affairs Medical Center, and the principal investigator of the Clinical Pain Research Laboratory of The Miami Project to Cure Paralysis. My background is in cross-disciplinary pain research (pain physiology and pain psychology) and in the clinical management of chronic pain. I have performed human pain research for more than 25 years and in the field of spinal cord injury (SCI) for over 21 years. I have adapted outcome measures used to classify and assess pain in other chronic pain populations to people with SCI. I have published 62 peer reviewed journal articles and written eight book chapters on pain and pain assessment. My present research involves both qualitative and quantitative pain methodologies including quantitative sensory testing and MR spectroscopic brain imaging. I have been instrumental in developing, presenting, and promoting the International SCI Pain Data Sets and the NINDS CDEs for SCI and Pain. I serve as the Chair or as a member in both National and International efforts to standardize pain outcome measures and pain classification, and clinical guidelines related to pain. I have extensive interdisciplinary clinical pain research experience in persons with neurotrauma, including the use of a wide spectrum of pain outcome measurements and pain phenotyping.
B. Positions and Honors
Positions and Employment
1986-1990 Dentist (general dentistry). Kungälv, Sweden
1987-1993 PhD-training, Department of Physiology, Faculty of Medicine, University of Gothenburg. Gothenburg, Sweden
1990-1991 Dentist (Orofacial Pain, Department of Stomatognathic Physiology), Faculty of Dentistry, University of Gothenburg. Gothenburg, Sweden
1993-1995 Chronic Pain Management, Biodex Therapy Center. Winnipeg, Canada
1996-1999 Senior Research Associate, The Miami Project to Cure Paralysis, University of Miami School of Medicine. Miami, Florida
1999-2002 Instructor in Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami School of Medicine. Miami, Florida
2002-2005 Research Assistant Professor in Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami School of Medicine. Miami, Florida
2004- pres. Research Health Scientist, Research Service, Bruce W. Carter VA Medical Center. Miami, FL
2005-2014 Research Associate Professor in Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami Miller School of Medicine. Miami, Florida
2007-2014 Research Associate Professor in Rehabilitation Medicine, University of Miami Miller School of Medicine. Miami, Florida
2007- pres. Graduate Faculty, Neuroscience Program, University of Miami Miller School of Medicine. Miami, Florida
2007- 2017 Scientific Awards Committee, University of Miami Miller School of Medicine. Miami, Florida
10/08-09/09 Vice-Chair: Research & Development Committee, Bruce W. Carter VA Medical Center. Miami, Florida
10/09-10/10 Chair: Research & Development Committee, Bruce W. Carter VA Medical Center, Miami, Florida

07/10-06/13 Member: Medical School Faculty Council, University of Miami Miller School of Medicine. Miami, Florida
10/10-09/12 Member: Research & Development Committee, Bruce W. Carter VA Medical Center. Miami, Florida
2014- pres. Research Professor in Neurological Surgery, The Miami Project to Cure Paralysis, University of Miami Miller School of Medicine. Miami, Florida
2014- pres. Research Professor in Rehabilitation Medicine, University of Miami Miller School of Medicine.

Miami, Florida
Other Experience and Professional Memberships
1983-pres. Member International Association for the Study of Pain (IASP)
1996-pres. Member American Pain Society (APS)
1997-pres. Member American Paraplegia Society
2001-pres. Member American Spinal Injury Association (ASIA)
2003-pres. Member International Spinal Cord Injury Association
2004-2008 Member American Pain Society Ethics committee
2004-pres. Member American Spinal Injury Association Research Committee
2005-pres. Chair International Pain Data Set subcommittee ISCoS/ASIA
2007-pres. Member of Scientific Awards Committee, University of Miami, Miller School of Medicine
2009-2012 Member International Taskforce on pain classification after SCI
2013-pres. ACTTION-APS Pain Taxonomy (AAPT): Member research committee.
2013-pres. ACTTION-APS Pain Taxonomy (AAPT): Co-chair subcommittee on central neuropathic pain
2015-pres. NINDS SCI Data Sets Oversight Committee
C. Contributions to Science
My work primarily concerns the extremely complex problem of persistent neuropathic pain after neurotrauma. My primary interests are influenced by my clinical background and interest in elucidating the underlying mechanisms of human pain and the cognitions and behaviors that determine the impact of pain.
1. Defining persistent pain after SCI: Much of this work was initiated to determine, in more detail than previous research, the characteristics, psychosocial impact and interference, and chronicity of pain after SCI. This work was the foundation for the development of national and international recommendations for pain evaluations after SCI (see Evaluating pain below)
a. Widerström-Noga EG, Felipe-Cuervo E, Broton JG, Duncan RC, Yezierski RP. Perceived difficulty in dealing with consequences of spinal cord injury. Arch Phys Med Rehabil 80:580-6. 1999.
b. Widerström-Noga EG, Felipe-Cuervo E, Yezierski RP. Chronic pain following spinal cord injury: Interference with sleep and activities. Arch Phys Med Rehabil 82:1571-7. 2001.
c. Widerström-Noga EG, Turk DC. Types and effectiveness of treatments used by people with chronic pain associated with spinal cord injuries: Influence of pain and psychosocial characteristics. Spinal Cord 41 (11):600-609. 2003.
d. Cruz-Almeida Y, Martinez-Arizala A, Widerström-Noga EG. Chronicity of pain associated with spinal cord injury: A longitudinal analysis. JRRD 42 (5): 585-94. 2005.
2. Pain evaluation: I am the Chair of the International Spinal Cord Injury Pain Data Set committee, which is an international collaborative effort between the major pain and spinal cord injury (SCI) organizations. The goal of this committee is to facilitate collaborations and multicenter trials by developing standardized SCI pain evaluation algorithms that can be used worldwide. The first instrument “The Basic Pain Data Set” has been endorsed, translated into several languages, and incorporated into the NINDS Common Data Elements. Consistent evaluation of pain after SCI is critical to progress in this field by facilitating collaboration and comparable outcomes in across clinical centers and countries.
a. Widerström-Noga EG, Cruz-Almeida Y, Martinez-Arizala A, Turk DC. Internal consistency, stability, and validity of the spinal cord injury version of the Multidimensional Pain Inventory. Arch Phys Med Rehabil 87:516-23. 2006.
b. Widerström-Noga EG, Biering-Sørensen F, Bryce T, Cardenas DD, Finnerup NB, Jensen MP, Richards JS, Siddall P. The International Spinal Cord Injury Pain Basic Data Set. Spinal Cord 46 (12):818-23. 2008.
c. Widerström-Noga EG, Biering-Sørensen F, Bryce T, Cardenas DD, Finnerup NB, Jensen MP, Richards JS, Siddall PJ. The International Spinal Cord Injury Pain Basic Data Set (version 2.0). Spinal Cord 52 (4):282-6. 2014.
d. Biering-Sørensen F, Alai S, Anderson K, Charlifue S, Chen Y, DeVivo M, Flanders AE, Jones L, Kleitman N, Lans A, Noonan VK, Odenkirchen J, Steeves J, Tansey K, Widerström-Noga E, Jakeman LB. Common data elements for spinal cord injury clinical research: a National Institute for Neurological Disorders and Stroke project. Spinal Cord 53 (4):265-77. 2015.
3. Pain Classification: I have been an integral part of the development of a valid and reliable spinal cord injury pain classification system. I am also a member of a major new initiative, initiated by Drs. Robert Dworkin, Dennis Turk, and Roger Fillingim, and co-sponsored by Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks, and the American Pain Society. The intent is to develop a comprehensive taxonomy encompassing all acute and chronic pain conditions. At present, there is no consensus on pain classification, a major limitation that has impeded the development

of improved pain treatments.
a. Bryce TN, Biering-Sørensen F, Finnerup NB, Cardenas DD, Defrin R, Lundeberg T, Norrbrink C, Richards JS, Siddall P, Stripling T, Treede RD, Waxman SG, Widerström-Noga E, Yezierski RP, Dijkers M. International Spinal Cord Injury Pain Classification: part I. Background and description. Spinal Cord 50 (6):413-7. 2012.
b. Bruehl S, Ohrbach R, Sharma S, Widerstrom-Noga E, Dworkin RH, Fillingim RB, Turk DC. The ACTTION-American Pain Society Pain Taxonomy (AAPT): Approaches to Demonstrating the Reliability and Validity of Core Diagnostic Criteria. J of Pain 2016 Sep;17(9 Suppl):T118-31).
c. Fillingim RB, Brueh Sl, Dworkin RH, Dworkin SF, Loeser JD, Turk DC, Widerström-Noga E, et al. The ACTTION-American Pain Society Pain Taxonomy (AAPT): An Evidence-Based and Multi-Dimensional Approach to Classifying Chronic Pain Conditions. J Pain 15 (3):241-9. 2014
d. Widerstrom-Noga E, Loeser J, Jensen TS, Finnerup NB. AAPT Diagnostic Criteria for Central Neuropathic Pain. J of Pain 2017 Dec;18(12):1417-1426.
4. Sensory pain phenotypes: Quantitative Sensory Testing (QST) is a very important method used to investigate underlying mechanisms of pain in neuropathic pain research. My colleagues and I have demonstrated that QST is both valid and reliable after spinal cord injury (SCI). Furthermore, we have shown that injury to both the spinothalamic tract and the dorsal column is predictive of the development of neuropathic pain after SCI. We have just completed another study, the largest of its kind, testing the utility of QST to define clinical neuropathic pain phenotypes or subgroups after SCI. The results suggest at least two clinical pain phenotypes with varying degrees of gain and loss of sensory function. Since such clinical pain phenotypes may reflect underlying mechanisms of pain, identification of specific phenotypes based on QST can serve to differentiate subgroups in responder analyses in clinical trials.
a. Felix ER, Widerström-Noga EG. Reliability and validity of quantitative sensory testing in persons with spinal cord injury and chronic neuropathic pain. JRRD 46 (1):69-84. 2009.
b. Cruz-Almeida Y, Felix ER, Martinez-Arizala A, Widerström-Noga EG. Decreased spinothalamic and dorsal column medial lemniscus-mediated function is associated with neuropathic pain after spinal cord injury. J Neurotrauma 29 (17):2706-15. 2012
c. Widerström-Noga EG, Felix ER, Adcock JP, Escalona M, Tibbett J. Multidimensional neuropathic pain phenotypes after spinal cord injury. J of Neurotrauma. 2016;33(5):482-92.
5. Brain biomarkers of Pain: My colleagues and I have recently published research involving magnetic resonance spectroscopy of the brain in persons with central neuropathic pain and SCI or traumatic brain injuries. Our data suggest that biomarkers related to glutamatergic metabolism and glial activation are associated with severe neuropathic pain as well as a specific sensory phenotype with residual spinothalamic function. These findings are consistent with our previous data from the thalamus showing that pain and severity of pain after SCI are associated both with glial activation and neuronal dysfunction.
a. Widerström-Noga EG, Pattany P, Cruz-Almeida Y, Felix ER, Perez S, Cardenas DD, Martinez-Arizala A. Association between metabolite concentrations in the anterior cingulate cortex and high neuropathic pain impact after spinal cord injury. Pain 54 (2):204-212. 2013.
b. Widerström-Noga EG, Cruz-Almeida Y, Felix ER, Pattany PM. Somatosensory phenotype is associated with thalamic metabolites and pain intensity after spinal cord injury. Pain 156:166-174. 2015.
c. Widerström-Noga E, Govind V, Adcock J, Levine B, Maudsley AA. Subacute pain after TBI is associated with lower insular N-acetylaspartate concentrations. J of Neurotrauma 2016:15;33(14):1380-9.
d. Pattany PM, Yezierski RP, Widerström-Noga EG, Bowen BC, Martinez-Arizala A, Garcia BR, Quencer RM. Proton magnetic resonance spectroscopy of the thalamus in patients with chronic neuropathic pain after spinal cord injury. Am J Neuroradiol 23;901-5. 2002.
List of Published Work (peer reviewed articles 57out of 62)
https://www.ncbi.nlm.nih.gov/pubmed/?term=widerstrom-noga
Research Support (past 3 years)
Ongoing Research Support
MR141214 (DoD) Widerström-Noga (PI) 4/15/2016—3/31/2019
Utility of MRS Brain Biomarkers of Pain Phenotypes after TBI
The aims of this project will determine the ability of whole brain Magnetic Resonance Spectroscopy (MRS) and Diffusion Kurtosis Imaging (DKI) measures in brain areas involved in the processing and modulation of pain (thalamus, insula, cingulate, prefrontal cortex, and hippocampus) to predict: (1) Chronic pain after TBI; and (2) Pain symptom, somatosensory and psychological pain phenotypes. The specific measures include: 1) For MRS: N-acetylaspartate (NAA; an indicator of neuronal dysfunction or loss), myo-inositol (Ins; an indicator of glial activation or proliferation), and a composite of glutamate and glutamine (Glx; an

indicator of glutamatergic function; and 2) For DKI: mean diffusivity (MD), fractional anisotropy (FA), mean kurtosis (MK), radial kurtosis (RK), and axial kurtosis (AK).
Role: PI
90DP0074 (NIDILRR) Nash (PI) 09/30/2015—08/31/2019
A Lifestyle Intervention Targeting Enhanced Health and Function for Persons with Chronic SCI in Caregiver/Care-Receiver Relationships: Effects of Caregiver Co-Treatment.
This project will study lifestyle interventions (LI) in persons with spinal cord injuries and diseases. Project goals include: (1) testing the impact of a model LI program on attributes of health and function that are recognized to compromise healthy aging in persons with SCI living in caregiver/care-receiver relationships, (2) examining the impact of the LI on the relationship of the caregiver/care-receiver dyad, and (3) determining whether co-intervention with the caregiver improves health/function for their partner.
Role: Co-Investigator
90IF0099 (NIDILRR) Taylor (PI) 09/30/2015—09/29/2018
The Relations among Pain, Depression, and Resilience and their Prediction of Life Satisfaction in Men and Women with Spinal Cord Injury
This project identifies and evaluates relations among pain, depression, and resilience and the extent to which they predict life satisfaction in men and women with chronic pain secondary to spinal cord Injury (SCI).
Role: Co-Investigator

SC140052 (DoD) Widerström-Noga (PI) 09/15/2015—09/14/2018
Perspectives on Management of Severe Neuropathic Pain after Spinal Cord Injury
The long-term goal of this study is to overcome barriers to the management of severe SCI-related chronic pain. The primary purpose being to identify barriers to optimal pain management based on the perspectives and beliefs of individuals with SCI, their significant others, and healthcare providers, and to identify the primary ways to overcome these barriers and develop an educational tool to disseminate this information to the SCI community.
Role: PI
R01 HD079009-01 (NICHD) Field-Fote (PI) 08/01/2014—07/31/2019
Dose-Response Effects of Whole Body Vibration on Spasticity and Walking in SCI
The goal of this project is to assess the effects various doses of whole body vibration on spasticity, walking function, pain, and strength in persons with SCI.
Role: Co-Investigator
NIDILRR South Florida SCI Model System Felix (PI) 09/01/2016-08/31/21
Randomized, double-blinded, controlled trial of early-intervention TENS for the reduction of the prevalence and severity of chronic neuropathic pain during the first year after spinal cord injury.
Role: Co-Investigator

Completed Research Support
SC110131 (DoD) Jagid (PI) 09/15/2012—09/14/2016
Treatment of Pain and Autonomic Dysreflexia in Spinal Cord Injury with Deep Brain Stimulation
This is a Phase I study of the safety and efficacy of deep brain stimulation applied bilaterally in the midbrain periaqueductal-periventricular gray region (PAG/PVG) for alleviation of chronic neuropathic pain in patients with spinal cord injury.
Role: Co-I
SC110195 (DoD) Widerström-Noga (PI) 09/01/2012—08/31/2015
Experiences of Living with Pain after a Spinal Cord Injury
The goal of this qualitative study was to identify barriers and facilitators to coping and management of SCI-related persistent pain, its impact on a person's activities and participation, and how this impact may change with time since injury.
Role: PI
Robert J., Jr. & Helen C. Kleberg Foundation Anderson (PI) 01/01/2013—06/30/2014
Exercise and Locomotor Training Required for Clinical Trials Targeting Chronic Spinal Cord Injury
The purpose of this project is to determine, in persons with chronic SCI, the minimum amount of exercise conditioning and locomotor training required to ameliorate the confounding effects of a deconditioned body

state and provide baseline control for training-induced neuroplasticity prior to administration of a biologic or pharmacologic therapy. The trial outcome will enable us to design an appropriate exercise and locomotor training protocol to combine with biologic or pharmacologic therapies and to establish a core set of outcome measures that are sensitive yet feasible to administer in a clinical trial targeting individuals living with chronic, motor-complete thoracic SCI
Role: Co-Investigator

Kim Anderson, PhD
Metro Health Medical Center/Case Western Reserve University School of Medicine

(no CV uploaded)

Jessica Cambridge, MPH
The Miami Project to Cure Paralysis, University of Miami, Miller School of Medicine

(no CV uploaded)

Salome Perez, PhD
Bruce W. Carter Veterans Affairs Medical Center

(no CV uploaded)

Alberto Martinez-Arizala, MD
Bruce W. Carter Veterans Affairs Medical Center

(no CV uploaded)

Case Report: Stercoral Colitis

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Kirsten Fisher, MD
James a Haley Vamc, Michael Bilirakis Spinal Cord Injury Center

CV:
KIRSTEN FISHER, M.D.

Professional Background

SCI General Medicine Outpatient Clinic, Staff Physician, James A. Haley Veterans Hospital, Michael Bilirakis Spinal Cord
Injury Center, Tampa, FL (2014 to present)

Medical Director, Outpatient Rehabilitation Program, James A. Haley Veterans Hospital, Michael Bilirakis Spinal Cord Injury Center, Tampa, FL (2009 to present)

Acute Rehabilitation Therapy Program, Staff Physician, , James A. Haley Veterans Hospital, Michael Bilirakis Spinal Cord
Injury Center, Tampa, FL (2007 to 2009)

Research & Publications

SCI-VIP: Predictive Outcome Model Over Time for Employment (PrOMOTE), Co-Site Investigator (2016)

Experience in Graduate Medical Education

University of South Florida College of Medicine, James A. Haley Veterans Hospital Rehab Residency Program Lecture Series, 2007 to 2014

Claire LeFevre, ARNP
James a Haley Vamc

CV:
Claire LeFevre, ARNP

Short CV

Claire has worked at the James Haley Veterans Hospital Spinal Cord Injury Unit since 2009 as an Advanced Registered Nurse Practitioner (ARNP). She makes primary health care decisions based on information obtained by assessing the physical and psychosocial health status of SCI patients. She participates in the interdisciplinary team planning for the patient total health care management plan. She provides education in the management of acute and chronic spinal cord injuries for both patient and Caregivers. She independently performs initial and interim histories and physical examinations on patients; orders and interprets routine laboratory and diagnostic tests; initiates and expedites requests for consultation or studies.

PROFESSIONAL CERTIFICATIONS
Certified Family Nurse Practitioner (ANCC), 2014 to Present
Registered Nurse, 1984 to Present
Basic Life Support Prepared, Current
Advanced Cardio Life Support Prepared, Current Gerontological Nursing Certification, 2010 to Present
Medical-Surgical Nursing Certification, 2010 to Present 2010 – Present

PROFESSIONAL SERVICE ASSOCIATIONS AND HONORS
American Association Nurse Practitioners 2013 – Present
American association of Public Health 2010 – Present
Sigma Theta Tau Nursing Honor Society 2013 – Present
Nurses organization of Veterans Affairs 2009 – Present
National Nurses United 2009 – Present

Impact of a community-based residential rehabilitation program on participant's quality of life, participation and perceived social support: a case series

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Carinne Callahan, PT, ATP
Empower Spinal Cord Injury, Inc

CV:
SKILLS AND SPECIAL INTERESTS
Spinal Cord Injury with special focus on Wheelchair Mobility, Seating and Positioning, and Adaptive Sports

CLINICAL EXPERIENCE
DURABLE MEDICAL EQUIPMENT PRESCRIPTION
Commonwealth Care Alliance – Boston, MA Nov 2017-present
• Rehabilitation specialist for community-based, not-for-profit healthcare organization dedicated to improving care for people with complex chronic conditions, including multiple disabilities
• Prescription of equipment to individuals with complex medical needs to maximize independence
INPATIENT NEUROLOGICAL REHABILITATION -- CLINICAL SPECIALIST, LEVEL 3 CLINICIAN
Spaulding Rehabilitation Hospital – Boston, MA '04-'08, 2009-2015
• Evaluation and treatment of individuals with spinal cord injury ranging from individuals with C1 ventdependent
tetraplegia to individuals with incomplete paraplegia who are ambulatory
• Facilitation of learning with others on spinal cord injury unit as a Mentor and Clinical Specialist
ADAPTIVE SPORTS MEDICINE CLINIC -- LEAD PHYSICAL THERAPIST
Spaulding Rehabilitation Hospital – Boston, MA January 2016-present
• Co-founder of innovative Adaptive Sports Medicine Clinic, created to fill the need for interdisciplinary evaluation and treatment of musculoskeletal disorders in adaptive sports athletes

NONPROFIT EXPERIENCE
Empower Spinal Cord Injury, Incorporated – Boston, MA 2010-present
• Founder and acting president of non-profit corporation established to create happier, more meaningful and more independent lives in individuals with spinal cord injuries through a summer residential rehabilitation program and day outreach programs throughout the year
• Designed and organized 6 Wheelchair Skills Courses in Boston, MA (2012-2018)
• Event coordinator for 3 annual Knobby Tire Ride and Roll Fundraisers (2015-present)
• Awarded over $60,000 in grant monies for Empower Spinal Cord Injury, including the following grants: Craig H Nelson Foundation Quality of Life Grant, Christopher and Dana Reeve Quality of Life Grant, Blue Cross Blue Shield Catalyst Fund, and Permobil Foundation Grant

SPECIAL AWARDS AND CERTIFICATIONS
AMERICAN PHYSICAL THERAPY ASSOCIATION SPINAL CORD INJURY SPECIAL INTEREST GROUP
Award for Clinical Excellence in Spinal Cord Injury Care or Service November 2017
REHABILITATION ENGINEERING AND ASSISTIVE TECHNOLOGY SOCIETY OF NORTH AMERICA
Certified Assistive Technology Professional (ATP) May 2014-present
• Competent in the ability to provide direct consumer-related services in Assistive Technology
AMERICAN ASSOCIATION OF SNOWBOARD INSTRUCTORS April 2016
Level 1 Snowboard Instructor
• Certified Instructor in Adaptive Snowboarding

PRESENTATIONS
Academy of Spinal Cord Injury Professionals Conference- Denver CO September 2017
• Poster presentation of "Facilitating Resilience: Empowerment through Peers, Proficiency, Passion and Purpose"
Access Recreation Boston Fall Conference - Boston, MA October 2016
• Co-Presenter of Break-out Session: "Wear the Chair! Optimizing Adaptive Sports Equipment Fit for

Injury Prevention and Performance"
Academy of Spinal Cord Injury Professionals Conference- Nashville, TN September 2016
• Poster presentation of "Reframing Rehabilitation- Residential Rehabilitation in Chronic Spinal Cord Injury Care"
• Award for Best Poster related to Clinical Care
AAPM&R 2015 ANNUAL ASSEMBLY- Boston, MA September 2015
• Co-presentor of Injury Prevention in Adaptive Sports: Optimizing the Athlete-Equipment Interface

VOLUNTEER EXPERIENCE & COMMUNITY INVOLVEMENT
Volunteer with Spaulding Adaptive Sports Centers: Adaptive Skiing, Cycling, Basketball Summer 2011-present

---

Monique Dawes, OTR
Empower Spinal Cord Injury, Inc

CV:
Employment
07/2013- Present Empower Spinal Cord Injury, Inc Stony Brook, NY
Volunteer Occupational Therapist
Creating individualized therapy plans for individuals with spinal cord injuries
Working with interdisciplinary team to ensure safe, fun, and meaningful experience for each participant
Educating participants on how to reengage in meaningful activities when returning home
Implementing interventions focused on increasing participants ability to complete I/ADLs at highest level of function
Mentorship of therapists and students in SCI treatments
Assist with fundraisers and skill based events

02/2011- 08/2014 Spaulding Rehab Hospital Boston, MA
Occupational Therapist- Advanced Clinician
Created individualized therapy plans for individuals with spinal cord injuries
Worked with interdisciplinary team and families to plan successful discharges from acute rehab setting
Implementing interventions focused on increasing patients ability to complete I/ADLs at highest level of function
Completed program development projects to ensure best practice interventions and program protocols
Mentored entry level therapists, rehab aides, and OT students

Committees
03/2012-08/2014 Spaulding Rehab Hospital Boston, MA
Strength Book Committee
Developing patient friendly education manual for individuals with spinal cord injuries
Develop hospital wide documents to ensure patient safety and compliance with JCAHO and CARF regulations
09/2012-08/2014 Spaulding Rehab Hospital Boston, MA
Safety Care
Developing a safety policies, procedures and culture to ensure the safety of patients, families, and staff
09/2013-08/2014 Spaulding Rehab Hospital Boston, MA
Infection Control
Monitoring infection control data, developing interventions to increase infection control and prevention for employees, patients, and visitors

Certifications
05/2017-2019 BLS CPR Certification
08/2014 PAMS Certification

Presentations
Dawes, M. (2013, November). Occupational Therapy Interventions after Spinal Cord Injury. Lecture

presentation at the University of New Hampshire, Durham, NH.
Jacobs, K., Franco, J., Zhu, L., *Dawes, M., Huggins, A., Igari, C., Ranta, B., Umez-Eronini, A. (2011, April). Wii Health: A Pilot Study Of The Health And Wellness Benefits Of Wii Fit On University Freshmen. Poster presentation at the American Occupational Therapy Association Annual Conference, Philadelphia, PA.
Jacobs, K., Franco, J., Zhu, L., *Dawes, M., Huggins, A., Igari, C., Ranta, B., Umez-Eronini, A. (2010, October). Wii Health: A Pilot Study Of The Health And Wellness Benefits Of Wii Fit On University Freshmen. Poster presentation at the Massachusetts Association of Occupational Therapy Annual Conference, Norword, MA.

Publications
Jacobs K, Zhu L, *Dawes M, Franco J, Huggins A, Igari C, Ranta B, Umez-Eronini A (2011) Wii health: a preliminary study of the health and wellness benefits of Wii Fit on university students. British Journal of Occupational Therapy, 74(6), 262-268

Professional Affiliations
08/2008-Present American Occupational Therapy Association
02/2011-Present NBCOT
04/2012-Present The Network
04/2016-Present NBOTC

Karla Feitl, DPT
Empower Spinal Cord Injury, Inc

CV:
Inova Alexandria Hospital, Alexandria, VA Jan 2016 - present
Acute Care and Hospital-Based Outpatient Rehabilitation
- Provide evaluation, treatment, education, family training, and multi-disciplinary discharge planning for adult inpatients with a variety diagnoses including neuromuscular, cardiothoracic, renal, GI, and multi-system disorders as well as status-post orthopedic, abdominal, and cardiothoracic surgeries, as well as for patients in the NICU setting.
-Provide evaluation, treatment, education, family training, and discharge preparation for adult outpatients with a variety of neurological, vestibular, and orthopedic disorders.

Volunteer Experience
Empower Spinal Cord Injury (SCI), Inc., Stony Brook, NY 07/14 - Present
Volunteer – Two-week Residential Rehabilitation Program
• Residential Aide, Summer 2014: provided personal-care assistant services with participants as needed, and assisted with physical therapy sessions and adaptive sporting events (including swimming, hand-cycling, kayaking, surfing, and yoga).
• Head Residential Aide, Summer 2015: organized and supervised a team of 17 residential aides in addition to residential aide services described above.
• Student Ambassador, Ongoing: assisting with grant writing and reporting, organizing fundraisers, marketing, research, spreading program awareness, as well as teaching during several manual wheelchair skills clinics for both wheelchair users and student physical and occupational therapists.

Adaptive Sports, Long Island, NY 2012 – 2015
Volunteer
• Assisted with equipment, scorekeeping, transfers, and game-play at a variety of adaptive sports practices and tournaments, including rugby, softball, football, basketball, swimming, and rock climbing.

Academic Appointments
Teaching Assistant 2005 – 2013

• Human Anatomy Lab (Stony Brook University)
• COSMOS (California State Summer School for Mathematics and Science)
Special Topics in Marine Biology
• Organisms to Ecosystems (University of California, Irvine)
• Introduction to Biology Lab and Scientific Writing (University of California, Irvine)
• Human Physiology Lecture (University of California, Irvine)
• Human Physiology Lab (University of California, Irvine)
• Invertebrate Zoology Lab (Providence College)
• Marine Biology Lab (Providence College)
• Comparative Biomechanics Lab (Providence College)
• Ecology Lab (Providence College)

Proof-of Principle Efficacy of Verdinexor, a Selective Inhibitor of Nuclear Export, in a Rat Model of Spinal Cord Injury

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Savanna Gornisiewicz, BS
Karyopharm Therapeutics

CV:

Savanna Gornisiewicz
savannagornisiewicz@gmail.com
954.618.8713

I. Work/Volunteer Experience

Research Associate
Karyopharm Therapeutics Inc.
June 19th, 2017 – Present
• responsible for organizing research generated by collaborators and presenting this research in various formats, including as abstract and posters for specific scientific conferences, as grant applications, and as slide decks for business and corporate development purposes
• responsible for carrying out independent research including literature research and laboratory research
• responsible for supporting the advancement of Karyopharm's non-oncology compounds in early and late preclinical development

Assistant Feed Editor
The FeedFeed FoodNetwork
January, 2017-June, 2017
• responsible for editing recipe posts and photos
• responsible for social media maintenance and publicizing posts
• responsible for supporting the advancement of start up food and cooking publication company

Life Guard
Amherst College Aquatic Center
Fall 2013-May 2017
• responsible for maintaining safety and enforcing rules on the pool deck
• responsible for organizing and maintaining safe facility

Swim Lessons
Amherst College Aquatic Center
Fall 2013-May 2017
• responsible for teaching swim lessons and general swim safety skills

Volunteer and Medical Assistant
Clinical Publica en Siete Cuartones
May 2016-July 2016
• responsible for assisting the primary physician in administering vaccinations, assisting in phlebotomies and analyzing vitals
• responsible for organizing and maintaining patient charts
• responsible for carrying out laboratory research and analyzing plasma samples in the hematology lab to detect abnormalities in blood cultures
• Organized and participated in outreach programs to educate about various aspects of personal health in the community, particularly in the schools working directly with children

Shadowed Dr. Fernando Manalac
Sports Medicine department at Holy Cross Medical Hospital
Summer, 2015
• shadowed Dr. Manalac in his practice and assisted in patient diagnoses
• responsible for organizing patient charts
• responsible for assisting in prepping patients prior to visit with physician

Volunteer Counselor
Special Olympics
Fall 2017, 2018
• worked one on one with children with various mental disabilities and special health care needs in various exercise programs in a community setting
• was actively involved in swim lessons and responsible for teaching children at various levels of ability the fundamentals of swimming and fostering a friendly and team based environment
• was actively involved in basketball lessons and responsible for helping establish a friendly team based environment in an exercise community setting

Nutrition Internship
Team Devin Alexander Manhattan Beach, CA
Summer, 2015
• responsible for maintaining and editing recipe posts and photos
• responsible for social media maintenance and publicizing posts
• responsible for supporting the advancement of nutrition and culinary goals of small business startup centered on health and nutrition

Pompano Beach Junior Lifeguard Youth Program Recreational Aid
Pompano Beach, FL
Summer 2011-2013
• responsible for leading camp activities and exercises and mentoring children age 6-16
• responsibilities included leading daily activities and games, teaching CPR and various lifeguard techniques and skill sets, teaching fundamentals of swimming, running and paddle boarding as well as fundamental life safety skills
• responsible for leading activities which promote a healthy lifestyle and water safety habits

Volunteer Vet Assistant
Lecznica i Szpital dla Zwierzat (Animal Clinic) in Radosc, Poland
Summer 2011, 2012, 2013
• worked with Dr. Magdalena Bobowska as a volunteer assistant in helping care for the animals and clinic
• responsible for walking dogs, cleaning kennels and dog grooming

Camp Counselor
Equine-Assisted Therapies of South Florida
Summer 2011,2012
• worked one on one with children with various physical/mental disabilities in innovating recreational therapy technique utilizing horses and horseback riding to improve children's motor skills and interactions with environment
• responsible for leading daily activities including physical therapy, arts and crafts, caring for the horses and serving as a general mentored for children age 6-18 years

II. College/ University
Amherst College
Amherst, MA
Bachelor of Arts in Psychology
Graduated May, 2017

Cumulative GPA: 3.60/4.00
• followed pre-med track with significant laboratory work and coursework in biology (Adaptation and Organisms; Molecular), chemistry (Organic Chemistry), biochemistry, physics (Mechanics and Wave Motion; Electromagnetism and Optics), statistics, psychology (behavioral neuroscience and research methods)
• significant course work in Spanish

IES Abroad & University of Granada
Granada, Spain
Spring Semester, 2016
GPA: 3.94
• significant course work in Spanish

III. Leadership and Extracurricular Activities
• Member of the women's Cross-Country Team at Amherst College from 2013-2016
o Captain for the 2016-2017 seasons
• Member of the women's Track and Field Team at Amherst College from 2014-2017
o Captain for the 2016-2017 seasons

IV. Awards and Recognitions
• NCAA DIII All American in Cross Country (first team-all NESCAC)
• Nationals qualifier for 5k in Cross Country and Indoor Track and Field
• New England Small College Athletic Conference All-Academic Award

V. Skills and Interests
• Active member of Yoga community and yoga enthusiast
• Fluent in Spanish and Polish
• Proficient with Microsoft Office applications
• Proficient with Smartsheet
• Certified lifeguard, CPR, PADI Open Water Diver

VI. Bibliography

Peer-reviewed publications
D.G. Widman, S. Gornisiewicz, S. Shacham, S. Tamir. 2018. In vitro toxicity and efficacy of verdinexor, an exportin 1 inhibitor, on opportunistic viruses affecting immunocompromised individuals. Under review in PLoS One; July, 2018.

VII. ABSTRACTS/PRESENTATIONS

S. Gornisiewicz, R. Dewar, D.G. Widman, S. Shacham, P. Digard, S. Tamir. Verdinexor (KPT-335) demonstrates antiviral activity against multiple emerging influenza strains. Presented at the 31st Annual Meeting of the International Society for Antiviral Research. Porto, Portugal. June 11-15, 2018.

D. G. Widman, S. Gornisiewicz, S. Shacham, S. Tamir. Verdinexor, a novel inhibitor of exportin-1, shows in vitro efficacy against opportunistic viral infections in the immunocompromised patient. Presented at the 31st Annual Meeting of the International Society for Antiviral Research. Porto, Portugal. June 11-15, 2018.

Douglas Widman, PhD
Karyopharm Therapeutics

(no CV uploaded)

Sharon Tamir, BS
Israeli College of Complementary Medicine

(no CV uploaded)

Sharon Shacham, PhD
Karyopharm Therapeutics

(no CV uploaded)

The SCI Knowledge Mobilization Network: Parkwood Institute's experience of utilizing implementation science to support pain best practice implementation

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Saagar Walia, MSc
Parkwood Institute, Sjhc

CV:
Publications:
Wolfe DL, Hsieh J, Kras-Dupuis A, Riopelle RJ, Walia S, Guy SD, Gillis K. An Inclusive, Online Delphi Process for Setting Targets for Best Practice Implementation for Spinal Cord Injury. Journal of Evaluation in Clinical Practice (accepted; in processing)

Scovil CY, Delparte JJ, Walia S, Flett HM, Guy SD, Wallace M, Burns AS, Wolfe DL, SCI KMN. Implementation of pressure injury prevention best practices across six Canadian rehabilitation sites: results from the Spinal Cord Injury Knowledge Mobilization Network. Archives of Physical Medicine and Rehabilitation (accepted; in processing)

Shepherd JD, Badger-Brown KM, Legassic MS, Walia S, Wolfe DL. SCI-U: E-learning for patient education in spinal cord injury rehabilitation. J Spinal Cord Med. 2012 35(5):319-29.

Presentations/Posters:
Walia S, Wolfe DL, Scovil CY, Delpart JJ. The SCI Knowledge Mobilization Network: Building infrastructure across a pan-Canadian community of practice to support best practice implementation. Health Quality Transformation – Quality Matters 2017. October 24, 2017 (Poster)

Charbonneau R, Wallace M, Bambrick W, Koning C, Cwiklewich M, Walia S, Erickson G, Crocker J, Mumme L. Implementing Best Practices for pain in SCI: What are the indicators telling us? 56th ISCoS Scientic Meeting. October 24-26, 2017. (Poster)

Kras-Dupuis A, Koning C, Scovil CY, Wolfe DL, Mumme L, Flett HM, Walia S, Guy SD. The Transformative Nature of the Spinal Cord Injury Knowledge Mobilization Network: An Exploration of Innovative and Systematic Approaches to Sustainable Implementation Across a Pan-Canadian Community of Practice. Global Implementation Conference. June 20-21, 2017. (Presentation)

Wolfe D and Walia S. The Transformative Nature of the Spinal Cord Injury Knowledge Mobilization Network: Sustainable Implementation Across a Pan-Canadian Community of Practice. Canadian Spinal Cord Injury and Ontario Spinal Cord Injury Research Network Meeting. May 12-14, 2017. (Poster)

Flett H, Walia S, Koning C, Kras-Dupuis A, O'Connell C, Scovil C, Wolfe D, SCI KMN. Using Implementation Science to support Best Practice Implementation in SCI Rehabilitation: Experiences of the Spinal Cord Injury Knowledge Mobilization Network. ISCoS 2016. Vienna, Austria. September 14-16, 2016. (Poster)

Koning C, Charbonneau R, Mumme L, Mark M, Wallace M, Walia S, Bayless K, Cwiklewich M. Implementing best practice in pressure ulcer prevention education: Patient reported outcomes driving practice changes. Praxis 2016.Vancouver, BC. April 25-27, 2016. (Poster)

Laramée MT, Joly C, Robidoux I, Jeune V, Walia S. How implementation science helped us change practices. The IRGLM's experience with the Spinal Cord Injury Knowledge Mobilization Network. Praxis 2016.Vancouver, BC. April 25-27, 2016. (Poster)

Walia S, Koning C, Kras-Dupuis A, O'Connell C, Scovil CY, Wolfe D, SCI KMN. Key activities to facilitate sustained practice change: Learning from the experiences of the SCI KMN. Praxis 2016.Vancouver, BC. April 25-27, 2016. (Poster)

Mumme L, Koning C, Walia S, Bayless K, SCI KMN. Using Patient-reported Outcomes to Improve Pressure Ulcer Patient Education. 27th Annual National Forum on Quality Improvement in Health Care. Orlando, Florida. December 6-9, 2015. (Poster)

Riopelle RJ, Brown J, Wolfe D, Walia S, SCI KMN. The Spinal Cord Injury Knowledge Mobilization Network: an adapted Collective Impact exemplar for Social Impact within Neuroscience Innovation Ecosystems cast in the Canadian context. Global Implementation Conference. May 26-28, 2015. Dublin, Ireland. (Presentation)

Walia S, Hamilton L, Kairy D, Scovil C, Wolfe D, Wright P, SCI KMN. Using Implementation Science to Translate Clinical Practice Guideline (CPG) Recommendations Into Sustainable Practice Change In SCI Rehabilitation. The 4th ISCoS and ASIA Joint Scientific Meeting. May 14-16, 2015. Montreal, QC. (Poster)

Guy S, KrasDupuis A, Wolfe D, Hsieh J, Walia S, Askes H. Spinal Cord Injury Best Practice Implementation for Pressure Ulcer Prevention: Initial Implementation Results. 90th American Congress of Rehabilitation Medicine(ACRM). Orlando, Florida, USA. November 12-16, 2013. (Poster)

Dalton Wolfe, PhD
Parkwood Institute, Sjhc

CV:
PUBLICATIONS
(Refereed)

Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan VK, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves JD, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Evidence-based scientific exercise guidelines for adults with spinal cord injury: an update and a new guideline. Spinal Cord. 2018 Apr;56(4):308-321.

Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan V, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves J, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Response to correspondence from the ESSA Statement authors. Spinal Cord. 2018 Apr;56(4):409-411.

Burke SM, Tomasone JR, Scime NV, Ma JK, Harden SM, Wolfe DL. Physical activity self-management interventions for adults with spinal cord injury: Part 2 – Exploring the generalizability of findings from research to practice, Psychology of Sport and Exercise, 2018, ISSN 1469-0292
Lala D, Houghton P, Holyoke P, Wolfe D. Using a Modified ADAPTE Process to Enable Effective Implementation of Electrical Stimulation Therapy for Treating Pressure Ulcers in Persons With Spinal Cord Injury. Rehabilitation Process and Outcome https://doi.org/10.1177/1179572717745836. First Published December 19, 2017

Munce SEP, Allin S, Wolfe DL, Anzai K, Linassi G, Noonan VK, Jaglal SB. Using the theoretical domains framework to guide the development of a self-management program for individuals with spinal cord injury: Results from a national stakeholder advisory group. J Spinal Cord Med. 2017 Nov;40(6):687-695.
van der Scheer JW, Martin Ginis KA, Ditor DS, Goosey-Tolfrey VL, Hicks AL, West CR, Wolfe DL. Effects of exercise on fitness and health of adults with spinal cord injury: A systematic review. Neurology. 2017 Aug 15;89(7):736-745.

Gibbs JC, Gagnon DH, Bergquist AJ, Arel J, Cervinka T, El-Kotob R, Maltais DB, Wolfe DL, Craven, BC. Rehabilitation Interventions to modify endocrine-metabolic disease risk in Individuals with chronic Spinal cord injury living in the Community (RIISC): A systematic review and scoping perspective. J Spinal Cord Med. 2017 Nov;40(6):733-747.
Chan CW, Miller WC, Querée M, Noonan VK, Wolfe DL, SCIRE Research Team. The development of an outcome measures toolkit for spinal cord injury rehabilitation. Can J Occup Ther. 2017 Apr;84(2):119-129.

Lala, D, Houghton, PE, Kras-Dupuis A, Wolfe DL. Developing a model of care for healing pressure ulcers with electrical stimulation therapy for persons with spinal cord injury. Top Spinal Cord Inj Rehabil 2016;22(4):277–287.

Baron J, Swaine J, Presseau J, Aspinall A, Jaglal S, White B, Wolfe D, Grimshaw J. Self-management interventions to improve skin care for pressure ulcer prevention in people with spinal cord injuries: A systematic review protocol. Syst Rev 2016 5(1):150.

Guy SD, Mehta S, Harvey D, Lau B, Middleton JW, O'Connell C, Townson A, Truchon C, Wolfe D, Bradbury CL, Bryce TN, Casalino A, Côté I, Craven BC, Finnerup NB, Hitzig SL, Kras-Dupuis A, Moulin DE, Orenczuk S, Parrent AG, Potter P, Siddall PJ, Short C, Teasell R, Widerström-Noga E, Loh E. The CanPain SCI Clinical Practice Guideline for rehabilitation management of neuropathic pain after spinal cord: Recommendations for model systems of care. Spinal Cord 2016 54:S24-S27.

Guy SD, Mehta S, Casalino A, Côté I, Kras-Dupuis A, Moulin DE, Parrent AG, Potter P, Short C, Teasell R, Bradbury CL, Bryce TN, Craven BC, Finnerup B, Harvey D, Hitzig SL, Lau B, Middleton JW, O'Connell C, Orenczuk S, Siddall PJ, Townson A, Truchon C, Widerström-Noga E, Wolfe D, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Recommendations for treatment. Spinal Cord 2016 54:S14-S23.

Mehta S, Guy SD, Bryce TN, Craven BC, Finnerup NB, Hitzig SL, Orenczuk S, Siddall PJ, Widerström-Noga E, Casalino A, Côté I, Harvey D, Kras-Dupuis A, Lau B, Middleton JW, Moulin DE, O'Connell C, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Wolfe D. Bradbury CL, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Screening and diagnosis recommendations. Spinal Cord 2016 54:S7-13.

Loh E, Guy SD, Mehta S, Moulin DE, Bryce TN, Middleton JW, Siddall PJ, Hitzig SL, Widerström-Noga E, Finnerup NB, Kras-Dupuis A, Casalino A, Craven BC, Lau B, Côté I, Harvey D, O'Connell C, Orenczuk S, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Bradbury CL, Wolfe D. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Introduction, methodology and recommendation overview. Spinal Cord. 2016 54:S1-S6.

Ravenek KE, Wolfe DL, Hitzig SL. A scoping review of video gaming in rehabilitation. Disabil Rehabil Assist Technol. 2016 11(6):445-43.

Allison DJ, Chapman B, Wolfe D, Sequeira K, Hayes K, Ditor DS. Effects of a functional electrical stimulation-assisted cycling program on immune and cardiovascular health in persons with spinal cord injury. Top Spinal Cord Inj Rehabil. 2016 22(1):71-78.

Eng JJ, Noonan VK, Townson AF, Higgins CE, Rogers J, Wolfe DL. Impact of an online medical internet site on knowledge and practice of health care providers: a mixed methods study of the Spinal Cord Injury Rehabilitation Evidence project. J Med Internet Res. 2014 Dec 23;16(12):e296.

Bayley MT, Teasell RW, Wolfe DL, Gruen RL, Eng JJ, Ghajar J, Tavender E, Kua A, Bragge P. Where to build the bridge between evidence and practice?: results of an international workshop to prioritize knowledge translation activities in traumatic brain injury care. J Head Trauma Rehabil. 2014 29(4):268-76.

Noonan VK, Wolfe DL, Thorogood NP, Park SE, Hsieh JT, Eng JJ. Knowledge translation and implementation in spinal cord injury: A systematic review. Spinal Cord. 2014 52(8):578-87.

Mays R, McIntyre A, Mehta S, Hill D, Wolfe D, Teasell R. A review of educational programs to reduce UTIs among individuals with SCI. Rehabil Nurs. 2014 39(5):240-49.

McIntyre A, Cheung K, Kwok C, Mehta S, Wolfe D, Teasell R. Quality of life and bladder management post spinal cord injury: A systematic review. Appl.Res.Qual.Life. 2014 9:1081-1096.

McIntyre A, Mays R, Mehta S, Janzen S, Townson A, Hsieh J, Wolfe D, Teasell R. Examining the effectiveness of intrathecal baclofen on spasticity in individuals with chronic spinal cord injury: A systematic review. J Spinal Cord Med. 2014 37(1):11-18.

Latimer-Cheung AE, Arbour-Nicitopoulos KP, Brawley LR, Gray C, Wilson AJ, Prapavessis H, Tomasone, JR, Wolfe DL, Martin Ginis KA. Developing physical activity interventions for adults with spinal cord injury. Part 2: Motivational counseling and peer-mediated interventions for people intending to be active. Rehabil Psychol. 2013 58(3):307-15.

Martin Ginis KA, Tomasone JR, Latimer-Cheung AE, Arbour-Nicitopoulos KP, Bassett-Gunter RL, Wolfe DL. Developing physical activity interventions for adults with spinal cord injury. Part 1: A comparison of social cognitions across actors, intenders and non-intenders. Rehabil Psychol. 2013 58(3):299-306.

Sweet SN, Martin Ginis KA, Tomasone JR, and The SHAPE-SCI Research Group. Investigating intermediary variables in the physical activity and quality of life relationship in persons with spinal cord injury. Health Psychol. 2013 32(8):877-85.

Sinden KE, Martin Ginis KA, and The SHAPE-SCI Research Group. Identifying occupational attributes of jobs performed after spinal cord injury: Implications for vocational rehabilitation. Int J Rehabil Res. 2013 36(3):196-204.

Mehta S, Hill D, McIntyre A, Foley N, Hsieh J, Ethans K, Teasell RW, Loh E, Welk B, Wolfe D. Meta-analysis of botulinum toxin A detrusor injections in the treatment of neurogenic detrusor overactivity after spinal cord injury. Arch Phys Med Rehabil. 2013 94(8):1473-81.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 2: Systematic review of dorsal root entry zone procedure. Top Spinal Cord Inj Rehabil. 2013 19(1):78-86.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 1: Systematic review of physical and behavioral treatment. Top Spinal Cord Inj Rehabil. 2013 19(1):61-77.

PRESENTATIONS:
Wolfe D. Research to practice innovations in locomotor training for persons with acquired brain or spinal cord injuries. Parkwood Institute Research Update. London, ON. Apr 21 2017.

Wolfe D. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. ONF Staff. Toronto, ON. Nov 3 2015.

Wolfe D, Flett H, Lala D, Musselman K. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. Ontario SCI Research Network Meeting. Toronto, ON. Oct 23 2015.

Wolfe, D, Athanasopoulos P. Making things happen by working together: Prevention and treatment of pressure sores. ONF Board of Directors Meeting, Toronto, ON. Oct 6 2015.

Basett-Spiers K, Athanasopoulos P, Wolfe D, Flett H, Bowman T, Boles L. Integrating people with SCI in best practice implementation across the continuum of care: Prevention and treatment of pressure sores. Ministry of Health and Long Term Care Meeting, Toronto, ON. Sept 9 2015.

Kras-Dupuis A, Guy S, Askes H, Wolfe D. Sustainability of the pressure ulcer prevention practice in persons with spinal cord injury on the inpatient rehabilitation unit. Western Nursing/STTI Iota Omicron Chapter 28th Annual Research Conference: Building Leadership in Nurses Everywhere from the Bedside to the Boardroom. London, ON. May 1 2015.

Koning C, Mumme L, Wolfe D, Scovil CY, Kras-Dupuis A, Brown J, Hamilton L, Mouneimne M, Laramée MT, Kerry Bayless, SCI KMN. Using Implementation Science: A guide for sustainable practice change in spinal

cord injury rehabilitation. 91st American Congress of Rehabilitation Medicine(ACRM). Toronto, ON. Oct 7-11 2014.

Guy S, Kras-Dupuis A, Hsieh J, Wolfe D. Implementing a skin health self-management focused education practice for persons with spinal cord injury. ASIA 2014 40th Annual Scientific Meeting. San Antonio, Texas, USA. May 14-17 2014.

Wolfe D. Implementing better practice in pressure injury risk assessment and management in SCI. National Trauma Research Institute Forum: Promoting Best Practice in Risk Assessment and Management for Pressure Injuries following Spinal Cord Injury in the Community Setting. Melbourne, AU. Apr 30 2014.

Wolfe D. Knowledge Mobilization: Overview of SCI Research at Lawson Health Research Institute/Parkwood Hospital – London, Canada. Research Forum, University of Sydney, Rehabilitation Sciences Unit. Sydney, AU. Apr 28 2014.

Wolfe D (Invited Speaker). Making the connection: There's more than just knowing about secondary complications, so what do I do about it…and how does research help me? Spinal Cord Injury Ontario Information Forum. London, ON. Oct 31 2013.

Kras-Dupuis A, Guy S, Wolfe D, Hsieh J, the SCI KMN. Collaborative best practice: Implementation of pressure ulcer prevention in spinal cord injury. Canadian Association of Rehabilitation Nurses 2013 Conference. Vancouver, BC. May 29-31 2013.

Aman SJ (Rapid Podium Presentation), McGuire S, Wittig J, Wolfe DL. Case study of intensive body weight support protocol on a person with acquired brain injury. Current Concepts in Balance, Fitness and Mobility: Perspectives on Intensity in Rehabilitation. Toronto, ON. Jan 25 2013.

Anna Kras-Dupuis, MScN
Parkwood Institute, Sjhc

(no CV uploaded)

Heather Askes, BSc
Parkwood Institute, Sjhc

(no CV uploaded)

Medical and Surgical Management of Acute Spinal Cord Injury during Pregnancy: Experience from a Case Series in a Third World Country

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Ajmal Zemmar, MD, PhD
Henan Provincial People's Hospitaljuha Hernesniemi International Neurosurgery Center

CV:

A. Zemmar, C.C. Chen, O. Weinmann, F. Vajda, J. Bozeman, N. Isaad, Y. Zuo, M.E. Schwab
Oligodendrocyte- and neuron-specific Nogo-A restrict dendritic branching and synaptic density in the adult mouse motor cortex
Cerebral Cortex (2017)

A. Petruska, F. Ruetz, A. Hong, L. Regli, O. Sueruecue, A. Zemmar, B. J. Nelson
Magnetic Needle Guidance for neurosurgery: Initial design and proof of concept
IEEE Robotics and Automation (2016)

A. Zemmar, B. Kast, K. Lussi, A. R. Luft, M. E. Schwab
Acquisition of a high-precision skilled forelimb reaching task in rats
Journal of Visualized Experiments (JoVE) (2015)

A. Zemmar, X. Yu, Y. Kellner, R. Vicente, M.Gullo, H. Kasper, O. Weinmann, K. Lussi, A. Luft, M. Pedotti, M. Zagrebelsky, Y. Zuo, M. E. Schwab
Neutralization of Nogo-A enhances synaptic plasticity in the motor cortex and improves motor learning in-vivo
The Journal of Neuroscience (2014)

A. Kempf, B. Tews, M. Arzt, O. Weinmann, F. Obermair, V. Pernet, M. Zagrebelsky, A. Delekate, C. Iobbi, A. Zemmar, Z. Ristic, M. Gullo, P. Spies, D. Dodd, D. Gygax, M. Korte, M. E. Schwab
â€œThe Sphingolipid Receptor S1PR2 is a Receptor for Nogo-A Repressing Synaptic Plasticityâ€
PLoS Biology (2014)

S. Choi, E. Yu, G. Rabello, S. Merlo, A. Zemmar, H. Moreno, J. Moreira, M. Sugimori, R. LlinÃ¡s
Optimization of synaptic transmission at the squid giant synapse by physically modified artificial seawater
Frontiers in Neuroscience (2014)

B. Tews, K. SchÃ¶nig, M. Arzt, S. Clementi, M. Pedotti, A. Zemmar, S. Berger, M. Schneider, O. Weinmann, H. Kasper, M. E. Schwab, D. Bartsch
Synthetic miRNA-mediated downregulation of Nogo-A in transgenic rats reveals its role as regulator of plasticity, learning and memory
Proc Natl Acad Sci U S A (2013)

Invited Lectures & Oral Presentations:
2017: Hernesniemi Center Opening, Zhengzhou (China)
2017: Neurotechnology Conference, Toronto (Canada)
2016: Goethe University, Frankfurt (Germany)
2015: Ohio State University, Columbus (USA)
2013: University of California, Santa Cruz (USA)
2013: University of Helsinki, Helsinki (Finland)
2013: Society for Neuroscience (SFN)

Competitive Funding, Awards & Grant Evaluations:
2016: Evaluator of European Commission (ERC) grants

2015: Zurich University Career Award
2015: EMDO Foundation
2015: Heidi Demetriades Foundation
2014: EANS Research Prize
2013: Swiss National Science Foundation Fellowship
2012: Boehringer Ingelheim Fellowship
2009: Scholarship Allianz-Foundation
2007 - 2008: Student Funding by the Max-Planck-Society
2006 - 2009: Full Scholarship Friedrich-Ebert-Foundation

Languages: English (Fluent), German (Fluent), Spanish (Advanced), Farsi (Native Language)

Ahmed Al-Jradi, MD
Neurosurgery Department, Al Thawrah General Hospital

(no CV uploaded)

Vincent Ye, MD
University of Toronto

(no CV uploaded)

Ismail Al-Kebsi, MD
Neurosurgery Department, Al Thawrah General Hospital

(no CV uploaded)

Hugo Andrade, MD, PhD
Henan Provincial People's Hospitaljuha Hernesniemi International Neurosurgery Center

(no CV uploaded)

Josue Avecillas, MD, PhD
Neurosurgery Department, Hospital Joan Xxii

(no CV uploaded)

Iype Cherian, MD
Nobel Institute of Neuroscience, Nobel Medical College Teaching Hospital,

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord); Faculty of Medicine, University of British Columbia

(no CV uploaded)

Juha Hernesniemi, MD, PhD
Henan Provincial People's Hospitaljuha Hernesniemi International Neurosurgery Center

(no CV uploaded)

Impact of different forms of activity-based training on bladder function following spinal cord injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Charles Hubscher, PhD
Univ Louisville Sch Med

CV:
A. Personal Statement
My research is geared toward understanding the neural mechanisms underlying bladder, bowel and sexual dysfunction after spinal cord injury (SCI) in a chronic rodent contusion model in parallel with human SCI subjects with the goal of developing more effective therapeutic approaches for translation directly to the clinic. The current proposal involving the pediatric SCI population is an important progression from our studies on the impact of activity based training in the adult SCI population. I've been fortunate to have been funded since 1998 when I received a postdoctoral fellowship from the Paralyzed Veterans of America to begin studies on the ascending circuitries mediating male sexual function. My subsequent R01 funding on male urogenital function following SCI covered a period of ten years through 2011. I have also been collaborating with Dr. Susan Harkema for many years to study human subjects in parallel to our basic science animal model work. We have multiple projects involving locomotor training and spinal cord epidural stimulation.

B. Positions and Honors

Positions and Employment
1996-2000 Visiting Assistant, Dept. of Physiological Sciences, University of Florida
2000-2001 Assistant Scientist, Dept. Physiological Sciences, University of Florida
2001-2006 Assistant Professor, Dept. Anatomical Sciences & Neurobiology, Univ. of Louisville
2006-2009 Associate Professor, Dept. Anatomical Sciences & Neurobiology, Univ. of Louisville
2009-present Professor, Dept. Anatomical Sciences & Neurobiology, Univ. of Louisville
2009-present Graduate Program Director, Dept. Anatomical Sciences and Neurobiology
2012-present Vice Chair, Dept. Anatomical Sciences & Neurobiology

Professional Memberships and Other Experience (past 3 years)
Member, Society for Neuroscience
Member, American Physiological Society
Member, International Association for the Study of Pain
Charter Member, Organization for the Study of Sex Differences
Member, International Continence Society
Member, International Brain Research Organization
Member, Kentucky Spinal Cord Injury Research Center
Member, Louisville Chapter of the Society for Neuroscience

2015 Scientific Reviewer, DOD: CDMRP 2015 RT/SCIRP
2015 NIBIB Consortium Member on Addressing Paralysis through Spinal Stimulation Technologies
2015 NIH Special Emphasis Panel/Study Section CNNT 2015/05 - CNNT Study Section.
2015 VA Grant Review, Rehabilitation Research & Development Service SCI & Pain Panel - 2015/02.
2015 SCIRTS Grant Review, Craig H. Neilsen Foundation - 2015/03.
2016 Scientific Reviewer, DOD: CDMRP 2016 SCIRP INT-SC & NPP Panels
2016 Scientific Reviewer, Diabetic Complications Consortium (DiaComp) Funding Program, NIDDK.
2017-18 Scientific Reviewer, VA: RR&D SPiRE review.
2017 Scientific Reviewer, NIH: 2017/18 ZRG1 ETTN-B (56) R, RFA-RM-17-003: SPARC Foundational Peripheral Neuroanatomy and Functional Neurobiology
2018 Scientific Reviewer, NY State Department of Health SCIRB review.

Recent Honors

2015 Provost's Award for Exemplary Director of Graduate Studies (University of Louisville).
2016 Florida State University Program in Neuroscience 2016 Graduate of Distinction.
2018 President's Award for Distinguished Research, University of Louisville.

C. Contribution to Science

1) Novel findings in a clinically relevant animal model of SCI (contusion) and in human studies demonstrating the effects of activity dependent plasticity induced by locomotor training after chronic injury on non-locomotor systems (urogenital function – animal and human; bowel – human only). Our animal study data and human data are consistent one another. Further mechanistic studies in our rodent model are in progress.

Hubscher, C.H., Herrity A.N., Williams, C.S., Montgomery, L.R., Willhite, A.M., Angeli, C.A., and Harkema S.J. (2018) Improvements in bladder, bowel and sexual outcomes following task-specific locomotor training in human spinal cord injury. PLOS One, Jan 31;13(1):e0190998. (PMID:29385166).

Ward, P.J., Herrity, A.N., Smith, R.R., Willhite, A., Harrison, B.J., Petruska, J.C., Harkema, S.J., and Hubscher, C.H. (2014) Novel multi-system functional gains via task specific training in spinal cord injured male rats. J Neurotrauma, 31: 819-833 (PMID:24294909).

Hubscher, C.H., Montgomery, L.R., Fell, J.D., Armstrong, J.E., Poudyal, P., Herrity, A.N. and Harkema, S.J. (2016) Effects of exercise training on urinary tract function after spinal cord injury. AJP – Renal, 310(11):F1258-68. (PMID:26984956).

Ward, P.J., Herrity, A.N., Harkema, S.J. and Hubscher, C.H. (2016) Training-induced functional gains following spinal cord injury. Neural Plasticity. http://dx.doi.org/10.1155/2016/1307694.

2) Novel findings regarding the innervation of the pelvic viscera (including the female reproductive organs and most recently the urinary bladder) by the vagus in the rat and the concept of this pathway as a potential alternate route that can be targeted for therapeutic interventions after SCI.

Herrity, A.N., Petruska, J.C., Stirling, D.P., Rau, K.K., and Hubscher, C.H. (2015) The impact of spinal cord injury on the neurochemical profile of vagal neurons. AJP: Reg Int Comp Physiol., 308(12):R1021-33 (PMID: 25855310)
.
Herrity, A.N., Rau, K.K., Petruska, J.C., Stirling, D.P. and Hubscher, C.H. (2014) Identification of bladder and colon afferents in the nodose ganglia of male rat. J. Comp. Neurol., 522(16): 3667-82 (PMID:24845615).

Kaddumi, E.G. and Hubscher, C.H. (2007) Urinary bladder irritation alters efficacy of vagal stimulation on rostral medullary neurons in chronic T8 spinalized rats. J. Neurotrauma, 24(7): 1219-1227.

Hubscher, C.H. and Berkley, K.J. (1995) Spinal and vagal influences on the responses of rat solitary nucleus neurons to stimulation of uterus, cervix and vagina. Brain Research 702: 251-254.

3) Research findings related to identification of multiple ascending and descending spinal pathways mediating urogenital function, which provides multiple targets for therapeutic interventions after spinal cord injury in order to retain function.

Johnson, R.D., Chadha, H.K., Dugan, V.P., Gupta, D.S., Ferrero, S.L. and Hubscher, C.H. (2011) Bilateral bulbospinal projections to pudendal motoneuron circuitry after chronic spinal hemisection injury as revealed by transsynaptic tracing with pseudorabies virus. J. Neurotrauma 28(4): 595-605. (PMID 21265606)

Hubscher, C.H., Reed, W.R., Kaddumi, E.G., Armstrong, J.E., and Johnson, R.D. (2010) Select spinal lesions reveal multiple ascending pathways in the rat conveying input from the male genitalia. J. Physiol. 588.7: 1073-1083. (PMID20142271)

Hubscher, C.H. and Johnson, R.D. (2000) Effects of acute and chronic mid-thoracic spinal cord injury on neural circuits for male sexual function. II. Descending pathways. J. Neurophysiology 83(5): 2508-2518.

Hubscher, C.H. and Johnson, R.D. (1999) Effects of acute and chronic mid-thoracic spinal cord injury on neural circuits for male sexual function. I. Ascending pathways. J. Neurophysiology 82(3): 1381-1389.

4) Substantial contribution toward the literature on viscero-somatic and viscero-visceral convergence at multiple levels of the neural axis (e.g., medullary reticular formation, thalamus) which not only impacts multiple fields of study (e.g., visceral pain; the clinical application of manual therapy) but likely explains why multi-symptomatic patients experience referred pain or altered sensations in unaffected viscera. The existence of shared pathways provides a means by which pathology in one organ can affect the functionality of an adjacent healthy organ (cross-organ sensitization).

Hubscher, C.H., Gupta, D.S. and Brink, T.S. (2013) Convergence and cross-talk in urogenital neural circuitries. J. Neurophysiol. 110: 1995-2005 (PMID: 23926033).

Hubscher, C.H. (2006) Estradiol-associated variation in the responses of rostral medullary neurons to somatovisceral stimulation. Exp. Neurol. 200: 227-239.

Kaddumi, E.G. and Hubscher, C.H. (2006) Convergence of multiple pelvic organ inputs in the rostral medulla. J. Physiol. London 572.2: 393-405.

Hubscher, C.H. and Johnson, R.D. (2004) Effects of chronic dorsal column lesions on pelvic viscerosomatic convergent medullary reticular formation neurons. J. Neurophysiol. 92: 3589-3593

5) Finding that neurons in the dorsal column nuclei, an area commonly considered as part of the “touch pathway”, can also respond to gentle and noxious stimulation of viscera and widespread skin regions. These and other findings have led to an ensemble view that multiple pathways cooperate rather than operate separately to produce the many perceptions of touch and pain.

Cothron, K.J., Massey, J.M., Onifer, S.M. and Hubscher, C.H. (2008) Identification of penile inputs to the rat gracile nucleus. AJP: Reg Int Comp Physiol. 294: R1015-R1023.

Petruska, J.C., Hubscher, C.H. and Johnson, R.D. (1998) Anodally-focussed polarization of peripheral nerve allows discrimination of myelinated and unmyelinated fiber input to brainstem nuclei. Exp. Brain Res.: 121(4): 379-390.

Berkley, K.J. and Hubscher, C.H. (1995) Are there separate CNS pathways for touch and pain? Nature Medicine 1(8): 766-773.

Berkley, K.J. and Hubscher, C.H. (1995) Visceral and somatic sensory tracks through the neuroaxis and their relation to pain: lessons from the rat female reproductive system. In: G.F. Gebhart (Ed.), Visceral Pain, Progress in Pain Research and Management, Vol. 5, pp. 195-216, IASP Press, Seattle.

Full list of publications: http://www.ncbi.nlm.nih.gov/pubmed/?term=hubscher+ch

D. Research Support

Current Research Support

2017-20 Principal Investigator (25% effort), NIH SPARC Grant OT2OD024898 (Harkema Co-PI): “Functional mapping with lumbosacral epidural stimulation for restoration of bladder function after spinal cord injury”. Total Year 1 Direct Costs only: $839,353. The goals of this epidural stimulation project are 1) to determine the optimal stimulation parameters for storage and voiding in SCI research participants already implanted with the scES Medtronic device (16-electrode array from L1-S1); 2) to quantify the long-term effects of daily bladder training using optimal stimulation parameters (all the same research participants); 3) to assess secondary benefits (bladder medication usage, susceptibility to urinary tract infections, indirect

cardiovascular, bowel and sexual function benefits) of long-term bladder training; and 4) to address with a small animal model the impact of location, lesion severity, chronicity and gender.

2017-22 Co-Investigator (10% effort), Christopher and Dana Reeve Foundation, ES_BI-2017 (Harkema – PI): “Task and physiological specific stimulation for recovery of autonomic function, voluntary movement and standing using epidural stimulation and training after severe spinal cord injury". Total five-year costs: $8,565,304. The major goal of this research is to determine the level of functional gain that can be achieved in voluntary control of movements below the level of injury and autonomic nervous system function as a result of activation of spinal circuits with epidural stimulation with or without task-specific training in humans with complete motor paralysis.

2015-18 Principal Investigator (20% effort), Department of Defense (DOD) SCI40033: “Improving urogenital function with step training after spinal cord injury”. Total costs - $744,160.
The goals of this project are 1) to determine whether the combination of exercise and pharmacological treatment with desmopressin (an ADH receptor agonist) can reduce polyuria in SCI rats (as measured using metabolic cages); 2) to test the effectiveness of both pudendal as well as epidural stimulation on bladder function in both non-trained as well as locomotor trained (LT) and forelimb-only trained SCI rats; and 3) to assess if LT or neuromodulation improves specific sexual reflexes.

2018-21 Principal Investigator (2.5% effort), Kentucky Spinal Cord and Head Injury Research Trust (KSCHIRT): “Development of a comprehensive assessment of bowel function after SCI”. Total three years: $299,987. The goals of this study are to determine the impact of chronicity on colonic motility and anorectal EMG using a clinically relevant rat contusion model (Aim 1) and to determine potential benefits of locomotor training (Aim 2).

2014-19 Principal Investigator (15% effort), NIH R01 (Harkema Co-PI): “Effects of activity dependent plasticity on recovery of bladder and sexual function after human spinal cord injury”. Total five-year costs - $1,556,250. The goal of this project are 1) to determine whether the effect of weight-bearing task-specific training for locomotion (LT) on voiding frequency and urodynamic parameters is due to an interaction between locomotor and urinary bladder circuitry after traumatic incomplete upper motor neuron SCI in humans (versus standing or general exercise); 2) to assess the effect of LT on urinary biomarker levels after severe incomplete SCI; 3) to determine the effect of weight-bearing task-specific training for locomotion on erectile function and sexual satisfaction after traumatic incomplete upper motor neuron SCI in humans; and 4) to assess the effect of epidural stimulation in combination with LT on voiding frequency, urodynamic parameters, erectile function, and bladder/urine biomarker levels after complete and motor complete/sensory incomplete upper motor neuron SCI in humans.

2018-21 Principal Investigator (15% effort): “Spinal Cord Injury Induced Polyuria”. Total Costs for 3 years: $597,426. The overall objective of the current study is to assess the development and maintenance of SCI induced polyuria and the mechanisms that underlies it and strategies that may be taken to improve associated deficits.

April Herrity, PhD
Univ Louisville Sch Med

(no CV uploaded)

J. Wyles, BS
Univ Louisville Sch Med

(no CV uploaded)

Anthony Gallahar, BS

Univ Louisville Sch Med

(no CV uploaded)

Kristen Johnson, RN
Univ Louisville Sch Med

(no CV uploaded)

Andrea Willhite, BS
Univ Louisville Sch Med

(no CV uploaded)

Susan Harkema, PhD
Univ Louisville Sch Med

(no CV uploaded)

A comprehensive visualization technique enhancing clinical interpretation of big data analysis results of a large International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) database

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Christian Schuld, MSc
Heidelberg University Hospital - Spinal Cord Injury Center

CV:
BIOGRAPHICAL SKETCH

NAME OF APPLICANT: Christian Schuld
POSITION TITLE: Research Associate

INSTITUTION AND LOCATION DEGREE START END FIELD OF STUDY
Hoechst AG Apprenticeship 09/95 07/97 IT specialist
University Heidelberg, Germany Diploma (M.Sc.) 10/98 03/05 Medical Informatics

PERSONAL STATEMENT
My long term research interests involve human gait analysis with focus on gait deviations resulting from spinal cord injury (SCI). Beyond analysis, I am also interested in gait therapy and restoration using novel approaches like putting the patient in loop and provide real-time feedback from the running gait analysis. In order to be able to validly and reliably measure the benefits, clinical outcome measured are of utmost importance. In the field of SCI medicine, the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) stands out as “the” internationally accepted tool to quantify the location and severity of a SCI. Starting as the database developer of the European Multicenter Study about Spinal Cord Injury (EMSCI) I have become involved in ISNCSCI research resulting in multiple publications on ISNCSCI training, the ISNCSCI calculators and studies simulating the effects of possible revisions using modified calculators and large datasets.
POSITIONS AND EMPLOYMENT

ACTIVITY START END FIELD COMPANY SUPERVISOR
IT specialist 07/97 06/98 IT support Celanese GmbH Thomas Huschke

Research associate 05/05 12/09 rehabilitation engineering Stiftung Orthopädische Universitätsklinik Rüdiger Rupp

Research associate 01/10 present rehabilitation engineering Heidelberg University Hospital, Spinal Cord Injury Center

OTHER EXPERIENCES AND PROFESSIONAL MEMBERSHIPS
2013- American Spinal Injury Association (ASIA)
2011- International Spinal Cord Society (ISCos)

CONTRIBUTION TO SCIENCE

https://www.researchgate.net/profile/Christian_Schuld

Last 5 years:

Seeger JB., Schikschneit JP., Schuld C., Rupp R., Jäger S., Schmitt H., Maier GS., Clarius M. Change of gait in patients with lateral osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty. Knee Surg Sports Traumatol Arthrosc. 2015 Jul;23(7):2049-54. doi: 10.1007/s00167-014-2944-2. Epub 2014 Mar 27.

Schließmann D., Nisser M., Schuld C., Gladow T., Derlin S., Heutehaus L., Weidner N., Smolenski U., Rupp R. Trainer in a pocket - proof-of-concept of mobile, real-time, foot kinematics feedback for gait pattern normalization in individuals after stroke, incomplete spinal cord injury and elderly patients. Journal of NeuroEngineering and Rehabilitation. https://doi.org/10.1186/s12984-018-0389-4

Warner FM., Cragg JJ., Jutzeler CR., Röhrich F., Weidner N., Saur M., Maier DD., Schuld C.; EMSCI Sites., Curt A., Kramer JK.. Early Administration of Gabapentinoids Improves Motor Recovery after Human Spinal Cord Injury. Cell Rep. 2017 Feb 14;18(7):1614-1618. doi: 10.1016/j.celrep.2017.01.048.

Franz S., Schuld C., Wilder-Smith E., Heutehaus L., Lang S., Gantz S., Schuh-Hofer S., Treede RD., Bryce T., Wang H., Weidner N. Spinal Cord Injury Pain Instrument and PainDETECT questionnaire: linguistic validation and convergent construct validity in a German cohort of individuals with Spinal Cord Injury. Eur J Pain. 2017 Nov;21(10):1642-1656. doi: 10.1002/ejp.1069. Epub 2017 Jun 27.

Hommelsen M., Schneiders M., Schuld C., Keyl P., Rupp R. Sensory Feedback Inter-feres with Mu Rhythm Based Detection of Motor Commands from Electroencephalographic Signals. Frontiers in Human Neuroscience. 2017 Nov. 01. doi: 10.3389/fnhum.2017.00523. . [Epub ahead of print]

Cragg JJ, Haefeli J, Jutzeler CR, Röhrich F, Weidner N, Saur M, Maier DD, Kalke YB, Schuld C, Curt A, Kramer JK. Effects of Pain and Pain Management on Motor Recov-ery of Spinal Cord-Injured Patients: A Longitudinal Study. Neurorehabil Neural Repair. 2016 Sep;30(8):753-61. doi: 10.1177/1545968315624777. Epub 2016 Jan 7.

Maurer-Burkhard B, Smoor I, von Reumont A, Deckstein G, Stierle I, Rupp R, Schuld C. Validity and reliability of a locomotor stage-based functional rating scale in spinal cord injury. Spinal Cord. 2016 Aug;54(8):619-25. doi: 10.1038/sc.2015.223. Epub 2016 Jan 12.

Franz S, Kirshblum SC, Weidner N, Rupp R, Schuld C; EMSCI study group. Motor levels in high cervical spinal cord injuries: Implications for the International Standards for Neurological Classification of Spinal Cord Injury. J Spinal Cord Med. 2016 Sep;39(5):513-7. doi: 10.1080/10790268.2016.1138602. Epub 2016 Feb 25.

Schuld C, Franz S., Brüggemann K., Heutehaus L., Weidner N., Kirshblum SC., Rupp R.; EMSCI study group. International standards for neurological classification of spinal cord injury: impact of the revised worksheet (revision 02/13) on classification performance. J Spinal Cord Med. 2016 Sep;39(5):504-12. doi: 10.1080/10790268.2016.1180831. Epub 2016 Jun 14.

Schuld C., Franz S., van Hedel HJA., Moosburger J., Maier D., Abel R., van de Meent H., Curt A., Weidner N., EMSCI study group, Rupp R. International standards for neurological classification of spinal cord injury: classification skills of clinicians versus computational algorithms, Spinal Cord. 2015 Apr;53(4):324-31. doi: 10.1038/sc.2014.221. Epub 2014 Dec 9.

Rupp R., Schließmann D., Plewa H., Schuld C., Gerner HJ, Weidner N., Hofer EP., Knestel M. Safety and Efficacy of At-Home Robotic Locomotion Therapy in Individuals with Chronic Incomplete Spinal Cord Injury: A Prospective, Pre-Post Intervention, Proof-of-Concept Study. PLoS One. 2015 Mar 24;10(3):e0119167. doi: 10.1371/journal.pone.0119167. eCollection 2015. Erratum in: PLoS One. 2015;10(4):e0126999.

Seeger JB., Schikschneit JP., Schuld C., Rupp R., Jäger S., Schmitt H., Maier GS., Clarius M. Change of gait in patients with lateral osteoarthritis of the knee after mobile-bearing unicompartmental knee arthroplasty. Knee Surg Sports Traumatol Arthrosc. 2015 Jul;23(7):2049-54. doi: 10.1007/s00167-014-2944-2. Epub 2014 Mar 27.

Schließmann D., Schuld C., Schneiders M., Derlien S., Glöckner M., Gladow T., Weidner N. and Rupp R. (2014). Feasibility of visual instrumented movement feedback therapy in individuals with motor incomplete spinal cord injury walking on a treadmill. Front. Hum. Neurosci. 8:416. doi: 10.3389/fnhum.2014.00416

Schuld C., Wiese J., Franz S., Putz C., Stierle I., Smoor I., Weidner N., EMSCI Study Group and Rupp R.:

Effect of formal training in scaling, scoring and classification of the International Standards for Neurological Classification of Spinal Cord Injury. Spinal Cord. 2013 Apr;51(4):282-8. doi: 10.1038/sc.2012.149. Epub 2012 Nov 27.

Kamradt, T., Rasch C., Schuld C., Böttinger M., Mürle B., Hensel C., Fürstenberg H., Weidner N., Rupp R., Hug A.: Spinal cord injury: Association with axonal peripheral neuropathy in severely paralyzed limbs, Eur J Neurol. 2013 May;20(5):843-8. doi: 10.1111/ene.12082. Epub 2013 Jan 11.

Jäger S., Seeger JB., Schuld C., Bitsch RG., Clarius M., Tibial Cementing in UKA: A Three-Demensional Analysis of the Bone Cement Implant Interface and the Effect of Bone Lavage, J Arthroplasty. 2013 Oct;28(9 Suppl):191-4. doi: 10.1016/j.arth.2013.05.014.

Yannic Meurer, MSc
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Steffen Franz, MD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Laura Heutehaus, BSc
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Norbert Weidner, MD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Rüdiger Rupp, PhD
Heidelberg University Hospital - Spinal Cord Injury Center

(no CV uploaded)

Harnessing spinal electrical stimulation to modulate autonomic function after spinal cord injury

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Jordan Squair, PhD
University of Calgary

CV:
EDUCATION:
University of British Columbia, BKin - 2008-2012
University of British Columbia, MSc - 2012 - 2014
University of British Columbia, PhD - 2015 - 2018
University of British Columbia, MD - 2015 -
Swiss Federal Institute of Technology / University of Calgary, Postdoctoral Fellow - 2018 -

SELECTED PUBLICATIONS (10/40):
1. Squair, J.W., Ruiz, I., Phillips, A.A., Zheng, M.M.Z., Sarafis, Z.K., Sachdeva, R., Gopaul, R., Lui, J., Tetzlaff, W., West, C.R., Krassioukov, A.V. Minocycline reduces the severity of autonomic dysreflexia after experimental spinal cord injury. Journal of Neurotrauma. In Press.
2. Squair, J.W., BÃ©langer, L.M., Tsang, A., Ritchie, L., Mac-Thiong, J.M., Parent, S., Christie, S., Bailey, C., Dhall, S., Street, J., Ailon, T., Paquette, S., Dea, B., Fisher, C.G., Dvorak, M.F., West, C.R., Kwon, B.K. (2017). Spinal cord perfusion pressure as measured by lumbar intrathecal catheterization predicts neurological recovery in acute spinal cord injury: a prospective observational study. Neurology. 89(16), 1660-1667. This manuscript was the result of a multi-centre Canadian clinical trial. The results, published in Neurology, were the feature of an accompanying editorial (Karam, C., Neurology, 2018). This article was also the winner of the Apple Award for best paper in the field of spinal cord injury, awarded annually by the American Spinal Injury Association.
3. West, C.R.*, Phillips, A.A.*, Squair, J.W., Williams, A., Walter, M., Lam, T. Krassioukov, A.V. (2017). Epidural spinal cord stimulation acutely restores cardiovascular function in one individual with motor complete spinal cord injury. Accepted: JAMA Neurology. This article was the first report that electrical stimulation placed over the spinal cord can restore proper control of blood pressure. It was published in JAMA Neurology (IF: 10) and was the subject of numerous press releases.
4. Squair, J.W.*, DeVeau, K.M.*, Harman, K.A., Poormasjedi-Meibod, M.S., Hayes, B., Liu J., Magnusun, D.S.K., Krassioukov, A.V., West, C.R. (2018). Spinal cord injury induced sympathetic decentralization causes cardiac atrophy and systolic dysfunction. Journal of Neurotrauma. 35(3):424-434.
5. Squair, J.W., Phillips, A.A., Currie, K.C., Gee, C., Krassioukov, A.V. (2018). Autonomic testing for prediction of competition performance in Paralympic athletes. Scandinavian Journal of Medicine and Science in Sport. 28(1), 311-318.
6. Squair, J.W., Field, T.S., Phillips, A.A. (2018). Journal Club: Relationship between carotid arterial properties and cerebral white matter hyperintensities. Neurology. 90(7), 338-340.
7. Squair, J.W., Liu, J., Tetzlaff, W., Krassioukov, A.V., West, C.R. (2017). Spinal cord injury induced cardiomyocyte atrophy and impaired cardiac function are severity dependent. Experimental Physiology. 103(2):179-189.
This article was featured on the cover of Experimental Physiology, and was the focus of the journalâ€™s recent press release, as well as others including the physiological society.
8. Squair, J.W., West, C.R. Popok, D., Assinck, P., Liu J., Tetzlaff, W., Krassioukov, A.V. (2016). High thoracic contusion model for the investigation of cardiovascular function post spinal cord injury. Journal of Neurotrauma.34(3), 671-684.
9. Squair, J.W.*, Phillips, A.A.*, Harmon, M., Krassioukov A.V. (2016). Emergency Management of Autonomic Dysreflexia with Neurological Complications. CMAJ. 88(15): 1100-1103.
10. Squair, J.W., West, C.R. and Krassioukov, A.V. (2015). Neuroprotection, plasticity manipulation, and regenerative strategies to improve cardiovascular function following spinal cord injury. Journal of Neurotrauma, 32, 1-13.

SELECTED SCHOLARSHIPS AND AWARDS:
1. Frederick Banting and Charles Best Canada Graduate Scholarship (Doctoral Award)
Canadian Institutes for Health Research

2. Canada Graduate Scholarship Foreign Study Supplement
Michael Smith Foundation for Health Research / Canadian Institutes for Health Research
3. Alexander Graham Bell Canada Graduate Scholarship (Masters Award)
National Science and Engineering Research Council of Canada
4. Undergraduate Student Research Award
National Science and Engineering Research Council of Canada
5. Friedman Award for Scholars in Health
6. IODE War Memorial Scholarship

Newton Cho, MD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Kay-Alexander Bartholdi, MSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Selin Anil, BSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Mark Anderson, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

JÃ©rÃ´me Gandar, BSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Andreas Rowald, BSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Claudia Kathe, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Zoe Sarafis, BSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Matthieu Gautier, MSc
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Xiaoyang Kang, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Nicolas Vachicouras, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Stephanie Lacour, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Quentin Barraud, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

GrÃ©goire Courtine, PhD
Swiss Federal Institute of Technology (Epfl)

CV:
NA

Aaron A, A
University of Calgary

CV:
NA

Comparison of stroke-count accuracy of two commercially available wrist-worn activity monitors to actual strokes during continuous manual wheelchair propulsion for six minutes in persons with paraplegia

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Lisa Lighthall Haubert, MPT
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Valerie Eberly, PT
Rancho Los Amigos National Rehabilitation Center

CV:

Eberly, Valerie J.

Research Physical Therapist

A. Positions and Honors

Positions and Employment
1991-2003 Physical Therapist, Rancho Los Amigos National Rehabilitation Center, Downey, CA
2003-present Research Physical Therapist, Pathokinesiology Laboratory, Rancho Los Amigos National Rehabilitation Center, Downey, CA

2002-2005 Clinical Mentor, USC Neurolgic Physical Therapy Residency Program

Other Experience and Professional Memberships
1991-present American Physical Therapy Association (APTA), member #130846
1991-present California Chapter American Physical Therapy Association
1995-present American Physical Therapy Association Neurological Section

Honors
May 1998 Specialty Certification in Neurology through American Board of Physical Therapy Specialties (ABPTS)
September 2005 Kinesiological Electromyography Certification (KEMG)

B. Selected peer-reviewed publications (in chronological order)

1. Hatchett PE, Requejo PS, Mulroy SJ, Haubert LL, Eberly VJ, Conners SG. Impact of Gender on Shoulder Torque and Manual Wheelchair USAge for Individuals with Paraplegia: A Preliminary Report. Top Spinal Cord Inj Rehabil, 2009; 15(2)79-89.

2. Mulroy SJ, Klassen T, Gronley JK, Eberly VJ, Brown DA, Sullivan KJ. Gait parameters associated with responsiveness to treadmill training with body-weight support after stroke: an exploratory study Physical Therapy, 2010, 90(2):209-23.

3. Mulroy SJ, Eberly VJ, Gronely JK, Weiss W, Newsam CJ. Effect of AFO design on walking after stroke: impact of ankle plantar flexion contracture. Prosthet Orthot Int, 2010, 34(3):277-92.

4. Mulroy SJ, Thompson L, Kemp B, Hatchett P, Newsam CJ, Gutierrez Lupold D, Lighthall Haubert L, Eberly V, Ge

T, Azen SP, Winstein CJ, Gordon J; for the Physical Therapy Clinical Research Network (PTClinResNet). Strengthening and optimal movements for painful shoulders (STOMPS) in chronic spinal cord injury: A randomized, controlled trial. Physical Therapy, 2011, 91(3)1-20.

5. Burnfield JM, Eberly VJ, Gronely JK, Perry J, Yule WJ, Mulroy SJ. Impact of stance phase microprocessor-controlled knee prosthesis on ramp negotiation and community walking function in K2 level transfemoral amputees. Prosthet Orthot Int, 2012, 36(1):95-104.

6. Eberly VJ, Mulroy SJ, Gronely JK, Perry J, Yule WJ, Burnfield JM. Impact of a stance phase microprocessor-controlled knee prosthesis on level walking in lower functioning individuals with a transfemoral amputation. Prosthet Orthot Int, 2014, 38(6): 447-455.

7. Mulroy SJ, Hatchett P, Eberly VJ, Haubert LL, Conners S, Requejo PS. Shoulder Strength and Physical Activity Predictors of Shoulder Pain in People With Paraplegia From Spinal Injury: Prospective Cohort Study. Phys Ther. 2015 Jul;95(7):1027-38.

8. Haubert LL, Mulroy SJ, Hatchett PE, Eberly VJ, Maneekobkunwong S, Gronley JK, Requejo PS. Car Transfer and Wheelchair Loading Techniques in Independent Drivers with Paraplegia. Front Bioeng Biotechnol. 2015 Sep 17;3:139.

9. Hatchett PE, Mulroy SJ, Eberly VJ, Haubert LL, Requejo PS. Body mass index changes over 3 years and effect of obesity on community mobility for persons with chronic spinal cord injury. J Spinal Cord Med. 2016 Jul;39(4):421-32.

C. Research Support
Ongoing Research Support:
Modular Orthosis Prescription System
Principal Investigator: Requejo, PS
Agency: NIDDR
Type: Grant Number H133G100268-12 10/10 - present
The purpose of this project is to create and disseminate an integrated system combining a set of modular and adjustable trial AFO and KAFOs and an interactive decision-making phone app that can assist in the decision-making process for prescribing the orthotic device.
Role: Research and Development Therapist

Southern California Spinal Cord Injury Model System Research Study for Maintenance of Shoulder Health
Principal Investigator: Mulroy, SJ
Agency: NIDDR
Type: Grant Number H133N110018, CSDA No. 84.133N-1 12/12 - present
The purpose of this project is to determine Clinical research to determine if a shoulder home exercise program can prevent the onset of shoulder pain in persons with spinal cord injury.
Role: Research Therapist

Ended:
Shoulder Pain in SCI: A Longitudinal Study

Principal Investigator: Mulroy, SJ
Agency: NIH
Type: R01 HD049774 08/06 â€“ 12/13
The purpose of this project is to determine if the biomechanical parameters of wheelchair propulsion, shoulder muscle strength and wheelchair use can predict who will eventually develop shoulder pain in individuals who have paraplegia from spinal cord injury.
Role: Research Therapist

Functional Ambulation: Standard Therapy vs. Electrical Stimulation Therapy (FASTEST).
Site Principal Investigator: Ayyoub, Z
Agency: Bioness
Type: Clinical Research 10/10 â€“ 12/12
This is a multi-site randomized clinical trial with subjects post stroke. The purpose of this study is to compare walking, safety, function and quality of life. The two groups are 1) treatment group prescribed with the NESS L300 (functional electrical stimulation unit approved, by the FDA, that provides dorsiflexion assist during gait); and 2) control group prescribed with a traditional ankle-foot orthosis. The study has a crossover design.
Role: Intervention Therapist

Physical Therapy Clinical Research Network (PTClinResNet)
Principal Investigator: Winstein, CJ
Agency: Foundation for Physical Therapy
Type: Clinical Research Network 01/01/03-12/31/07
PTClinResNet is a research network which included the studies STEPS, STOMPS, MUSSEL, and PEDALS studies. PTClinResNet has three specific aims: 1) to generate evidence to evaluate the efficacy of resistance-exercise based physical therapist interventions designed to improve muscle performance and movement skill. Investigations include one multi-site phase III and three phase I randomized clinical trials (RCT); 2) to create the infrastructure necessary to develop and sustain clinical trials research in physical therapy; and 3) to provide education and training opportunities for present and future clinician-researchers in physical therapy and for the physical therapy practice community at-large in its support of evidence-based practice.
Role: Evaluation Therapist, blinded for STOMPS and STEPS

The Effect of Ankle-Foot Orthotic Design on Hemiplegic Gait
Principal Investigator: Mulroy, SJ
Agency: NIDDR
Type: Grant Number H336000004 10/00 - 10/03
The purpose of this project was to develop clinical criteria (strength, ROM, spasticity) for prescribing orthoses that will best improve the walking ability for stroke survivors. We compared the walking performance in three different designs of plastic AFOâ€™s for individuals with hemiplegic residuals of a stroke.Role: Research Therapist

---

Sara Mulroy, PhD, PT
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Sandy Connors, PTA
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Diego Rodriguez, BS

Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Philip Requejo, PhD
Rancho Los Amigos National Rehabilitation Center

(no CV uploaded)

Left Ventricular Function in Individuals with Spinal Cord Injury during Acute and Chronic Periods Post Injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Shane Balthazaar, BScKin, RDCS
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

CV:
Name: Shane Balthazaar, BScKin, RDCS

Position Title: Graduate Student, International
Collaboration On Repair Discoveries (ICORD), Faculty of Medicine, University of British Columbia, Vancouver, BC

A. Personal Statement
My research could be characterized as "cardiac changes following acute spinal cord injury (SCI)" and is focused on the time-course of cardiac changes and different exercises to delay or prevent the effects of cardiac dysfunction following SCI. I am especially interested in understanding when these changes occur and where clinical intervention will be the most efficient.

In our human research, we are studying the time-course of cardiac function in the spinal cord injury population up to a year post-injury. For this work we are using echocardiography to demonstrate various cardiac parameters such as systolic function, diastolic function, and myocardial strain. We have learned that over time, people with chronic spinal cord injuries demonstrate different cardiac indices compared to able-bodied individuals, as well as between lesion levels. We are now studying when these changes occur. We have begun to compare the cardiac indices at various time points. Early work is showing that the systolic function changes in the cervical lesion of injury as early as 6 months post-injury.

I also contribute to the field of echocardiography through clinical work and teaching. In addition to performing clinical echocardiography exams on various patients that include the spinal cord injury population, I assist with various projects at the International Collaboration On Repair Discoveries (ICORD) in Vancouver, Canada.

B. Positions and Honors

Positions

2014 -
Diagnostic Cardiac Sonographer, Vancouver General & UBC Hospitals
2014 -
Research Sonographer, University of British Columbia
2015 -
Diagnostic Cardiac Sonographer, St. Paulâ€™s Hospital
2016 -
Instructor, British Columbia Institute of Technology

Certifications
2011 -
Member, Ontario Kinesiology Association (OKA)
2014 -
Member, American Society of Echocardiography (ASE)
2014 -
Member, American Registry for Diagnostic Medical Sonography (ARDMS)

C. Contribution to Science

1. Cardiac changes in the acute spinal cord injury population - For this work we are using echocardiography to assess cardiac function in the spinal cord injury population over time. We are also comparing the differences in cardiac indices between people with a cervical lesion injury versus a thoracic lesion injury. We have also begun to study how people with a T1-T6 lesion injury compares to a lower thoracic lesion injury.

2. Assessing cardiac function after exercise intervention - Currently, preventative measures for cardiovascular disease focus around increasing physical activity-especially through the use of arm-cycle ergometry training. However, we are currently investigating if body weight-supported treadmill training, an alternative form of exercise, may be more capable of improving cardiovascular health in individuals with spinal cord injury.

D. Research Support

Robert H.N. Ho Scholarship. Period: 2018
ROLE: Graduate Student/Research Assistant
PI: Andrei V. Krassioukov

University of British Columbia - Graduate Student Travel Grant. Period: 2018
ROLE: Graduate Student/Research Assistant
PI: Andrei V. Krassioukov

Thomas Nightingale, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Matthias Walter, MD, PhD, FEBU
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Katharine Currie, PhD
University of Michigan

(no CV uploaded)

Christopher West, PhD
International Collaboration on Repair Discoveries (Icord), University of British Columbia - Okanagan

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Cardiac Arrhythmias in the Acute and Chronic Phase following Acute Traumatic Spinal Cord Injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Shane Balthazaar, BScKin, RDCS
The University of British Columbia

CV:
Name: Shane Balthazaar, BScKin, RDCS

Position Title: Graduate Student, International Collaboration On Repair Discoveries (ICORD), Faculty of Medicine, University of British Columbia, Vancouver, BC

A. Personal Statement
My research could be characterized as "cardiac changes following acute spinal cord injury (SCI)" and is focused on the time-course of cardiac changes and different exercises to delay or prevent the effects of cardiac dysfunction following SCI. I am especially interested in understanding when these changes occur and where clinical intervention will be the most efficient.

In our human research, we are studying the time-course of cardiac function in the spinal cord injury population up to a year post-injury. For this work we are using echocardiography to demonstrate various cardiac parameters such as systolic function, diastolic function, and myocardial strain. We have learned that over time, people with chronic spinal cord injuries demonstrate different cardiac indices compared to able-bodied individuals, as well as between lesion levels. We are now studying when these changes occur. We have begun to compare the cardiac indices at various time points. Early work is showing that the systolic function changes in the cervical lesion of injury as early as 6 months post-injury.

I also contribute to the field of echocardiography through clinical work and teaching. In addition to performing clinical echocardiography exams on various patients that include the spinal cord injury population, I assist with various projects at the International Collaboration On Repair Discoveries (ICORD) in Vancouver, Canada.

B. Positions and Honors

Positions

2014 -
Diagnostic Cardiac Sonographer, Vancouver General &
UBC Hospitals
2014 -
Research Sonographer, University of British Columbia
2015 -
Diagnostic Cardiac Sonographer, St. Paulâ€™s Hospital
2016 -
Instructor, British Columbia Institute of Technology

Certifications
2011 -
Member, Ontario Kinesiology Association (OKA)
2014 -
Member, American Society of Echocardiography (ASE)
2014 -
Member, American Registry for Diagnostic Medical
Sonography (ARDMS)

C. Contribution to Science

1. Cardiac changes in the acute spinal cord injury population - For this work we are using echocardiography to assess cardiac function in the spinal cord injury population over time. We are also comparing the differences in cardiac indices between people with a cervical lesion injury versus a thoracic lesion injury. We have also begun to study how people with a T1-T6 lesion injury compares to a lower thoracic lesion injury.

2. Assessing cardiac function after exercise intervention - Currently, preventative measures for cardiovascular disease focus around increasing physical activity- especially through the use of arm-cycle ergometry training. However, we are currently investigating if body weight-supported treadmill training, an alternative form of exercise, may be more capable of improving cardiovascular health in individuals with spinal cord injury.

D. Research Support

Robert H.N. Ho Scholarship. Period: 2018
ROLE: Graduate Student/Research Assistant
PI: Andrei V. Krassioukov

University of British Columbia - Graduate Student Travel Grant. Period: 2018
ROLE: Graduate Student/Research Assistant
PI: Andrei V. Krassioukov

Morten SengelÃ¸v, MD
Danish National Research Foundation Centre for Cardiac Arrhythmia (Darc), University of Copenhagen

(no CV uploaded)

Kim Bartholdy, MD
Clinic for Spinal Cord Injuries, Rigshospitalet

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Fin Biering-SÃ¸rensen, MD, DMSc
Clinic for Spinal Cord Injuries, Rigshospitalet, Faculty of Health Sciences, University of Copenhagen

(no CV uploaded)

Tor Biering-SÃ¸rensen, MD
Clinic for Spinal Cord Injuries, Rigshospitalet, Danish National Research Foundation Centre for Cardiac Arrhythmia (Darc), University of Copenhagen

(no CV uploaded)

A high-protein diet or combination exercise training to improve metabolic health in individuals with long-standing spinal cord injury: a pilot randomized study

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Ceren Yarar-Fisher, PT, PhD
Uab

CV:
A. Personal Statement
I am a third-year, early career faculty member in the University of Alabama at Birmingham (UAB) Department of Physical Medicine and Rehabilitation (PM & R). My independent career is just at its beginning. I chose to start it at UAB because of the number of great centers and cores to support my research, collaborators to increase my areas of expertise, and 9.6-person months of protected research time. My translational research program focuses on understanding the pathophysiology of traumatic spinal cord injury (SCI) in the acute and chronic stages, with the purpose of developing novel nutritional, rehabilitation, and exercise strategies to improve neurorecovery and metabolism in this population. I have received institutional, National Institutes of Health (NIH), and National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) funding to study the effects of SCI on systemic and muscle metabolism and the effects of low-carbohydrate/high protein diets on metabolic function in SCI. My latest research interest is to understand the impact of a ketogenic diet, which has been linked to metabolic improvement, on neurological recovery and functional independence in the acute stages of SCI, as to date, no pharmacologic therapy has shown to improve the neurological or functional recovery in SCI patients. Thus, the need for timely and effective non-pharmacological strategies are of critical importance for positive outcomes after SCI. The current application builds logically on our recent pilot findings demonstrating improved upper extremity motor function and glycemic state in response to a ketogenic diet (KD) in individuals with acute SCI. Accordingly, the purpose of this project is to determine if 5 weeks of KD (vs. standard diet) improves motor and sensory function, functional independence, and glycemic control in patients with complete SCI. The long-term goal of our work is to develop an optimal nutritional intervention that can be accomplished in the clinic shortly after injury. The aim is to optimize the neurorecovery and quality of life of people with SCI over their life-span. As an early career investigator at the intersection of SCI, rehabilitation medicine, and nutrition science, the environment at UAB is perfect. In my short time at UAB I have taken on a number of collaborations while increasing the funding for my independent work. The 4 publications presented below show our capacity to conduct clinical research trials in the SCI population.
1. Yarar-Fisher C, Polston KF, Eraslan M, Henley KY, Kinikli GI, Bickel CS, Windham ST, McLain AB, Oster RA, Bamman MM. Paralytic and non-paralytic muscle adaptations to exercise training vs. high protein diet in individuals with long-standing spinal cord injury. J Appl Physiol (1985). 2018 Mar 1; PubMed PMID: 29494292.
2. Yarar-Fisher C, Bickel CS, Kelly NA, Stec MJ, Windham ST, McLain AB, Oster RA, Bamman MM. Heightened TWEAK-NF-ÎºB signaling and inflammation-associated fibrosis in paralyzed muscles of men with chronic spinal cord injury. Am J Physiol Endocrinol Metab. 2016 May 1;310(9): E754-61. PubMed PMID: 26931128; PubMed Central PMCID: PMC4888537.
3. Yarar-Fisher C, Bickel CS, Windham ST, McLain AB, Bamman MM. Skeletal muscle signaling associated with impaired glucose tolerance in spinal cord-injured men and the effects of contractile activity. J Appl Physiol (1985). 2013 Sep 1;115(5):756-64. PubMed PMID: 23766505; PubMed Central PMCID: PMC4073980.
4. Yarar-Fisher C, Chen Y, Jackson AB, Hunter GR. Body mass index underestimates adiposity in women with spinal cord injury. Obesity (Silver Spring). 2013 Jun;21(6):1223-5. PubMed PMID: 23913734; PubMed Central PMCID: PMC3740452.

B. Positions and Honors
Positions and Employment
2005 - 2006 Physical Therapist, Synapse Neurorehabilitation Clinic, Ankara
2008 - 2011 Graduate Teaching Assistant, Auburn University, Auburn, AL
2011 - 2014 Post-doctoral trainee, University of Alabama at Birmingham, Birmingham, AL
2014 - 2015 Instructor, Department of Nutrition, University of Alabama at Birmingham, Birmingham, AL
2015 - Assistant Professor, Department of Physical Medicine and Rehabilitation, University of Alabama at Birmingham, Birmingham, AL

Other Experience and Professional Memberships
2008 - Member, American College of Sports Medicine
2009 - Member, Southeastern American College of Sports Medicine
2011 - Member, American Physiological Society
2013 - Member, American Congress of Rehabilitation Medicine
2017 - Peer Review, NIH, Early Career Reviewer
2017 - Member, Academy of Spinal Cord Injury Professionals

Honors
2009 Outstanding Graduate Student, Auburn University/School of Kinesiology
2009 Outstanding International Student, Auburn University/School of Kinesiology
2010 Dissertation Award, Auburn University/Graduate School
2010 G. Dennis Wilson Graduate Award, Auburn University/School of Kinesiology
2011 - 2014 Recipient of Nutrition and Obesity Research Center Training Grant, University of Alabama at Birmingham, T32DK062710
2013 Career Enhancement Award, University of Alabama at Birmingham/Office of Postdoctoral Education
2013 - 2015 Mary Switzer Postdoctoral Fellowship, NIDILRR
2014 - 2017 Treasurer, Spinal Cord Injury Special Interest Group, American Congress of Rehabilitation Medicine
2015 - 2015 Creativity is a Decision Award, Nutrition and Obesity Research Center, University of Alabama at Birmingham
2017 Chair-Elect, Spinal Cord Injury Special Interest Group, American Congress of Rehabilitation Medicine

C. Contribution to Science
1. Physiological and sensorimotor changes in response to massage therapy and ankle rehabilitation. TM has become a mainstream treatment for multiple conditions; however, research is lacking to authenticate the efficacy, optimal parameters, or underlying physiological responses of this treatment. We were first to show that TM not only increases blood flow in the treated areas but also in the adjacent, not-massaged areas. In addition, we have introduced dynamic infrared thermography, a useful tool to measure noninvasive, noncontact changes in skin temperature, as an alternative measure for peripheral blood flow changes for massage therapy research. We also demonstrated that TM produces improvements in balance, nervous system, and cardiovascular measures which increase over time and are maintained after therapy ceases in older individuals. This is a substantial finding strongly promoting this treatment as a non-pharmaceutical intervention for falls in older adults. In addition to massage therapy, we assessed the effect of balance training on sensorimotor measures in participants with chronic ankle instability (CAI). The tendency toward repeated ankle sprains and recurring symptoms (e.g., pain, weakness, giving way) has been reported to occur in as high as 40% to 70% of individuals who have sustained a lateral ankle sprain. As balance training is a common component of ankle rehabilitation, understanding its effect on the sensorimotor system in individuals with CAI may enable us to optimize protocols to better utilize this rehabilitation method. We were first to show that after 6 weeks of balance training, dynamic balance, inversion joint position sense, and changes in motoneuron pool excitability improved in individuals with CAI compared to healthy controls who did not train. Our results suggest that balance training may lead to a reduction in the incidence of repeated injury and produce improvements in the daily functioning of individuals with CAI.
a. Sefton JM, Yarar C, Berry JW. Six weeks of massage therapy produces changes in balance, neurological and cardiovascular measures in older persons. Int J Ther Massage Bodywork. 2012;5(3):28-40. PubMed PMID: 23087776; PubMed Central PMCID: PMC3457720.
b. Sefton JM, Yarar C, Berry JW. Massage Therapy Produces Short-term Improvements in Balance, Neurological, and Cardiovascular Measures in Older Persons. Int J Ther Massage Bodywork. 2012;5(3):16-27. PubMed PMID: 23087775; PubMed Central PMCID: PMC3457719.
c. Sefton JM, Yarar C, Hicks-Little CA, Berry JW, Cordova ML. Six weeks of balance training improves sensorimotor function in individuals with chronic ankle instability. J Orthop Sports Phys Ther. 2011 Feb;41(2):81-9. PubMed PMID: 21169716.
d. Sefton JM, Yarar C, Berry JW, Pascoe DD. Therapeutic massage of the neck and shoulders produces changes in peripheral blood flow when assessed with dynamic infrared thermography. J Altern Complement Med. 2010 Jul;16(7):723-32. PubMed PMID: 20590481.

2. Whole body vibration intervention to improve cardiovascular health in SCI. During my doctoral work I developed a significant interest in SCI rehabilitation and discovering alternative exercise interventions that can be easily utilized by individuals with SCI for improving cardiovascular health. Although cardiovascular benefits in response to upper body exercise and functional electrical stimulation are shown in the SCI population, pain and autonomic dysreflexia have become the most common complaint of individuals with SCI who are engaged in these exercises regularly. Whole-body vibration (WBV) has been suggested as a potential exercise intervention for improving cardiovascular and musculoskeletal performance in able-bodied individuals; however, no study investigated whether WBV can be utilized for cardiovascular benefits in the SCI population. We were the first research group who assessed the efficacy of WBV for improving cardiovascular outcomes in individuals with long-standing SCI. Although we did not show significant improvements in cardiovascular outcomes with WBV, we introduced a novel clinical application of WBV for individuals with SCI. We showed that blood pressure in individuals with SCI appeared to be maintained much better in the upright position when WBV is applied. Thus, this could be helpful in the rehabilitation of SCI patients by allowing them to avoid the difficulties of orthostatic hypotension earlier in their rehabilitation programs.
a. Yarar-Fisher C, Pascoe DD, Gladden LB, Quindry JC, Hudson J, Sefton J. Acute physiological effects of whole body vibration (WBV) on central hemodynamics, muscle oxygenation and oxygen consumption in individuals with chronic spinal cord injury. Disabil Rehabil. 2014;36(2):136-45. PubMed PMID: 23651125.

3. During my postdoctoral training I was fortunate to continue my research in individuals with long-standing SCI and receive federal funding (a post-doctoral fellowship) to investigate potential contributors to metabolic disease after SCI, including alterations in skeletal muscle metabolism and body composition.
Skeletal muscle metabolic adaptations after SCI. Changes in skeletal muscle insulin sensitivity and glucose metabolism are the initiating defect in type 2 diabetes, evident decades before beta-cell failure. The transformation of muscles from a slow-oxidative to a fast-glycolytic phenotype after SCI yields a muscle tissue that is insulin resistant and metabolically inflexible. Chronic SCI muscle presents with a diabetic phenotype. Our research confirmed that human SCI muscle has histochemical and biochemical properties that are very similar to that of human diabetic muscle, including fewer Type I fibers and a predominance of Type IIax+IIx fibers. These fibers have significantly reduced glucose handling capacity under insulin and exercise-stimulated conditions due to lower levels of the insulin receptor, glucose transporter 4 (GLUT 4), hexokinase II, glycogen synthase, and pyruvate dehydrogenase-E1Î±. Our previous work demonstrated that individuals with chronic SCI (22 years post-injury) have impaired whole-body glucose tolerance and insulin sensitivity associated with marked downregulation of skeletal muscle GLUT 4 expression. In addition, because persistent inflammation and increased levels of proinflammatory cytokines in the skeletal muscle have been shown as potential contributors to muscle insulin resistance, we assessed proinflammatory gene expression and intracellular signaling in the chronic SCI muscle. Our findings demonstrated that individuals with long-standing SCI have heightened muscle inflammatory signaling and the TWEAK-Fn14-NFÎºB signaling pathway may be an important mediator of this inflammation. This impairment, when combined with transformation of skeletal muscles from a slow-oxidative to a fast-glycolytic phenotype and impaired whole-body insulin sensitivity, may have an important role in muscle insulin resistance and type 2 diabetes associated with SCI.
Limited use of Body Mass Index after SCI. Due to significant neurological impairment, body composition drastically deteriorates, as early as 6 months after SCI, with an excessive loss of lean mass below the level of injury and an increased total fat mass. Detailed and accurate descriptions of the amount and distribution of fat mass and adipose tissue after SCI remain limited, particularly across population variables like sex, anatomical level of injury, and severity of injury. We were first to show that regardless of injury level, women with SCI had a higher soft tissue percent fat than able-bodied women at any given body mass index (BMI). Therefore, our research group confirmed a limited use of BMI in measuring adiposity in women with SCI, particularly among those with tetraplegia. Underestimation of adiposity with BMI has important clinical implications as obesity has been shown to be associated with metabolic disorders. Consequently, we have introduced new recommendations for BMI cutoff points for defining obesity in women with SCI (28 kg/m2 for paraplegia and 21 kg/m2 for tetraplegia).
a. Yarar-Fisher C, Bickel CS, Kelly NA, Stec MJ, Windham ST, McLain AB, Oster RA, Bamman MM. Heightened TWEAK-NF-ÎºB signaling and inflammation-associated fibrosis in paralyzed muscles of men with chronic spinal cord injury. Am J Physiol Endocrinol Metab. 2016 May 1;310(9): E754-61. PubMed PMID: 26931128; PubMed Central PMCID: PMC4888537.
b. Yarar-Fisher C, Bickel CS, Windham ST, McLain AB, Bamman MM. Skeletal muscle signaling associated with impaired glucose tolerance in spinal cord-injured men and the effects of contractile activity. J Appl Physiol (1985). 2013 Sep 1;115(5):756-64. PubMed PMID: 23766505; PubMed Central PMCID: PMC4073980.

c. Yarar-Fisher C, Chen Y, Jackson AB, Hunter GR. Body mass index underestimates adiposity in women with spinal cord injury. Obesity (Silver Spring). 2013 Jun;21(6):1223-5. PubMed PMID: 23913734; PubMed Central PMCID: PMC3740452.

4. During my first three years as a faculty, I have expanded my research focus to study new but related areas. My research program has focused on investigating the effects of brown adipose tissue loss and various dietary interventions, including low carbohydrate and ketogenic diets (findings are under review), on metabolic function and neurological recovery in individuals with acute and chronic injuries. Drs. Barbara Gower and Robert Oster (Co-Is in the proposed project) have been collaborators in these projects. In addition, I have served as a member of American Congress of Rehabilitation Medicine/SCI-Interdisciplinary Special Interest Group to promote knowledge translation via educating providers to deliver best practices, and to advocate funding for future rehabilitation research.
Diet and exercise effects on whole body and skeletal muscle metabolism in the chronic stages of SCI. In a clinical research study (funded by NIDILRR/ H133F130051), we aimed to determine if 8 weeks of neuromuscular electrical simulation induced leg resistance training (NMES-RE) plus arm cycling vs. high-protein diet induces physiological adaptations necessary to improve insulin sensitivity, glucose tolerance, and skeletal muscle metabolism and phenotype in SCI individuals with insulin resistance. Despite the increase in Type I and Type IIa fiber size, Type I fiber distribution was not changed following leg NMES-RE plus arm cycling. In addition, no changes were observed in skeletal muscle signaling pathways for glucose utilization. These results laid the groundwork for our ongoing research (1K01HD87463-01A1, received during my first year of faculty appointment) by suggesting that early prevention against these deleterious adaptations in muscle is expected to be much more effective than attempting to reverse changes several months/years after SCI. Our studies using novel electrical stimulation training protocols to improve whole body and muscle metabolism in the acute stages of SCI are ongoing.
a. Yarar-Fisher C, Polston KF, Eraslan M, Henley KY, Kinikli GI, Bickel CS, Windham ST, McLain AB, Oster RA, Bamman MM. Paralytic and non-paralytic muscle adaptations to exercise training vs. high protein diet in individuals with long-standing spinal cord injury. J Appl Physiol (1985). 2018 Mar 1; PubMed PMID: 29494292.
b. Yarar-Fisher C, Heyn P, Zanca JM, Charlifue S, Hsieh J, Brienza DM. Early Identification of Cardiovascular Diseases in People With Spinal Cord Injury: Key Information for Primary Care Providers. Arch Phys Med Rehabil. 2017 Jun;98(6):1277-1279. PubMed PMID: 28185637.
c. Smith DL Jr, Yarar-Fisher C. Contributors to Metabolic Disease Risk Following Spinal Cord Injury. Curr Phys Med Rehabil Rep. 2016 Sep;4(3):190-199. PubMed PMID: 29276654; PubMed Central PMCID: PMC5737009.

D. Additional Information: Research Support and/or Scholastic Performance
Ongoing Research Support
1K01HD87463-01A1, NIH/NICHD
Yarar-Fisher, Ceren (PI)
07/01/17-01/30/22
Targeting skeletal muscle to improve metabolic health in individuals with spinal cord injury
Role: PI
Completed Research Support
KL2TR001419-01, UAB Center for Clinical and Translational Science
Yarar-Fisher, Ceren (PI)
11/01/15-06/30/17
Utilizing Ketogenic Diet to Improve Neuro-recovery Following Spinal Cord Injury
Role: PI
ED-GRANTS-011713-002, National Institute on Disability and Rehabilitation Research/Mary Switzer Merit Research Fellowship
Yarar-Fisher, Ceren (PI)
08/01/13-04/01/15
Novel Exercise and Diet Prescription to Improve Body Composition and Metabolic Health in Individuals with Long-Standing Spinal Cord Injury
Role: PI
T32DK062710, NIH
Yarar-Fisher, Ceren (PI)
11/01/11-10/30/14

Nutrition and Obesity Training Grant, University of Alabama at Birmingham (UAB), Birmingham, AL
Role: Post-Doctoral Scholar
Dissertation Award, Auburn University Graduate School
Yarar-Fisher, Ceren (PI)
08/01/10-07/01/11
Acute Effects of Whole Body Vibration on Central and Peripheral Hemodynamic Responses in Individuals with Spinal Cord Injury
Role: PI

Jia Li, PhD
Uab

(no CV uploaded)

Keith Polston, MS
Uthsc

(no CV uploaded)

Mualla Eraslan, MS
Uab

(no CV uploaded)

Scott Bickel, PT, PhD
Samford University

(no CV uploaded)

Samuel Windham, MD
Uab

(no CV uploaded)

Robert Oster, PhD
Uab

(no CV uploaded)

Marcas Bamman, PhD
Uab

(no CV uploaded)

High-thoracic spinal cord injury acutely impairs cardiac contractile function

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Christopher West, PhD
University of British Columbia

CV:
A. Personal Statement
I am an integrative physiologist with a focus on how spinal cord injury (SCI) alters the control of cardiovascular and autonomic circuitry. I conduct research across the translational spectrum including in rodents, pigs, and the clinical SCI population. I run the Translational Integrative Physiology Laboratory located at the Blusson Spinal Cord Center. This Center houses the International Collaboration on Repair Discoveries, a collection of over 300 individuals working to improve the lives of people with SCI. My laboratory is supported by an infrastructure grant from the Canadian Foundation for Innovation and the British Columbia Knowledge Development Found. I hold competitive operating funding from the Heart and Stroke Foundation of Canada, the Rick Hansen Institute, the Craig Neilsen Foundation, and the US Department of Defense. Presently, my laboratory consists of 2 postdocs (both hold competitive fellowships), 1 MD-PhD student (4 x competitive scholarships), 1 PhD student (1 x competitive scholarship), and 3 MSc students (1 x competitive scholarship each). Over the course of the last 3 years I have published an average of 8 manuscripts per year, most of which feature in leading physiology (Hypertension, J. Physiology, AJP series) and/or Neurotrauma journals (JAMA Neurology, Neurology, J. Neurotrauma). In my work with the clinical SCI population, I have used epidural stimulation to activate dormant autonomic spinal circuitry and instantaneously restore vasomotor control over the heart, vasculature and cerebral circulation. In my pre-clinical experimental work, which has involved the development of novel rodent and porcine models of SCI, I combine state of the art cardiac imaging (MRI and high-frequency ultrasound) with invasive preparations (closed-chest cardiac pressure-volume loops) and standard bench techniques (molecular and histological approaches) to better understand the pathways that control cardio-autonomic function after injury and how to effectively manipulate them to improve autonomic and cardiovascular function. More recently, I have become interested in computational approaches to identify molecular signatures of SCI in the cord, autonomic ganglia and cardiovascular organs. We are using this approach to leverage our transcriptome wide sequencing data to better guide the dissection of spinal pathways that mediate plasticity in cardio-autonomic circuitry after SCI.

B. Positions and Honors
Positions and Employment
2004-2006 Exercise Physiologist, Anglia Ruskin University, Cambridge. UK
2006-2007 Clinical Exercise Physiologist, Nuffield Proactive Health, London. UK
2007-2011 Graduate teaching Assistant, Brunel University, UK
2011-2014 Postdoctoral Fellow (Medicine), University of British Columbia, Canada
2014- Assistant Professor (Kinesiology/Medicine), University of British Columbia, Canada
Other Experience and Professional Memberships
2008- Member, American College Sports Medicine
2011- Member, American Spinal Injury Association (+Autonomic Standards Committee)
2015- Member, American Physiological Society (Cardiovascular Section)
2015- Member, SCI Action Canada
2015- Member, SCI Action International
Honors
2008 Brunel University Chancellor Prize for outstanding doctoral research, UK
2011 Gordon Hibert Award for best postdoctoral research, ICORD, UBC. Canada
2012 Gordon Hibert Award for best postdoctoral research, ICORD, UBC. Canada
2012 Paralympic games participation medal
2013 Gordon Hibert Award for best postdoctoral research, ICORD, UBC. Canada
2013 Sam Schmidt Young Investigator Award (American Spinal Injuries Association)
2013 Winner UBC 3-min Postdoc Slam
2014 Michael Smith Foundation for Health Research Scholar Award

C. Contribution to Science (selected from a total of 45: Citations >250: h-index 10: Web of Science)

A. Development of pre-clinical models and an in vivo cardio-autonomic testing battery to demonstrate plasticity in cardio-autonomic circuitry after SCI. I have led the development of a severe midline contusion injury at the T2 segment in rodents (and subsequently pigs) as well as a battery of in vivo cardio-autonomic assessment tools (in vivo direct left-ventricular, cardiac MRI, and arterial catheterization at rest and in response to various perturbations). I have used these models and tools to demonstrate for the first time that the SCI causes cardiac contractile dysfunction (reduced slope of the end-systolic pressure-volume relationship determined during inferior vena cava occlusion) and blood pressure dysregulation that is directly due to the loss of supraspinal control of spinal sympathetic pathways and plasticity within these circuits (Squair et al., 2018, Exp. Physiology; Squair et al., 2018, J Neurotrauma; DeVeau et al., 2018, AJP Heart and Circ). I have also investigated the long-term cardiac consequences of SCI on the heart by demonstrating the presence of interstitial fibrotic remodelling mediated via the Smad pathway (West et al., 2014. J Physiol) and cardiomycocyte atrophy, the latter of which seems to be due to increased proteolysis via both the Ubiquitin-Proteasome System and Autophagy (Poormasjedi-Meibod MS et al., 2018, J Neuortauma). In the peripheral vasculature, I have shown the presence of vascular stiffening and altered adrenergic and cholinergic control, likely mediated by changes in receptor sensitivity (West et al., NNR. 2016). I have also found that different subsets of sensory afferents infiltrate 'non-typical' laminae within the spinal cord, which mediates a cascade of aberrant synapses to drive plasticity in spinal circuits controlling autonomic and cardiac function (West CR et al., 2016. Hypertension). I have confirmed the temporal pattern of cardiovascular dysfunction in rodents with SCI (via chronic telemetric recordings of temperature, heart rate, and blood pressure) and shown that such changes occur rapidly after injury, implying that the immediate loss of supraspinal control is a key regulator of normal cardio-autonomic function (within the first few mins-to-days (West et al., J Neurotrauma. 2015).

Squair JW, Liu J, Tetzlaff W, Krassioukov AV, West CR*. (2018) Spinal cord injury induced cardiomyocyte atrophy and impaired cardiac function are severity dependent. Experimental Physiology. Feb 1;103(2):179-189

Squair JW, DeVeau KM, Harman KA, Poormasjedi-Meibod MS, Hayes B, Liu J, Magnuson DSK, Krassioukov AV, West CR*. (2018) Spinal cord injury causes systolic dysfunction and cardiomyocyte atrophy. J Neurotrauma. Feb 1;35(3):424-434

DeVeau KM, Harman KA, Squair JW, Krassioukov AV, Magnuson DSK, West CR*. (2017) A comparison of passive hind-limb cycling and active upper-limb exercise provides new insights into systolic dysfunction following spinal cord injury. Am J Physiol Heart Circ Physiol. Nov 1;313(5):H861-H870.

West CR, Squair JW, McCracken L, Currie KD, Somvanshi R, Yuen V, Phillips AA, Kumar U, McNeill JH, and Krassioukov AV. (2016) Cardiac Consequences of Autonomic Dysreflexia in Spinal Cord Injury. Hypertension. 1281-1289.

West CR, Crawford MA, Poormasjedi-Meibod MS, Currie KD, Fallavollita A, Yuen V, McNeill JH, and Krassioukov AV. (2014) Passive hind-limb cycling improves cardiac function and reduces cardiovascular disease risk in experimental spinal cord injury. J Physiol. 1771-83.

West CR, Crawford MA, Laher I, Ramer MS, and Krassioukov AV. (2016) Passive Hind-Limb Cycling Reduces the Severity of Autonomic Dysreflexia after Experimental Spinal Cord Injury. Neurorehabil Neural Repair. 317-27.

West CR, Popok D, Crawford MA, and Krassioukov AV. (2015) Characterizing the Temporal Development of Cardiovascular Dysfunction in Response to Spinal Cord Injury. J Neurotrauma. 922-30.

B. Defining the role of the sympathetic nervous system in mediating the cardiac chronotropic and inotropic response to exercise in humans with spinal cord injury. I have conducted integrated physiological studies in humans with cervical SCI who exhibit sparing of descending sympathetic fibers despite exhibiting a

neurologically complete injury. These individuals provide an ideal model to examine the role of the descending sympathetic pathways in modulating cardiovascular indices. As compared to lesion-level matched individuals (i.e., same degree of motor/sensory dysfunction), I have shown that individuals with spared sympathetic fibers exhibit higher maximal heart rates and improved endurance performance (West CR et al., 2015. SJMSS), a higher aerobic exercise capacity (West CR et al., 2013. MSSE), and better orthostatic tolerance (West CR et al., 2014. MSSE). Intriguingly, I have conducted a recent collaborative project (I conducted the ultrasound imaging and assisted with analysis/interpretation) to demonstrate that when the cardiac-projecting sympathetic fibers are decentralized, diastolic basal and apical rotation increase (Currie KD et al., 2017. J Neurotrauma), which presumably is a mechanical compensation for the otherwise reduced diastolic function. The implications of this work are that the sympathetic fibers are neuro-anatomically distinct from motor fibers and play a key role in regulating both chronotropic and inotropic cardiac function, but are less important for mechanical cardiac responses. To further probe the possibility that these spinal pathways can modulate cardio-autonomic control in the chronic period after SCI we conducted a field-first study where an individual with motor and autonomic complete cervical SCI was implanted with an epidural electrical stimulation array and controller (West CR et al., 2018. JAMA Neurology). Using high-frequency electrical stimulation we are able to activate autonomic circuitry in a controlled manner and acutely normalize cardio-autonomic function (normalize the cardiac, vascular and cerebrovascular response to an orthostatic challenge test).

West CR, Gee CM, Voss C, Hubli M, Currie KD, Schmid J, and Krassioukov AV. (2015) Cardiovascular control, autonomic function, and elite endurance performance in spinal cord injury. Scand J Med Sci Sports. 476-85.

West CR, Romer LM, and Krassioukov A. (2013) Autonomic function and exercise performance in elite athletes with cervical spinal cord injury. Med Sci Sports Exerc. 261-7.

West CR, Wong SC, and Krassioukov AV. (2014) Autonomic cardiovascular control in Paralympic athletes with spinal cord injury. Med Sci Sports Exerc. 60-8.

Currie KD, West CR, Stohr EJ, and Krassioukov AV. (2017) Left ventricular mechanics in untrained and trained males with tetraplegia. J Neurotrauma. 591-598.

West CR, Phillips AA, Squair JW, Williams AM, Walter M, Lam L, Krassioukov AV. (2018) Effect of epidural stimulation on cardiovascular function in one individual with spinal cord injury. JAMA Neurology doi:10.1001/jamaneurol.2017.5055. Note: I am co-first author with Phillips AA

C. Investigating the cardiac and pulmonary effects of augmenting intra-abdominal (i.e., gastric) pressure at rest and during exercise. In addition to examining the effect of the sympathetic nervous system on cardiac inotropic function, I have also investigated the role of the Frank-Starling mechanism (i.e., increased venous return) in mediating cardiac indices at rest and in response to exercise. I studied individuals with absent descending surpaspinal sympathetic cardiac control who are only able to increase cardiac output via vagal withdrawal and/or increased venous return. I conducted a series of studies where I applied tight strapping around the abdomen (‘abdominal binding’) and investigated the corresponding changes in both pulmonary mechanics and cardiovascular function. At rest, I found that increasing intraabdominal pressure with abdominal binding resulted in increased cardiac output and a compensatory reduction in heart rate that occurred with no apparent negative pulmonary effects (West CR et al., 2012 RPNB). Intriguingly, I found that abdominal binding in individuals with intact supraspinal sympathetic cardiac control elicited no increase in stroke volume, implying that 1) stroke volume is maintained at rest by the sympathetic nervous system, and 2) that in the absence of descending sympathetic control, the Frank-Starling mechanism can be manipulated to facilitate stroke volume. I have subsequently extended these findings during both field-based exercise (West CR et al., 2014. JSMS) and incremental treadmill exercise in the laboratory (West CR et al., 2014. J Appl. Physiol), where I have found that facilitating venous return with abdominal binding increased endurance performance and aerobic exercise capacity. I have also attempted to strengthen the diaphragm via specific inspiratory muscle training in athletes with spinal cord injury with a view to improving cardiopulmonary interactions (West CR et al., 2014. SJMSS). Although I found an increase in diaphragmatic strength and a trend towards improved central circulatory function the findings were not as conclusive as for abdominal binding, suggesting that optimizing the mechanical configuration of the

respiratory system opposed to the strength of the diaphragm per se may be more important in optimizing central cardiovascular responses to exercise. Nevertheless, taken as a complete set of studies these findings suggest that targeting the Frank-Starling mechanism can facilitate venous return, cardiac output, and oxygen delivery in individuals with SCI.

West CR, Campbell IG, Shave RE, and Romer LM. (2012) Effects of abdominal binding on cardiorespiratory function in cervical spinal cord injury. Respir Physiol Neurobiol. 275-82.

West CR, Campbell IG, Goosey-Tolfrey VL, Mason BS, and Romer LM. (2014) Effects of abdominal binding on field-based exercise responses in Paralympic athletes with cervical spinal cord injury. J Sci Med Sport. 351-5.

West CR, Goosey-Tolfrey VL, Campbell IG, and Romer LM. (2014) Effect of abdominal binding on respiratory mechanics during exercise in athletes with cervical spinal cord injury. J Appl Physiol. 36-45.

West CR, Taylor BJ, Campbell IG, and Romer LM. (2014) Effects of inspiratory muscle training on exercise responses in Paralympic athletes with cervical spinal cord injury. Scand J Med Sci Sports. 764-72.

D. Research Support

Presently held:

09/17-09/20 US DoD-TRA. Title: Offsetting Cardiac Dysfunction in Acute Spinal Cord Injury to Optimize Neurological Outcome.
Position: Principal Investigator

07/17-07/19 Craig Neilsen Foundation. Title: Acute cardiac and vascular responses to spinal cord injury in a novel porcine model.
Position: Principal Investigator

01/16-01/21 Canadian Foundation for Innovation & British Columbia Knowledge Development Fund / infrastructure grant. Title: Development of the Translational Integrative Physiology Laboratory.
Position: Principal Investigator

07/17-07/21 Heart and Stroke Foundation National New Investigator. Title: Cardiac function after SCI: From discovery to delivery.
Position: Principal Investigator

05/17-05/18 Rick Hansen Foundation / (Operating grant). Title: Cardiac Mitochondrial function after SCI.
Position: Principal Investigator

07/15-06/18 Heart and Stroke Foundation / (Operating grant). Title: Habitual physical activity, exercise and cardiovascular function in spinal cord injury.
Position: Principal Investigator

05/15-04/18 Rick Hansen Foundation / (Operating grant). Title: Development, Evaluation and Dissemination of the Physiotherapists Enhancing Physical Activity (PEPA) Toolkit.
Position: Co-Investigator (PI: Dr. Martin-Ginis)

03/15-02/17 Rick Hansen Foundation / (Operating grant). Title: Effect of Epidural Stimulation on Cardiovascular and Cognitive Health Following Spinal Cord Injury.
Position: Co-Investigator (PI: Dr. Andrei Krassioukov)

07/14-07/19 Michael Smith Foundation for Health Research / (Career Investigator salary award). Title: Cardiac responses to spinal cord injury and exercise.
Position: Principal investigator

Completed Support

12/15-12/17 Rick Hansen Foundation / (Operating grant). Title: Acute cardiac and hemodynamic responses to spinal cord injury.
Position: Principal Investigator

12/14-12/16 Rick Hansen Foundation / (Operating grant). Title: Don't sugar coat it: Cardiac consequences of Type 2 diabetes after SCI.
Position: Principal Investigator

12/14-12/16 International Collaboration on Repair Discoveries / (Operating grant). Title: Development of Measurement Tools to Study Hybrid Exercise as a Novel Rehabilitation Tool to Improve Cardiovascular and Locomotor Outcomes after Spinal Cord Injury.
Position: Co Principal Investigator

11/14-11/16 International Collaboration on Repair Discoveries / (Equipment grant). Title: Purchasing of a pressure-volume conductance catheter and associated hardware. Position: Principal Investigator

07/13-07/16 Craig Neilsen Foundation / (Operating grant). Title: Cardiac function in spinal cord injury – From bench to bedside.
Position: Co-investigator

01/11-01/16 Canadian Institute for Health Research / (Team Grant). Title: Improving cardiovascular health for Canadians living with spinal cord injury: effects of exercise and targeted education.
Position: Co-investigator

07/13-07/15 American Spinal Injuries Association / (Operating grant/young scientist award). Title: Cardiac function in spinal cord injury.
Position: Co-principal investigator

Alex Williams, PhD
University of British Columbia

(no CV uploaded)

Neda Manouchehri, BSc
University of British Columbia

(no CV uploaded)

Keerit Tauh, MD
University of British Columbia

(no CV uploaded)

Malihesadat Poormasjedimeibod, PhD
University of British Columbia

(no CV uploaded)

Kitty So, BSc

University of British Columbia

(no CV uploaded)

Katelyn Shortt, BSc
University of British Columbia

(no CV uploaded)

Femke Streijger, PhD
University of British Columbia

(no CV uploaded)

Robert Boushel, PhD
University of British Columbia

(no CV uploaded)

Brian Kwon, MD, PhD
University of British Columbia

(no CV uploaded)

Intrathecal baclofen pump placement in the pectoralis region: A case report

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Beverly Hon, MD
Jfk Johnson Rehabilitation Institute

CV:
Chapter Publications:
Hon B, Wang J, Yonclas P, Kirshblum S. Neuro-Critical care management of acute spinal cord injury. In: Kirshblum S, Lin VL, eds. Spinal Cord Medicine. Third Edition. 2019. In Press.

Abstracts published and presented at national conferences:
Hon B, Linsenmeyer T. Autonomic dysreflexia in an individual with spina bifida during urodynamic evaluation. A case report. Accepted and pending publication.

Hon B, Kirshblum S. Prevalence of deep vein thrombosis on admission screening of complete spinal cord injury patients in acute rehabilitation. Abstract - J. Spin Cord Med. Sept. 2017, 28(5): 597-598

Hon B, Barrett AM. Assessing medication self administration performance and unawareness in rehabilitation patients. Abstract - Am J Phys Med Rehabil. March 2017, 96(3): a100

Hon B, Farag A. Complications from nonsurgical management of a distal femur fracture in a spinal cord injury patient. Abstract - Am J Phys Med Rehabil. March 2016, 95(3): a81-82

Hon B, Farag A. Successful conservative management of scapholunate dissociation in a spinal cord injury patient. Abstract - Am J Phys Med Rehabil. March 2016, 95(3): a113

Hon B, Bapineedu R. Bickerstaff encephalitis associated with cortical features: A case report. Abstract - PM R, September 2015, 7(9): Supplement, S119

Hon B, Anan E. Successful conservative management of an acutely displaced femoral head liner in a left total hip replacement. Abstract - Am J Phys Med Rehabil. March 2015, 94(3): S77-78

Peer reviewed articles:
Hon B, Kirshblum S. Duplex ultrasound surveillance for deep vein thrombosis after acute traumatic spinal cord injury at rehabilitation admission. J of Spinal Cord Med. Recommended for publication pending revision.

Einstein E, Patterson C, Hon B, et al. Somatostatin signaling in neuronal cilia is critical for object recognition memory. J Neurosci, March 2010, 30(12): 4306-4314

Rehab in Review:
â€œRehab in Reviewâ€. A monthly international publication for physical medicine and rehabilitation. Emory University, Atlanta GA. Contributed 2 reviews.

National oral presentations:
Routine duplex screening in rehabilitation after acute spinal cord injury. Accepted for platform presentation at Academy of Spinal Cord Injury Professionals (ASCIP) Educational Conference and Expo. New Orleans, Louisiana. September 2018.

Risk factors associated with deep vein thrombosis on admission screening of traumatic spinal cord injury patients in acute rehabilitation. Platform presentation at Association of Academic Physiatrists (AAP). Atlanta, Georgia. February 2018.

Prevalence of deep vein thrombosis on admission screening of complete spinal cord injury patients in acute rehabilitation. Platform presentation at ASCIP Educational Conference and Expo. Denver, Colorado. September 2017.

Regional and local oral presentations:
Introduction to Spinal Cord Injury. Oral presentation at JFK Johnson Rehabilitation Institute. Edison, NJ August 2018.

American Spinal Injury Association classification. Oral presentation at Rutgers NJMS Department of PM&R. West Orange, NJ. August 2017.

Spinal cord injury assessment. Oral presentation at Rutgers NJMS Department of PM&R. West Orange, NJ. July 2017.

Association between medication burden and disposition from acute rehabilitation. Oral presentation at Rutgers NJMS Department of PM&R. West Orange, NJ. June 2017.

EMG case conference: Carpal tunnel and anomalous innervations. Oral presentation at Rutgers NJMS Department of PM&R. East Orange, NJ. April 2017.

A review of the current literature of Bickerstaff Encephalitis. Oral presentation at Rutgers NJMS Department of PM&R. West Orange, NJ. May 2015.

Amanda Farag, MD
East Orange Veterans Affairs

(no CV uploaded)

Keith Claffey, CWCN, APN
East Orange Veterans Affairs

(no CV uploaded)

Carol Gibson-Gill, MD
East Orange Veterans Affairs

(no CV uploaded)

The interpretation of neurological recovery based on timing of neurologic assessment in spinal cord injury

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Nader Fallah, PhD
Ubc, Rick Hansen Institute

CV:
Position:
2014- Rick Hansen Institute Senior Biostatistician, Department of Research
Academic Position: 2016- University of British Columbia Adjunct professor, Division of Neurology, Department of Medicine

Awards/Scholarships:
2016 Third prize for best poster, International Collaboration on Repair Discoveries (ICORD) Annual Research Meeting, Vancouver
Research Experiences: 2012- Biostatistician, Rick Hansen Institute & University of
British Columbia, Canada Editorial board:
2015- HSOA Journal of Gerontology and Geriatric Medicine; Herald Scholarly Open Access
2016- The International Journal of Health Studies
Reviewing Activities: BMC Geriatric, Neuroepidemiology, Clinical Endocrinology, Journal of Public Health Journal of Applied Statistics, Neural Computing and Applications, Current Gerontology and Geriatric Research

Software:
Working knowledge of SPSS, SAS, R, Mplus, Matlab

Professional Membership:
The Institute of Mathematical Statistics (IMS)

Research Interests:
Statistical theory: Artificial Neural Networks, Machine learning, Multi-state Transition Model
Applications: Neuroscience, Alzheimerâ€™s and dementia, Spinal Cord Injury and Healthy Aging
Supervision of students and postdoctoral fellow: Jeffery Shum: BSc in Biomedical Engineering, Co-op program, Simon Fraser University, Applying nonlinear principal component analysis in spinal cord injury data, 2014 Freda Warner: MSc in Epidemiology, Simon Fraser University, Risk factors of in hospital mortality following traumatic spinal cord injury data, 2014-15 Manekta Bedi: MSc in Big Data (Computing Science), Simon Fraser University, Developing a new spinal cord injury mortality risk score by using neural networks, 2015 Maya Lichtenstein: Behavioral Neurology Fellow, University of
British Columbia, Discriminating social cognition deficits in bvFTD from that of depression 2014-2016

Publications:
A: Book Chapter:
B. Refereed Journals:

1: Phan P, Budhram B, Zhang Q, Rivers C, Noonan VK, Plashkes T, Wai EK, Paquet J, Roffey DM, Tsai E, Fallah N; RHSCIR Network. Highlighting Discrepancies in Walking Prediction Accuracy for Patients with Traumatic Spinal Cord Injury: an Evaluation of Validated Prediction Models using a Canadian Multi-centre Spinal Cord Injury Registry. Spine J. 2018 Sep 1. pii: S1529-9430(18)31104-5. doi: 10.1016/j.spinee.2018.08.016. [Epub ahead of print] PubMed PMID: 30179672.

2: Lichtenstein ML, Fallah N, Mudge B, Hsiung GR, Foti D, Beattie BL, Feldman HH. 16-Year Survival of the Canadian Collaborative Cohort of Related Dementias. Can J

Neurol Sci. 2018 Jul;45(4):367-374. doi: 10.1017/cjn.2018.6. Epub 2018 May 7. PubMed PMID: 29730995.

3: Fallah N, Rabiee S, Fallah M. Primary Disseminated Hydatid Cysts in a 14-Year-Old Girl: A Case Report. Acta Med Iran. 2017 Nov;55(11):726-729. PubMed PMID: 29307164.

4: Christison K, Walter M, Wyndaele JJM, Kennelly M, Kessler TM, Noonan VK, Fallah N, Krassioukov AV. Intermittent Catheterization: The Devil Is in the Details. J Neurotrauma. 2018 Feb 1. doi: 10.1089/neu.2017.5413. [Epub ahead of print] PubMed PMID: 29108476; PubMed Central PMCID: PMC5865623.

5: Orouji Z, Bajouri A, Ghasemi M, Mohammadi P, Fallah N, Shahbazi A, Rezvani M, Vaezirad F, Khalajasadi Z, Alizadeh A, Taghiabadi E, Dashtbozorgi S, Aghdami R, Hosseini SE, Bahahrvand H, Shafieyan S, Aghdami N. A single-arm open-label clinical trial of autologous epidermal cell transplantation for stable vitiligo: A 30-month follow-up. J Dermatol Sci. 2018 Jan;89(1):52-59. doi: 10.1016/j.jdermsci.2017.10.007. Epub 2017 Oct 18. PubMed PMID: 29103774.

6: Dalkilic T, Fallah N, Noonan VK, Salimi Elizei S, Dong K, Belanger L, Ritchie L, Tsang A, Bourassa-Moreau E, Heran MKS, Paquette SJ, Ailon T, Dea N, Street J, Fisher CG, Dvorak MF, Kwon BK. Predicting Injury Severity and Neurological Recovery after Acute Cervical Spinal Cord Injury: A Comparison of Cerebrospinal Fluid and Magnetic Resonance Imaging Biomarkers. J Neurotrauma. 2018 Feb 1;35(3):435-445. doi: 10.1089/neu.2017.5357. Epub 2017 Nov 6. PubMed PMID: 29037121.

7: Shojaei MH, Alavinia M, Craven BC, Cheng CL, Plashkes T, Shen T, Fallah N, Humphreys S, O'Connell C, Linassi AG, Ho C, Short C, Ethans K, Charbonneau R, Paquet J, Noonan VK, Furlan JC, Fehlings MG, Craven BC, Likitlersuang J, Sumitro E, Kalsi-Ryan S, Zariffa J, Wolfe D, Cornell S, Gagliardi J, Marrocco S, Rivers CS, Fallah NN, Noonan VK, Whitehurst D, Schwartz C, Finkelstein J, Craven BC, Ethans K, O'Connell C, Truchon C, Ho C, Linassi AG, Short C, Tsai E, Drew B, Ahn H, Dvorak MF, Paquet J, Fehlings MG, Noreau L, Lenz K, Bailey KA, Allison D, Ditor D, Baron J, Tomasone J, Curran D, Miller T, Grimshaw J, Moineau B, Alizadeh-Meghrazi M, Stefan G, Masani K, Popovic MR, Sumitro E, Likitlersuang J, Kalsi-Ryan S, Zariffa J, Garcia-Garcia MG, Marquez-Chin C, Popovic MR, Furlan JC, Gulasingam S, Craven BC, Furlan JC, Gulasingam S, Craven BC, Khan A, Pujol C, Laylor M, Unic N, Pakosh M, Musselman K, Brisbois LM, Catharine Craven B, Verrier MC, Jones MK, O'Shea R, Valika S, Holtz K, Szefer E, Noonan V, Kwon B, Mills P, Morin C, Harris A, Cheng C, Aspinall A, Plashkes T, Noonan VK, Chan K, Verrier MC, Craven BC, Alappat C, Flett HM, Furlan JC, Musselman KE, Milligan J, Hillier LM, Bauman C, Donaldson L, Lee J, Milligan J, Lee J, Hillier LM, Slonim K, Wolfe D, Sleeth L, Jeske S, Kras-Dupuis A, Marrocco S, McRae S, Flett H, Mokry J, Zee J, Bayley M, Lemay JF, Roy A, Gagnon HD, Jones MK, O'Shea R, Theiss R, Flett H, Guy K, Johnston G, Kokotow M, Mills S, Mokry J, Bain P, Scovil C, Houghton P, Lala D, Orr L, Holyoke P, Wolfe D, Orr L, Brooke J, Holyoke P, Lala D, Houghton P, Martin Ginis KA, Shaw RB, Stork MJ, McBride CB, Furlan JC, Craven BC, Giangregorio L, Hitzig S, Kapadia N, Popovic MR, Zivanovic V, Valiante T, Popovic

MR, Patsakos E, Brisbois L, Farahani F, Kaiser A, Craven BC, Patsakos E, Kaiser A, Brisbois L, Farahani F, Craven BC, Mortenson B, MacGillivray M, Mahsa S, Adams J, Sawatzky B, Mills P, Arbour-Nicitopoulos K, Bassett-Gunter R, Leo J, Sharma R, Latimer-Cheung A, Olds T, Martin Ginis K, Graco M, Cross S, Thiyagarajan C, Shafazand S, Ayas N, Schembri R, Booker L, Nicholls C, Burns P, Nash M, Green S, Berlowitz DJ, Taran S, Rocchi M, Martin Ginis KA, Sweet SN, Caron JG, Sweet SN, Rocchi MA, Zelaya W, Sweet SN, Bergquist AJ, Del Castillo-Valenzuela MF, Popovic MR, Masani K, Ethans K, Casey A, Namaka M, Krassiokov-Enns D, Marquez-Chin C, Marquis A, Desai N, Zivanovic V, Hebert D, Popovic MR, Furlan JC, Craven BC, McLeod J, Hicks A, Gauthier C, Arel J, Brosseau R, Hicks AL, Gagnon DH, Nejatbakhsh N, Kaiser A, Hitzig SL, Cappe S, McGillivray C, Singh H, Sam J, Flett H, Craven BC, Verrier M, Musselman K, Koh RGL, Garai P, Zariffa J, Unger J, Oates AR, Arora T, Musselman K, Moshe B, Anthony B, Gulasingam S, Craven BC, Michalovic E, Gainforth HL, Baron J, Graham ID, Sweet SN, Chan B, Craven BC, Wodchis W, Cadarette S, Krahn M, Mittmann N, Chemtob K, Rocchi MA, Arbour-Nicitopoulos K, Kairy D, Sweet SN, Sabetian P, Koh RGL, Zariffa J, Yoo P, Iwasa SN, Babona-Pilipos R, Schneider P, Velayudhan P, Ahmed U, Popovic MR, Morshead CM, Yoo J, Shinya M, Milosevic M, Masani K, Gabison S, Mathur S, Nussbaum E, Popovic M, Verrier MC, Musselman K, Lemay JF, McCullum S, Guy K, Walden K, Zariffa J, Kalsi-Ryan S, Alizadeh-Meghrazi M, Lee J, Milligan J, Smith M, Athanasopoulos P, Jeji T, Howcroft J, Howcroft J, Townson A, Willms R, Plashkes T, Mills S, Flett H, Scovil C, Mazzella F, Morris H, Ventre A, Loh E, Guy S, Kramer J, Jeji T, Xia N, Mehta S, Martin Ginis KA, McBride CB, Shaw RB, West C, Ethans K, O'Connell C, Charlifue S, Gagnon DH, Escalona Castillo MJ, Vermette M, Carvalho LP, Karelis A, Kairy D, Aubertin-Leheudre M, Duclos C, Houghton PE, Orr L, Holyoke P, Kras-Dupuis A, Wolfe D, Munro B, Sweeny M, Craven BC, Flett H, Hitzig S, Farahani F, Alavinia SM, Omidvar M, Bayley M, Sweet SN, Gassaway J, Shaw R, Hong M, Everhart-Skeels S, Houlihan B, Burns A, Bilsky G, Lanig I, Graco M, Cross S, Thiyagarajan C, Shafazand S, Ayas N, Schembri R, Booker L, Nicholls C, Burns P, Nash M, Green S, Berlowitz D, Furlan JC, Kalsi-Ryan S. Abstracts and Workshops 7th National Spinal Cord Injury Conference November 9 - 11, 2017 Fallsview Casino Resort Niagara Falls, Ontario, Canada. J Spinal Cord Med. 2017 Nov;40(6):813-869. doi: 10.1080/10790268.2017.1369666. PubMed PMID: 29034821; PubMed Central PMCID: PMC5778945.

8: Fallah N, Rahmati K, Fallah M. Prevalence of Human Hydatidosis Based on Hospital Records in Hamadan West of Iran from 2006 to 2013. Iran J Parasitol. 2017 Jul-Sep;12(3):453-460. PubMed PMID: 28979357; PubMed Central PMCID: PMC5623927.

9: Dvorak MF, Cheng CL, Fallah N, Santos A, Atkins D, Humphreys S, Rivers CS, White BAB, Ho C, Ahn H, Kwon BK, Christie S, Noonan VK. Spinal Cord Injury Clinical Registries: Improving Care across the SCI Care Continuum by Identifying Knowledge Gaps. J Neurotrauma. 2017 Oct 15;34(20):2924-2933. doi: 10.1089/neu.2016.4937. Epub 2017 Jul 26. PubMed PMID: 28745934; PubMed Central PMCID: PMC5653140.

10: Rivers CS, Fallah N, Noonan VK, Whitehurst DG, Schwartz CE, Finkelstein JA, Craven BC, Ethans K, O'Connell C, Truchon BC, Ho C, Linassi AG, Short C, Tsai E, Drew B, Ahn H, Dvorak MF, Paquet J, Fehlings MG, Noreau L; RHSCIR Network. Health Conditions: Effect on Function, Health-Related Quality of Life, and Life

Satisfaction After Traumatic Spinal Cord Injury. A Prospective Observational Registry Cohort Study. Arch Phys Med Rehabil. 2018 Mar;99(3):443-451. doi: 10.1016/j.apmr.2017.06.012. Epub 2017 Jul 19. PubMed PMID: 28732686.

11: Hicks KE, Zhao Y, Fallah N, Rivers CS, Noonan VK, Plashkes T, Wai EK, Roffey DM, Tsai EC, Paquet J, Attabib N, Marion T, Ahn H, Phan P; RHSCIR Network. A simplified clinical prediction rule for prognosticating independent walking after spinal cord injury: a prospective study from a Canadian multicenter spinal cord injury registry. Spine J. 2017 Oct;17(10):1383-1392. doi: 10.1016/j.spinee.2017.05.031. Epub 2017 Jul 14. PubMed PMID: 28716636.

12: Oladzad S, Fallah N, Nasernejad B. Combination of novel coalescing oil water separator and electrocoagulation technique for treatment of petroleum compound contaminated groundwater. Water Sci Technol. 2017 Jul;76(1-2):57-67. doi: 10.2166/wst.2017.185. PubMed PMID: 28708610.

13: Eddington KM, Burgin CJ, Silvia PJ, Fallah N, Majestic C, Kwapil TR. The Effects of Psychotherapy for Major Depressive Disorder on Daily Mood and Functioning: A Longitudinal Experience Sampling Study. Cognit Ther Res. 2017 Apr;41(2):266-277. doi: 10.1007/s10608-016-9816-7. Epub 2016 Oct 21. PubMed PMID: 28579660; PubMed Central PMCID: PMC5451128.

14: Marion TE, Rivers CS, Kurban D, Cheng CL, Fallah N, Batke J, Dvorak MF, Fisher CG, Kwon BK, Noonan VK, Street JT. Previously Identified Common Post-Injury Adverse Events in Traumatic Spinal Cord Injury-Validation of Existing Literature and Relation to Selected Potentially Modifiable Comorbidities: A Prospective Canadian Cohort Study. J Neurotrauma. 2017 Oct 15;34(20):2883-2891. doi: 10.1089/neu.2016.4933. Epub 2017 Jun 28. PubMed PMID: 28562167; PubMed Central PMCID: PMC5653096.

15: Truchon C, Fallah N, Santos A, Vachon J, Noonan VK, Cheng CL. Impact of Therapy on Recovery during Rehabilitation in Patients with Traumatic Spinal Cord Injury. J Neurotrauma. 2017 Oct 15;34(20):2901-2909. doi: 10.1089/neu.2016.4932. Epub 2017 Jun 26. PubMed PMID: 28493787; PubMed Central PMCID: PMC5652980.

16: Glennie RA, Batke J, Fallah N, Cheng CL, Rivers CS, Noonan VK, Dvorak MF, Fisher CG, Kwon BK, Street JT. Rural and Urban Living in Persons with Spinal Cord Injury and Comparing Environmental Barriers, Their Health, and Quality-of-Life Outcomes. J Neurotrauma. 2017 Oct 15;34(20):2877-2882. doi: 10.1089/neu.2016.4931. Epub 2017 May 18. PubMed PMID: 28462633; PubMed Central PMCID: PMC5653139.

17: Cheng CL, Plashkes T, Shen T, Fallah N, Humphreys S, O'Connell C, Linassi AG, Ho C, Short C, Ethans K, Charbonneau R, Paquet J, Noonan VK. Does Specialized Inpatient Rehabilitation Affect Whether or Not People with Traumatic Spinal Cord Injury Return Home? J Neurotrauma. 2017 Oct 15;34(20):2867-2876. doi: 10.1089/neu.2016.4930. Epub 2017 May 24. PubMed PMID: 28447870.

18: Abiri F, Fallah N, Bonakdarpour B. Sequential anaerobic-aerobic biological treatment of colored wastewaters: case study of a textile dyeing factory wastewater. Water Sci Technol. 2017 Mar;75(5-6):1261-1269. doi: 10.2166/wst.2016.531. PubMed PMID: 28333043.

19: Santos A, Fallah N, Lewis R, Dvorak MF, Fehlings MG, Burns AS, Noonan VK, Cheng CL, Chan E, Singh A, Belanger LM, Atkins D. Methodology of the Access to Care and Timing Simulation Model for Traumatic Spinal Cord Injury Care. J Neurotrauma. 2017 Mar 12. doi: 10.1089/neu.2016.4927. [Epub ahead of print] PubMed PMID: 28285549; PubMed Central PMCID: PMC5652975.

20: Burns AS, Santos A, Cheng CL, Chan E, Fallah N, Atkins D, Dvorak MF, Ho C, Ahn H, Paquet J, Kwon BK, Noonan VK. Understanding Length of Stay after Spinal Cord Injury: Insights and Limitations from the Access to Care and Timing Project. J Neurotrauma. 2017 Oct 15;34(20):2910-2916. doi: 10.1089/neu.2016.4935. Epub 2017 Mar 29. PubMed PMID: 28245734; PubMed Central PMCID: PMC5653133.

21: Hosseini SM, Fallah N, Royaee SJ. Optimization of photocatalytic degradation of real textile dye house wastewater by response surface methodology. Water Sci Technol. 2016 Nov;74(9):1999-2009. PubMed PMID: 27842020.

22: Park SE, Elliott S, Noonan VK, Thorogood NP, Fallah N, Aludino A, Dvorak MF. Impact of bladder, bowel and sexual dysfunction on health status of people with thoracolumbar spinal cord injuries living in the community. J Spinal Cord Med. 2017 Sep;40(5):548-559. doi: 10.1080/10790268.2016.1213554. Epub 2016 Aug 31. PubMed PMID: 27576584; PubMed Central PMCID: PMC5815154.

23: Kwon BK, Streijger F, Fallah N, Noonan VK, BÃ©langer LM, Ritchie L, Paquette SJ, Ailon T, Boyd MC, Street J, Fisher CG, Dvorak MF. Cerebrospinal Fluid Biomarkers To Stratify Injury Severity and Predict Outcome in Human Traumatic Spinal Cord Injury. J Neurotrauma. 2017 Feb;34(3):567-580. doi: 10.1089/neu.2016.4435. Epub 2016 Aug 15. PubMed PMID: 27349274.

24: Davidson RA, Carlson M, Fallah N, Noonan VK, Elliott SL, Joseph J, Smith KM, Krassioukov AV. Inter-Rater Reliability of the International Standards to Document Remaining Autonomic Function after Spinal Cord Injury. J Neurotrauma. 2017 Feb;34(3):552-558. doi: 10.1089/neu.2016.4489. Epub 2016 Jul 8. PubMed PMID: 27323843.

25: Evaniew N, Noonan VK, Fallah N, Rivers CS, Dvorak MF. Methylprednisolone for the Treatment of Patients with Acute Spinal Cord Injuries: Response. J Neurotrauma. 2016 May 15;33(10):975-6. doi: 10.1089/neu.2016.4499. PubMed PMID: 27094261.

26: Forooghian F, Kertes PJ, Eng KT, Albiani DA, Kirker AW, Merkur AB, Fallah N, Cao S, Cui J, Or C, Matsubara JA. Alterations in intraocular cytokine levels following intravitreal ranibizumab. Can J Ophthalmol. 2016 Apr;51(2):87-90. doi: 10.1016/j.jcjo.2015.11.001. PubMed PMID: 27085264.

27: Evaniew N, Belley-CÃ´tÃ© EP, Fallah N, Noonan VK, Rivers CS, Dvorak MF. Methylprednisolone for the Treatment of Patients with Acute Spinal Cord Injuries: A Systematic Review and Meta-Analysis. J Neurotrauma. 2016 Mar 1;33(5):468-81. doi: 10.1089/neu.2015.4192. Epub 2015 Dec 15. Review. PubMed PMID: 26529320; PubMed Central PMCID: PMC4779323.

28: Or C, Chui L, Fallah N, Forooghian F. VOLUMETRIC ASSESSMENT OF THE RESPONSIVENESS OF PIGMENT EPITHELIAL DETACHMENTS IN NEOVASCULAR AGE-RELATED MACULAR DEGENERATION TO INTRAVITREAL BEVACIZUMAB. Retina. 2016 Feb;36(2):264-71. doi: 10.1097/IAE.0000000000000795. PubMed PMID: 26418445.

29: Evaniew N, Noonan VK, Fallah N, Kwon BK, Rivers CS, Ahn H, Bailey CS, Christie SD, Fourney DR, Hurlbert RJ, Linassi AG, Fehlings MG, Dvorak MF; RHSCIR Network. Methylprednisolone for the Treatment of Patients with Acute Spinal Cord Injuries: A Propensity Score-Matched Cohort Study from a Canadian Multi-Center Spinal Cord Injury Registry. J Neurotrauma. 2015 Nov 1;32(21):1674-83. doi: 10.1089/neu.2015.3963. Epub 2015 Jul 17. PubMed PMID: 26065706; PubMed Central PMCID: PMC4638202.

30: Young M, Fallah N, Forooghian F. Choroidal degeneration in birdshot chorioretinopathy. Retina. 2015 Apr;35(4):798-802. doi: 10.1097/IAE.0000000000000489. PubMed PMID: 25811950.

31: Noonan VK, Fallah N, Park SE, Dumont FS, Leblond J, Cobb J, Noreau L. Health care utilization in persons with traumatic spinal cord injury: the importance of multimorbidity and the impact on patient outcomes. Top Spinal Cord Inj Rehabil. 2014 Fall;20(4):289-301. doi: 10.1310/sci2004-289. PubMed PMID: 25477742; PubMed Central PMCID: PMC4252129.

32: Pakzad-Vaezi K, Albiani DA, Kirker AW, Merkur AB, Kertes PJ, Eng KT, Fallah N, Forooghian F. A randomized study comparing the efficacy of bevacizumab and ranibizumab as pre-treatment for pars plana vitrectomy in proliferative diabetic retinopathy. Ophthalmic Surg Lasers Imaging Retina. 2014 Nov-Dec;45(6):521-4. doi: 10.3928/23258160-20141118-06. PubMed PMID: 25423631.

33: Dvorak MF, Noonan VK, Fallah N, Fisher CG, Finkelstein J, Kwon BK, Rivers CS, Ahn H, Paquet J, Tsai EC, Townson A, Attabib N, Bailey CS, Christie SD, Drew B, Fourney DR, Fox R, Hurlbert RJ, Johnson MG, Linassi AG, Parent S, Fehlings MG; RHSCIR Network. The influence of time from injury to surgery on motor recovery and length of hospital stay in acute traumatic spinal cord injury: an observational Canadian cohort study. J Neurotrauma. 2015 May 1;32(9):645-54. doi: 10.1089/neu.2014.3632. Epub 2014 Nov 19. PubMed PMID: 25333195; PubMed Central

PMCID: PMC4410758.

34: Glennie RA, Noonan VK, Fallah N, Park SE, Thorogood NP, Cheung A, Fisher CG, Dvorak MF, Street JT. Reliability of the spine adverse events severity system (SAVES) for individuals with traumatic spinal cord injury. Spinal Cord. 2014 Oct;52(10):758-63. doi: 10.1038/sc.2014.116. Epub 2014 Jul 15. PubMed PMID: 25023862.

35: Nathoo NA, Or C, Young M, Chui L, Fallah N, Kirker AW, Albiani DA, Merkur AB, Forooghian F. Optical coherence tomography-based measurement of drusen load predicts development of advanced age-related macular degeneration. Am J Ophthalmol. 2014 Oct;158(4):757-761.e1. doi: 10.1016/j.ajo.2014.06.021. Epub 2014 Jun 28. PubMed PMID: 24983793.

36: Dvorak MF, Noonan VK, Fallah N, Fisher CG, Rivers CS, Ahn H, Tsai EC, Linassi AG, Christie SD, Attabib N, Hurlbert RJ, Fourney DR, Johnson MG, Fehlings MG, Drew B, Bailey CS, Paquet J, Parent S, Townson A, Ho C, Craven BC, Gagnon D, Tsui D, Fox R, Mac-Thiong JM, Kwon BK. Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma. 2014 Sep 15;31(18):1540-7. doi: 10.1089/neu.2013.3278. Epub 2014 Jul 8. PubMed PMID: 24811484; PubMed Central PMCID: PMC4161054.

37: Baghaban Eslaminejad M, Fallah N. Small Molecule-BIO Accelerates and Enhances Marrow-Derived Mesenchymal Stem Cell in Vitro Chondrogenesis. Iran J Med Sci. 2014 Mar;39(2):107-16. PubMed PMID: 24644379; PubMed Central PMCID: PMC3957009.

38: Young M, Chui L, Fallah N, Or C, Merkur AB, Kirker AW, Albiani DA, Forooghian F. Exacerbation of choroidal and retinal pigment epithelial atrophy after anti-vascular endothelial growth factor treatment in neovascular age-related macular degeneration. Retina. 2014 Jul;34(7):1308-15. doi: 10.1097/IAE.0000000000000081. PubMed PMID: 24451923.

39: Rabiee S, Hemmati M, Fallah N. Comparison of serum progesterone in non-viable pregnancy and ectopic pregnancy. Acta Med Iran. 2013;51(10):693-6. PubMed PMID: 24338141.

40: Hadavand MB, Vaez Mahdavi MR, Jafari F, Fallah N. Consequences of Medical Insurance on Social Welfare; an Evidenced Based Study. Iran J Public Health. 2013 Nov;42(11):1324-6. PubMed PMID: 26171347; PubMed Central PMCID: PMC4499076.

41: Santos A, Gurling J, Dvorak MF, Noonan VK, Fehlings MG, Burns AS, Lewis R, Soril L, Fallah N, Street JT, BÃ©langer L, Townson A, Liang L, Atkins D. Modeling the patient journey from injury to community reintegration for persons with acute traumatic spinal cord injury in a Canadian centre. PLoS One. 2013 Aug 30;8(8):e72552. doi: 10.1371/journal.pone.0072552. eCollection 2013. PubMed PMID:

24023623; PubMed Central PMCID: PMC3758357.

42: Fallah N, Hsu CL, Bolandzadeh N, Davis J, Beattie BL, Graf P, Liu-Ambrose T. A multistate model of cognitive dynamics in relation to resistance training: the contribution of baseline function. Ann Epidemiol. 2013 Aug;23(8):463-8. doi: 10.1016/j.annepidem.2013.05.008. Epub 2013 Jul 3. PubMed PMID: 23830936; PubMed Central PMCID: PMC4476840.

43: Baghaban Eslaminejad M, Fallah N. Effects of BIO on proliferation and chondrogenic differentiation of mouse marrow-derived mesenchymal stem cells. Vet Res Forum. 2013 Spring;4(2):69-76. PubMed PMID: 25653775; PubMed Central PMCID: PMC4313005.

44: Lee S, Fallah N, Forooghian F, Ko A, Pakzad-Vaezi K, Merkur AB, Kirker AW, Albiani DA, Young M, Sarunic MV, Beg MF. Comparative analysis of repeatability of manual and automated choroidal thickness measurements in nonneovascular age-related macular degeneration. Invest Ophthalmol Vis Sci. 2013 Apr 23;54(4):2864-71. doi: 10.1167/iovs.12-11521. PubMed PMID: 23538060.

45: Rolfson DB, Wilcock G, Mitnitski A, King E, de Jager CA, Rockwood K, Fallah N, Searle SD. An assessment of neurocognitive speed in relation to frailty. Age Ageing. 2013 Mar;42(2):191-6. doi: 10.1093/ageing/afs185. Epub 2013 Jan 7. PubMed PMID: 23296141.

Carly Rivers, PhD
Rick Hansen Institute

(no CV uploaded)

Vanessa Noonan, PT, PhD
Ubc, Rick Hansen Institute

(no CV uploaded)

Tova Plashkes, MSc (PT)
Rick Hansen Institute

(no CV uploaded)

Zeina Waheed, BSc
Rick Hansen Institute

(no CV uploaded)

Brian Kwon, MD, PhD
Ubc

(no CV uploaded)

Charles Fisher, MD
Ubc

(no CV uploaded)

Marcel Dvorak, MD
Ubc

(no CV uploaded)

Utilizing a mixed methods approach in the development and assessment of mobile technology for seating pressure injury prevention

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Melissa Morrow, PhD
Mayo Clinic

CV:
Melissa Morrow, PhD
Position title: Associate Professor Biomedical Engineering, Mayo Clinic

A. Personal Statement

Ms. Vos-Draper and I developed the Comprehensive Mobile Assessment of Pressure (CMAP) system that utilizes real-time visual feedback on a smartphone related to interface pressure redistribution directly between the user and their seat cushion. My engineering training, expertise in rehabilitation medicine research specific to secondary conditions of spinal cord injury, and my post-graduate study of clinical research methodology has prepared me well to co-lead this project focused on technology development for independent healthy living through the prevention of pressure injuries. I am confident in my ability to co-lead this investigation as I am currently the PI on 3 federal awards (Two NIH R01s and DOD) all focused on secondary conditions of spinal cord injury. For this proposed project, I co-lead a tremendously talented group of experienced clinical and research collaborators that are incredibly passionate about helping people manage a completely preventable condition that is not only costly, but deadly. I am very enthusiastic about the success and clinical impact this work will have on pressure injury prevention.

C. Contributions to Science

1. Secondary Conditions to Spinal Cord Injury
My work in spinal cord injury rehabilitation began during my dissertation work wherein I investigated the reasons behind the high occurrence of shoulder pain and injury in manual wheelchair users. My goal was to understand which activities of daily living in manual wheelchair users contribute to shoulder pain and pathology and to explore effective interventions to prevent shoulder pain. We were able to identify activities that place users at highest risk and determined that low dose-high repetition exercises were effective in reducing pain. Starting in 2012, I collaborated with Ms. Vos-Draper on the CMAP technology development. Thus far we were able to complete a prototype, complete bench testing and preliminary field testing. We have advanced the app based on user-feedback and are preparing to advance the entire system with the creation of a new pressure mat.

a. Van Straaten MG, Cloud BA, Morrow MM, Ludewig PM, Zhao KD. Effectiveness of home exercise on pain, function, and strength of manual wheelchair users with spinal cord injury: a high-dose shoulder program with telerehabilitation. Arch Phys Med Rehabil. 2014 Oct; 95 (10):1810-1817.e2. Epub 2014 Jun 2 PMID:24887534. PMCID:4182115.
b. Morrow MM, Van Straaten MG, Murthy NS, Braman JP, Zanella E, Zhao KD. Detailed shoulder MRI findings in manual wheelchair users with shoulder pain. Biomed Res Int. 2014; 2014:769649. Epub 2014 Aug 11. PMID:25180192. PMCID:4142383.
c. Vos-Draper TL, Rindflesh A, Morrow MM. Wireless, Real-Time Seat Interface Pressure Mapping With a Smartphone as Biofeedback For Positioning and Pressure Relief. Rehabilitation Engineering and Assistive Technology Society of North America Annual Meeting 2013.
d. Vos-Draper TL, Morrow MM. Seating-Related Pressure Injury Prevention in Spinal Cord Injury: A Review of Compensatory Technologies to Improve In-Seat Movement Behavior. Current Physical Medicine and Rehabilitation Reports 2016 Dec 4(4). Accepted, In Press.

2. Research in the Real World
It was clear from earlier investigations that measuring activities, whether wheelchair activities or otherwise, only in the laboratory was only answering a part of the question. We needed to take our measurements into the natural environment where the activities were occurring in real- life to really understand the burden of the activity on the person. With the proper technology, we

were able to measure wheelchair activities outside of the lab and discovered that the laboratory was not representative of the natural environment in terms of wheelchair propulsion and other activities. The natural environment was more demanding, and to understand function in the real-world, we needed to utilize the technology that would allow us to capture the data of interest in the real-world.
a. Hurd WJ, Morrow MM, Kaufman KR, An KN. Influence of varying level terrain on wheelchair propulsion biomechanics. Am J Phys Med Rehabil. 2008 Dec; 87(12):984-91. PMID:18824889. PMCID:3899823.
b. Hurd WJ, Morrow MM, Kaufman KR, An KN. Wheelchair propulsion demands during outdoor community ambulation. J Electromyogr Kinesiol. 2009 Oct; 19(5):942-7. Epub 2008 Jun 30. PMID:18590967. PMCID:2752950.
c. Morrow MM, Hurd WJ, Kaufman KR, An KN. Shoulder demands in manual wheelchair users across a spectrum of activities. J Electromyogr Kinesiol. 2010 Feb; 20(1):61-7. PMID:19269194. PMCID:2794990.

3. Wearable Sensors and Mobile Monitoring
My work beyond wheelchair activities has focused on the use of wearable sensors to measure function (lower extremity and upper extremity) outside the laboratory setting. We have utilized activity monitors to measure function before and after surgery. We have developed analysis techniques and determined that patient reported outcomes are not reflective of functional activity before and after surgery.
a. Hurd WJ, Morrow MM, Kaufman KR. Tri-axial accelerometer analysis techniques for evaluating functional use of the extremities. J Electromyogr Kinesiol. 2013 Aug; 23(4):924-9. Epub 2013 Apr 30. PMID:23642841. PMCID:3775661.
b. Lugade V, Fortune E, Morrow M, Kaufman K. Validity of using tri-axial accelerometers to measure human movement - Part I: Posture and movement detection. Med Eng Phys. 2014 Feb; 36(2):169-76. Epub 2013 Jul 27. PMID:23899533. PMCID:3866210.
c. Fortune E, Lugade V, Morrow M, Kaufman K. Validity of using tri-axial accelerometers to measure human movement - Part II: Step counts at a wide range of gait velocities. Med Eng Phys. 2014 Jun; 36(6):659-69. Epub 2014 Mar 20. PMID:24656871. PMCID:4030415.
d. Morrow MM, Hurd WJ, Fortune E, Lugade V, Kaufman KR. Accelerations of the waist and lower extremities over a range of gait velocities to aid in activity monitor selection for field- based studies. J Appl Biomech. 2014 Aug; 30(4):581-5. Epub 2014 Mar 06. PMID:24610379. PMCID:4180224.

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/melissa.morrow.1/bibliograpahy/41766917/public/?sort=date&direction=ascending

Research Grants Awarded

Active Grants

Federal
Program Director / Principal Investigator Natural History of Shoulder Pathology in Wheelchair Users. Funded by Eunice Kennedy Shriver National Institute of Child Health and Human Development. (R01 HD 84423) 08/2015 - 05/2020

Program Director / Principal Investigator Development of a personal use seating pressure measurement system. Funded by Department of Defense. (W81XWH-15-1-0484) 09/2015 - 08/2018

Program Director / Principal Investigator Development of Technologies to Increase In-Seat Movement to Prevent Sitting-Acquired Pressure Injuries in Wheelchair Users. Funded by National Institute on Aging. (R01 AG 56255) 09/2017 - 04/2022

Co-Program Director / Principal Investigator Mobile and Remote Monitoring of Seating Pressure for Wheelchair Users with SCI. Funded by National Institute on Aging. (R21 AG 50640) 09/2015
- 05/2018

Co-Investigator In-Shoe Axial and Shear Force Measurement Device (R43 DK 116610) 04/2018 - 05/2019

Mayo Clinic
Co-Program Director / Principal Investigator Evidence for maintaining mobility and quality of life for manual wheelchair users. Funded by Rehabilitation Medicine Research Center
08/2015 - 12/2018

Tamara Vos-Draper, OT, ATP
University of Minnesota

CV:
For the past 23 years, I have worked full-time as an Occupational Therapist with a strong

interest in designing innovative strategies to help my patients function optimally in their daily activities. In this clinical role, I have encountered dozens of scenarios in which my patients did not have effective tools, particularly in the area of pressure injury prevention. I believe many of the pressure injuries were preventable if the person had access to their own live pressure map information in their daily lives to detect problems early. After a long-time patient passed away

from a serious sitting-related pressure injury late 2011, I applied for and successfully obtained a

grant through Mayo Clinicâ€™s Center for Innovation to create a pressure mapping system that my patients could view on a smartphone and use anywhere to be better informed about their own

pressure distribution. After successful completion of the prototype, and positive feasibility

evidence, I returned to school to pursue a PhD in Rehabilitation Science in order to best study effectiveness of the mobile pressure mapping system designed for patient use. I am in process of completing my dissertation study on use of pressure mapping as biofeedback to improve self-efficacy in self-management of pressure redistribution. I anticipate dissertation defense to occur in summer 2017. Tenacity and determination are two of my strongest traits as a clinician and non-traditional graduate student. I have listened carefully to my patients for the past 15 years and appreciate their desire to have access to their own seat interface pressure images outside of a clinical setting. It is for them that I am pursuing ongoing study of the effectiveness of such a system. As an experienced clinician and early scientist, I recognize the need to

surround myself with a strong team of experienced scientists from engineering, qualitative, and behavior science to ensure the success of this project. I have been fortunate to have worked with Dr. Melissa Morrow since 2012 when the first prototype mobile pressure mapping system was developed. I value the opportunity to work with Dr. Sonenblum, whose work has provided much of the evidence I use in my seating clinic practice as well as in my research endeavors. I am fortunate to have rich resources available to me at Mayo Clinic and through my affiliation with the University of Minnesota to facilitate these research goals. My ultimate objective is to reduce pressure-related injuries in wheelchair users to preserve their quality of life and I am committed to this endeavor.

B. Positions and Honors Positions and Employment
2001-Present Occupational Therapist, Department of Physical Medicine and Rehabilitation, Mayo Clinic
2009-Present Clinical Lead Assistive Technology, Department of Physical Medicine and Rehabilitation, Mayo Clinic
2016-present Teaching Specialist, Center for Allied Health Programs, Program in Occupational Therapy, University of Minnesota

Honors and Awards
2014 CoDE Award: Virtual Exercise in SCI (Connect Design Enable), Center for Innovation, Mayo Clinic
2012 Clinician of the Year, Minnesota Occupational Therapy Association
2012 CoDE Award: Pressure Mapping with Smartphone (Connect Design Enable), Center for Innovation, Mayo Clinic
2010 Bronze Level Award for Patient Education Material, Quality Academy, Mayo Clinic 2006 Individual Excellence Award, Mayo Clinic

Other Experiences and Professional Memberships
2015-Present Member, Skin Integrity Group, Rehabilitation and Engineering and Assistive Technology Society of North America, Wheeled Mobility Special Interest Group
2009-Present Advisory Member, Southern Minnesota Assistive Technology Center 2008-Present Member, American Occupational Therapy Association
2008-Present Member, Minnesota Occupational Therapy Association

2008-Present Member, Rehabilitation and Engineering and Assistive Technology Society of North America
2003-2005 Chair, Rehabilitation Unit Operations Committee, Mayo Clinic
1993-Present Occupational Therapist Registered (OTR), National Board for Certification in Occupational Therapy

C. Contribution to Science C1. Spinal cord injury care
I have had the opportunity to be involved in several exciting projects at Mayo Clinic. Two are highlighted below. First, we collected Life Space Assessment scores for patients who attended our seating clinic and compared the differences between manual and power wheelchair users. Initial results show that those in power wheelchairs tend to stay at home more and venture into the community significantly less that manual wheelchair users. We are expanding this study to include more subjects to better power the results. Second, I have worked with our spinal cord injury team to develop an online â€œvirtualâ€ exercise program. The sample size was small as this was a feasibility study, but initial feedback was positive by the participants. The online program is being expanded now through development funding at Mayo Clinic to include educational materials online. I participate in a weekly conference between researchers who specialize in spinal cord injury and wheelchair related interests.

Lanzino, D., Vos-Draper, T., Brown, R., Krump, K., Peterson, B., Wigham, K., & Hollman, J. Comparing Life Space Assessment Scores Between Power and Manual Wheelchair Users. Combined Sections Meeting of the American Physical Therapy Association, February 17-20, 2016. Anaheim, CA.

Gill, Megan. Feasibility and Behavioral Changes from a Virtual Health and Wellness Program for Individuals with SCI. Presented at the Academy of Spinal Cord Injury Professionals Education Conference and Expo, September 4-7. Nashville, TN.
Vos-Draper, T. Maintaining an Air-Filled Pressure Relieving Seat Cushion. Mayo Clinic, Patient Education Brochure.

2007.
Vos-Draper, T. Pressure Relief Maneuvers. Mayo Clinic, Patient Education Brochure. 2009; MC6479.

C2. Pressure-related injury prevention
Understanding how to prevent pressure-related injuries is a priority in my clinical work as well

as in research I participate in at Mayo Clinic. One of my first projects was collaboration with nursing to evaluate the overlays on the bedside patient chairs in intensive care units at Mayo Clinic. Using the evidence that one surface far surpassed the others, policy changes were made to ensure patients at risk had access to the more supportive surface. I have also been involved in patient education material development at Mayo Clinic for pressure injury prevention and I reviewed and contributed to the most recent Consortium for Spinal Cord Medicine guideline for healthcare providers on pressure ulcer prevention. Most recently, I worked with surgical resident to evaluate surgical chairs for pressure during surgical procedures. Through this study, it was observed that surgical chairs that allowed the most contact area and immersion were reported as causing less pain for surgeons. These projects highlight my desire to collaborate with diverse teams to advance practices in the area of pressure-related injury prevention. I am curious about how best to approach prevention efforts for my spinal cord injured patients who also have a concurrent traumatic brain injury (TBI). To begin learning more about this, I reviewed the charts of all patients dismissed from our inpatient rehabilitation unit for the past 12 years. For those patients we had medical records for (about 50%), there were trends showing that the patients with a concurrent TBI had more severe pressure ulcers than those without. Future work will focus on collecting the same data on those patients who did not continue their care at Mayo Clinic to increase the sample size.

Singh, R, Carranza, Leon DA, Morrow, MM, Vos-Draper, TL, Mc Gree, ME, Weaver, AL, Wooler, SM, Hallbeck,, S, Gebhart, JB. Effect of chair types on work-related musculoskeletal discomfort during vaginal surgery. American Journal of Obstetrics and gynecology. 2016 June 16. Doi: 10.1016/j.ajog.2016.06.016.

Vos-Draper, T., Beck, L., Garlanger, K. Pressure Ulcer Incidence in Adults with Dual Diagnosis: SCI & TBI. Presentation at American Spinal Cord Injury Association Annual Scientific Meeting, April 2016, Philadephia, PA.

C3. Assistive technology and product design
Over the past couple of decades, one of my passions is in design, fabrication, and implementation of unique solutions for complex issues affecting my patients. In 2009, I developed a mount for a power wheelchair that safely holds an adjustable baby carrier for a patient expecting her first child; this device allowed her to interact safely with her infant and has been used by two additional patients since. The CMAP was developed out of a need I identified for my patients and is described in other sections. I have presented on preliminary results from the CMAP at RESNA. Most recently, a need arose for a patient who was unable to self-suction

during the day while home alone in his power wheelchair. I partnered with Blue Sky Designs who was simultaneously working on a new switch-activated power mounting system. The patient has been successfully using the power mount to self-suction for the past 10 months and has had significant reduction in episodes of pneumonia. I have two product disclosures on file at Mayo Clinic Ventures.

Beck LA, Vos-Draper T. Pregnancy and Spinal Cord Injury: Successful Outcome. SCI Nursing. 2009; 26(2):7-12.

Vos-Draper, T. Wireless, real-time seat interface pressure mapping with a smartphone as biofeedback for positioning and pressure relief. Presented at Design of Medical Devices Conference, University of Minnesota, Minneapolis, MN. May 20, 2015.

Goodwin, D., Lee, N., Vos-Draper, T., & Kane, M. Powered mounts: Create powerful solutions for your clients. Workshop presentation at the RESNA Annual Conference, Thursday July 14, 2016, Arlington, Va.

D. Additional Information: Research Support and/or Scholastic Performance Research Support

Co-Program Director / Principal Investigator
Mobile and Remote Monitoring of Seating Pressure for Wheelchair Users with SCI. Funded by National Institute on Aging. (R21 AG 50640)
09/01/2015 to 5/31/2017

Co-Investigator
Development of a personal use seating pressure measurement system. Funded by Department of Defense. (W81XWH-15-1-0484)
09/01/2015 - 08/31/2018
Co-Investigator
Gill, M. (Principal Investigator)
Mayo Clinic Center for Innovation Grant
Virtual Health and Wellness for Spinal Cord Injury/Dysfunction Population

The goal of this work was to develop and coordinate virtual participation for persons with spinal cord injury/dysfunction focusing on health and wellness.
2014-2015

Principal Investigator 2012-2013
Mayo Clinic Center for Innovation Grant
Portable, Wireless, Affordable Seat Pressure Imaging for Wheelchair Users Linked to Smartphone Display
The major goal of this project was to develop a system to allow manual wheelchair users to measure and view seating pressures in their home environment in the effort to reduce pressure ulcers.
2012-2013

Intellectual Property
Portable, Wireless, Affordable Seat Pressure Imaging for Wheelchair Users Linked to Smartphone Display.
Mayo Case No.: 2012-077; not licensed

Fabric Pressure Sensing Mat for Wheelchair Users Designed for Daily Continuous Monitoring of Seat Interface Pressure.
Mayo Case No.: 2016-232; not licensed

Christine Olney, PhD, RN
Minneapolis Veterans Affairs Health Care System

(no CV uploaded)

John Ferguson, PhD
Minneapolis Veterans Affairs Health Care System

(no CV uploaded)

Gary Goldish, MD
Minneapolis Veterans Affairs Health Care System

(no CV uploaded)

Byron Eddy, DO
Minneapolis Veterans Affairs Health Care System

(no CV uploaded)

Andrew Hansen, PhD
Minneapolis Veterans Affairs Health Care System

(no CV uploaded)

A CARDIAC-CENTERED APPROACH TO HEMODYNAMIC MANAGEMENT INCREASES SPINAL CORD OXYGENATION IN A PORCINE MODEL OF ACUTE HIGH-THORACIC SPINAL CORD INJURY

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Alexandra Williams, PhD
University of British Columbia

CV:

Journal Articles

1. Williams AM, Gee CM, Voss C, West CR. (2018). Cardiac consequences of spinal cord injury: systematic review and meta-analysis. British Medical Journal - Heart. Accepted August 2018.
2. Williams AM, Shave RE, Coulson J, White H, Rosser-Stanford B, Eves N. (2018). The influence of vagal control on sex-related differences in left ventricular mechanics and hemodynamics. American Journal of Physiology, Heart and Circulatory Physiology.
3. Vermeulen TD, Boulet LM, Stembridge M, Williams AM, Anholm JD, Subedi P, Gasho C, Ainslie PN, Feigl EO, Foster GE. (2018). Influence of myocardial oxygen demand on the coronary vascular response to arterial blood gas changes in humans. AJP Heart and Circulatory Physiology.
4. Williams AM, Shave RE, Cheyne WS, Eves ND. (2017). The influence of adrenergic stimulation on sex differences in left ventricular twist. Journal of Physiology. 595(12): 3973-3985.
5. West CR, Phillips AA, Squair J, Williams AM, Walter M, Williams A, Lee A, Lam T, Krassioukov A. (2017). Association of Epidural Stimulation With Cardiovascular Function in an Individual With Spinal Cord Injury. Journal of the American Medical Association (JAMA) - Neurology. 75(5): 630-632.
6. Cheyne WS, Williams AM, Harper MI, Eves ND. (2017). Acute volume loading exacerbates direct ventricular interaction in a model of COPD. Journal of Applied Physiology.
7. Williams AM, Shave RE, Stembridge M, Eves ND. (2016). Females have greater left ventricular twist mechanics than males during acute reductions to preload. American Journal of Physiology, Heart and Circulatory Physiology. 311(1): H76-84.
8. Tymko MM, Hoiland RL, Kuca T, Boulet LM, Tremblay JC, Pinske BK, Williams AM, Foster GE. (2016). Measuring the human ventilatory and cerebral blood flow response to CO2: a technical consideration for the end-tidal-to-arterial gas gradient. Journal of Applied Physiology. 120(2): 282-96.
9. Cheyne WS, Williams AM, Harper M, Eves ND. (2016). Heart-lung interaction in a model of COPD: the importance of lung volume and direct ventricular interaction. American Journal of Physiology, Heart and Circulatory Physiology. 311(6): H1367-H1374.
10. Williams AM, Paterson DH, Kowalchuk JM. (2013). High-intensity interval training speeds pulmonary O2 uptake kinetics in moderate-intensity exercise transitions initiated from low and elevated metabolic rates. Journal of Applied Physiology. 114(11): 1550-62.

Conference Presentations

1. Williams AM, Manouchehri N, Tauh K, Poormasjedi-Meibod M, Boushel R, So K, Shortt K, Streijger F, Kwon BK, West CR. (2018). The impact of high-thoracic spinal cord injury on cardiac contractility in a porcine model. Society for Neuroscience 2018, San Diego, United States, Conference Date: 2018/11
2. Williams AM, Gee C, Voss C, West CR. (2018). Cardiac consequences of spinal cord injury: a metaanalysis. ASIA 2018 Annual Scientific Meeting, Rochester, MN, United States, Conference Date: 2018/4
3. Williams AM, Manouchehri N, Tauh K, So K, Shortt K, Streijger F, Boushel R, Kwon BK, West CR. (2018). The cardiac consequences of acute high-thoracic spinal cord injury. 2018 Okanagan Cardiovascular & Respiratory Symposium, Vernon, Canada, Conference Date: 2018/3
4. The proactive intervention improves habitual physical activity and aerobic fitness but not vascular structure in people with spinal cord injury. (2018). The proactive intervention improves habitual physical activity and aerobic fitness but not vascular structure in people with spinal cord injury. Ma JK, Williams AM, Martin Ginis KA, West CR, Vernon, Canada, Conference Date: 2018/3
5. Patrician A, Willie CK, Anholm J, Williams AM, Gasho C, Subedhi P, Hoiland RL, Tymko MM, Howe CA, Plato S, McBride E, Francesco G, Rieger MG, Hansen AB, MacLeod DB, Stembridge M, Ainslie PN. (2018). Iron manipulation and cerebral blood flow in sherpa and lowlanders at high altitude. 2018 Okanagan Cardiovascular &

Respiratory Symposium, Vernon, Canada, Conference Date: 2018/3
6. Howe CA, Hoiland RL, MacLeod DB, Tremblay JC, Carter HH, Patrician A, Delorme E, Rieger MG, Tymko MM, Stembridge M, Gasho C, Williams AM, Santoro A, Green DJ, Ainslie PN. (2018). Hemoconcentration reduces cerebral blood flow during acclimatization to high-altitude. 2018 Okanagan Cardiovascular & Respiratory Symposium, Vernon, Canada, Conference Date: 2018/3
7. Subedi P, Stembridge M, Williams AM, Gasho C, Willie C, Ainslie P, Anholm J. (2017). Pulmonary vascular response to hypobaric hypoxia and supplemental oxygen during gradual ascent in the Himalayas. 2017 International Hypoxia Symposia, Lake Louise, Canada, Conference Date: 2017/2
8. Willie C, Plato S, Mcbride E, Varoli G, Stembridge M, Eller L, Hoiland R, Williams AM, Gasho C, Subedi P, Anholm J, Ainslie P. (2017). 2016 UBC Nepal Expedition: iron and the pulmonary vascular responses during ascent to 5050m: Sherpa and lowlanders compared. 2017 International Hypoxia Symposia, Lake Louise, Canada, Conference Date: 2017/2
9. Vermeulen T, Boulet L, Stembridge M, Williams AM, Anholm J, Subedi P, Gasho C, Ainslie P, Foster GE. (2017). Influence of myocardial workload on the coronary vascular response to arterial blood gas fluctuations in humans. 2017 International Hypoxia Symposia, Lake Louise, Canada, Conference Date: 2017/2
10. Williams AM, Ainslie PN, Anholm J, Gasho C, Subedi P, Stembridge M. (2017). Left ventricular twist is influenced by both O2 saturation and ÃŸ1-adrenergic stimulation in acute and chronic hypoxia. 2017 International Hypoxia Symposia, Lake Louise, Canada, Conference Date: 2017/2
11. Willie C, Hoiland R, Stembridge M, Williams AM, Fluck D, Gasho C, Subedi P, Anholm J, Eller L, Reimer R, Macleod DB, Plato S, McBride E, Patrician A, Reiger M, Ainslie P. (2017). 2016 UBC Nepal Expedition: iron infusion reduces pulmonary arterial systolic pressure at high altitude in lowlanders but not Sherpa. 2017 International Hypoxia Symposia, Lake Louise, Canada, Conference Date: 2017/2
12. Cheyne WS, Williams AM, Harper MI, Eves ND. (2016). Volume Loading Exacerbates Adverse Heart-Lung Interaction In A Model Of COPD. American Journal of Respiratory and Critical Care Medicine. American Thoracic Society Meeting, San Francisco, United States (A2969-A2969), Conference Date: 2016/5
13. Harper MI, Graham AV, Nelson BK, Williams AM, Cheyne WS, Gelinas JC, Eves ND. (2016). Sex Differences In The Sensory And Affective Dimensions Of Dyspnea In Response To Different Respiratory Stimuli During Exercise. American Journal of Respiratory and Critical Care Medicine. American Thoracic Society Meeting, San Francisco, United States (A6394-A6394), Conference Date: 2016/5
14. Cheyne WS, Williams AM, Harper MI, Eves ND. (2016). Volume loading exacerbates adverse heart-lung interaction in a model of COPD. American Thoracic Society Meeting, San Francisco, United States, Conference Date: 2016/5
15. Cheyne WS, Williams AM, Harper MI, Eves ND. (2016). Heart-Lung Interaction In A Model Of COPD: The Importance Of Lung Volume. American Journal of Respiratory and Critical Care Medicine. American Thoracic Society Meeting, San Francisco, United States (A2968-A2968), Conference Date: 2016/5
16. Williams AM, Shave RE, Stembridge M, Eves N. (2015). Females have greater left ventricular twist mechanics than males during acute reductions to preload.The Physiological Society 2015 Annual Meeting, Cardiff, United Kingdom, Conference Date: 2015/7
17. Harper M, Graham A, Nelson B, Williams AM, Cheyne S, Gelinas J, Eves N. (2015). Sex differences in the sensory and affective dimensions of dyspnea in response to different respiratory stimuli during exercise. American Thoracic Society International Conference, Denver, United States,
18. Tymko MM, Kuca T, Hoiland RL, Boulet LM, Tremblay JC, Pinske BK, Williams AM, Bain AR, Foster GE. (2015). The end-tidal-to-arterial CO2 gradient and cerebrovascular reactivity. 2015 International Hypoxia Symposium, Lake Louise, Canada, Conference Date: 2015/2
19. Williams AM, Shave R, Stembridge M, Eves N (2014). Sex-related differences in left ventricular mechanics: effects of reduced preload. Okanagan
Cardiovascular and Respiratory Symposium, Vernon, Canada, Conference date 2014/3

Neda Manouchehri, BSc
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Keerit Tauh, MD
University of British Columbia

(no CV uploaded)

Malihe Poormasjedi-Meibod, PhD
University of British Columbia

(no CV uploaded)

Robert Boushel, PhD
University of British Columbia

(no CV uploaded)

Kitty So, BSc
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Katelyn Shortt, BSc
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Femke Streijger, PhD
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Brian Kwon, MD, PhD, FRCSC
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Christopher West, PhD
University of British Columbia

(no CV uploaded)

Bowel management changes after exoskeletal-assisted walking program

Thursday, April 04, 2019 03:45 PM - 04:45 PM

EunKyoung Hong, PhD
James J. Peters Va Medical Center

CV:
NAME: EunKyoung Hong
POSITION TITLE: Post-Doctoral Research Assistant

A. Personal Statement
In my early career, I was part of several research efforts at the University of Pittsburgh. These projects included conducting a questionnaire study in nursing homes, assisting with data collection for an anthropometric study, and conducting a disparity questionnaire study in wheelchair quality. Additionally, I performed ANSI/RESNA testing on several pediatric wheelchairs. With this background, I designed and manufactured an improved pediatric wheelchair and performed the standardized ANSI/RESNA wheelchair testing on it. Of particular interest, I collected input from people with disabilities to utilize consumer-centered devices in order to influence clinical effectiveness and improve quality of life. In accordance with my interests, my previous work focused on improving the comfort of manual wheelchair backrests. I accomplished this by identifying areas of comfort and discomfort in users of current wheelchair backrests and classifying the differences in individuals' back structures. Based on these survey and measurement results, I was able to design and develop an adjustable, rigid shell backrest. The technology design of the angle-adjustable backrest hardware has been patented (No. US 8,376,463). Testing of the prototype was performed in strict accordance with ISO standards before patient evaluation of the backrest. The design and functionality of prototype was evaluated by a focus group and after an in-home trial in users.
Upon graduation from the University of Pittsburgh, I joined the Spinal Cord Damage Research Center located at the James J. Peters VA Medical Center, Bronx, NY. In this Center, I have had the opportunity to be a researcher in the exoskeletal-assisted walking (EAW) program. This program is funded by grants from the VA, Department of Defense and the New Jersey State Commission for SCI Research. Under the mentoring of Dr. Ann M. Spungen, I wrote an investigator-initiated protocol for industry funding to test the safety and efficacy of a new standing power wheelchair to be used in patients with SCI who due to the severity of are not eligible for EAW. It is anticipated that by providing the ability to stand and/or walk with any of these assistive devices (Upright powered wheelchair or an exoskeleton), there would be positive changes on select medical conditions and aspects of quality of life. Using new and exciting forms of assistive technology to promote upright standing and mobility is an area of research that I am keenly interested in pursuing. I am fortunate to be able to transition my wheelchair design skills to that of improving the functionality and structure of the exoskeletons and upright wheelchair devices in this program. Additionally, with all transitions, I will learn clinical, select medical and physiological approaches, how to develop and implement a clinical research idea into more funded projects.

B. Positions and Honors

Positions
2002-2003 Assistant, Saint Peter's School & The National School for Students with Physical Disabilities, Seoul, Korea
2003-2003 Laboratory Assistant, Korean Nazarene University, Cheon-an, Korea
2003-2003 Secretary General of Students' Association, Korean Nazarene University, Cheon-an, Korea
2005-2005 Internship, Korea Employment Promotion Agency for the Disabled Rehabilitation Technology Center, Seoul, Korea
2006-2009 Graduate Student Researcher, University of Pittsburgh, Pittsburgh, PA
2007-2007 Clinical Internship, Center for Assistive Technology, University of Pittsburgh Medical Center, Pittsburgh, PA
2009-2015 Lead Project Researchers-Graduate Student Researcher, Human Engineering Research Laboratories, University of Pittsburgh, Pittsburgh, PA
2015- present Post-doctoral Researcher, Bronx Veterans Medical Research Foundation, James J. Peters VA

Medical Center, Bronx, NY
2016-present Assistant Professor
Rehabilitation Medicine, Icahn School of Medicine at Mount Sinai, New York, NY

Honors
Spring 2001 Merit Scholarship, Korean Nazarene University, Cheon-an, Korea
Fall 2001 Merit Scholarship, Korean Nazarene University, Cheon-an, Korea
Spring 2003 Secretary General of Students' Association, Korean Nazarene University, Cheon-an, Korea
Fall 2003 Merit Scholarship, Korean Nazarene University, Cheon-an, Korea
Spring 2005 Merit Scholarship, Korean Nazarene University, Cheon-an, Korea
May 2009 Rory A Cooper and Dion Johnson Award, University of Pittsburgh, Pittsburgh, PA

C. Contributions to Science

Publications
Hsin-yi Liu, Jonathan Pearlman, Rosemarie Cooper, Eun-Kyoung Hong, Hongwu Wang, Benjamin Salatin, Rory A. Cooper. Evaluation of aluminum ultralight rigid wheelchairs versus other ultralight wheelchairs using ANSI/RESNA standards. Journal of Rehabilitation Research & Development, Volume 47 Number5, 2010
Eun-Kyoung Hong, Jon Pearlman, Benjamin Salatin, Hongwu Wang, Hsin-Yi Liu, Rory A. Cooper PhD & Todd Hargroder. Design and Development of a Lightweight, Durable, Adjustable Composite Backrest Mounting. Assistive Technology: The Official Journal of RESNA, Volume 23, Issue 1, 2011
Eun-Kyoung Hong, Rory A Cooper, Jon Pearlman, Todd Hargroder. Design, Testing and Evaluation of Angle-Adjustable Backrest Hardware. Assistive Technology: The Official Journal of RESNA
Eun-Kyoung Hong, Brad E. Dicianno, Jon Pearlman, Rosemarie Cooper, Rory A Cooper. Comfort and Stability of Wheelchair Backrest according to the TAWC (tool for assessing wheelchair discomfort). Assistive Technology: The Official Journal of RESNA
Theresa M. Crytzer, Eun-Kyoung Hong, Brad E. Dicianno, Jon Pearlman, Mark Schmeler, Rory A Cooper. Identifying Characteristic Back Shapes from Anatomical Scans of Wheelchair Users to Improve Seating Design. Medical Engineering and Physics , Volume 38, Issue 9, 2016

Presentations
Differences in Wheelchair Satisfaction of Veterans by Body Mass Index
Poster presentation : Rehabilitation Engineering & Assistive Technology Society of North America Conference, Phoenix, AZ, June, 2007
Design Changes of a Pediatric, Adjustable, Lightweight, Modular Wheelchair
Poster presentation : Rehabilitation Engineering & Assistive Technology Society of North America Conference, Arlington, VA, June, 2008
Design Changes of a Lightweight, Durable, Adjustable, Composite Backrest Mounting
Poster presentation : Rehabilitation Engineering & Assistive Technology Society of North America Conference, New Orleans, LA, June, 2009
Comfort and stability of manual wheelchair backrest through the TAWC (Tool for Assessing Wheelchair Discomfort)
Oral presentation : International Seating Symposium, Nashville, TN, March, 2011
Patient-reported bladder management improvements after exoskeletal-assisted walking
Oral presentation : Academy of Spinal Cord Injury Professionals, Denver, CO, September, 2017

Steven Knezevic, MS
James J. Peters Va Medical Center

(no CV uploaded)

Pierre Asselin, MS
James J. Peters Va Medical Center

(no CV uploaded)

Stephen Kornfeld, DO
James J. Peters Va Medical Center

(no CV uploaded)

Peter Gorman, MD
University of Maryland Rehabilitation and Orthopedic Institute

(no CV uploaded)

Gail Forrest, PhD
Kessler Foundation

(no CV uploaded)

Ann Spungen, EdD
James J. Peters Va Medical Center

(no CV uploaded)

Matching Rehabilitation Strategies to the Weakness Phenotype of the upper Limb in Tetraplegia

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Jeffrey Jaramillo, DPT
Va Palo Alto

CV:
Jeffrey P. Jaramillo, DPT

1302 Lerida Way
Pacifica, CA 94044
650-493-5000
jeffrey.jaramillo@va.gov
Education:
2014 Doctorate of Physical Therapy, Simmons College, Boston, MA

1993 Post-professional Master of Science, University of Indianapolis, Indianapolis, IN
Krannert Graduate School of Physical Therapy

1989 Certificate in Physical Therapy, University of Medicine & Dentistry of New Jersey, Newark, NJ
School of Health Related Professions/Kean College of New Jersey

1984 Bachelor of Arts (B.A.) in Biology
Susquehanna University, Selinsgrove, PA

Professional Positions:
12/12 – current Health Science Specialist , Spinal Cord Injury Service, VA Palo Alto Health Care System, Palo Alto, CA.

07/07 – 12/12 Research Physical Therapist, ,Research Service, VA Palo Alto Health Care System, Palo Alto, CA.

Actively Participated as a Researcher on these funded grants

2010-12 “Use of Interactive Gaming for Enhanced Function after Spinal Cord Injury” VA Rehabilitation Research & Development Merit Review (Principal Investigator: Kiratli)
2009-12 “Longitudinal assessment of bone loss with chronic spinal cord injury, VA Rehabilitation Research & Development Merit Review (PI: Kiratli)
2007-11 “Nutritional needs and weight management after SCI: A telehealth approach" VA Rehabilitation Research & Development Merit Review (PI: Kiratli)
2008-09 Anabolic Steroid Therapy on Pressure Ulcer Healing in Persons with Spinal Cord Injury, VA Cooperative Studies Program (PI: Bauman, Bronx; Palo Alto PI: Punj),
2007-08 “Tele-Exercise Program for Persons with Spinal Cord Injury” Rehabilitation Engineering Research Center on Recreational Technologies and Exercise Physiology Benefiting Persons with Disabilities, National Institute on Disability and Rehabilitation Research (NIDRR) (Palo Alto local PI: Kiratli)

Publications

Jaramillo J, Worrell T, Ingersoll C. Hip isometric strength following knee surgery, Journal of Orthopedic and Sports Physical Therapy 20:160-165, 1994.

Spiess MR, Jaramillo J, Behrman AL, Teraoka JK, Patten C. Unexpected recovery after robotic locomotor training at physiologic stepping speed: a single-case design. Arch Phys Med Rehabil. Aug;93(8):1476-84, 2012.

Myers JN, Kiratli BJ, Jaramillo J. The cardiometabolic benefits of routine physical activity in persons living with spinal cord injury, In: Current Cardiovascular Risk Reports, 6:323–330, 2012.

Johanson ME, Zoia C. Lateva ZC, Jaramillo J, Kiratli BJ, McGill KC. Triceps brachii in incomplete tetraplegia: EMG and dynamometer evaluation of residual function and capacity for improvement. Topics in Spinal Cord Injury Rehabilitation. June 2013. Accepted

Manuscripts in Progress:
Hong M, Jaramillo J, Fong D, Shahoumian T, Kiratli BJ. Prescription practices and perceptions of VA clinicians related to Power-Assist Wheelchairs.

Jaramillo J, Fong D, Shahoumian T, Jenny Kiratli BJ. Reliability of resetting the work space of an upper extremity exoskeleton.

Kiratli BJ, Hong M, Manring K, Jaramillo J. Impact of Tele-Exercise program on managing shoulder pain in chronic spinal cord injured participants .

Jaramillo J, Johanson ME, Kiratli BJ. EMG patterns of the upper extremities during video game play of Spinal Cord Injured Individuals.

Acknowledgment:
Westlake KP, Patten C. Pilot study of Lokomat versus manual-assisted treadmill training for locomotor recovery post-stroke. J Neuroeng Rehabil. Jun 1:12;6:18.1 2009. For assistance in collecting experimental data and training participants in this locomotor study.

Abstracts & Presentations
Kiratli BJ, Manring K, Jaramillo J. Initial Experience with a Tele-Exercise program for management of shoulder pain in persons with chronic spinal cord injury. American Paraplegia Society, 2008.
Hentz V, Curtin C, Johanson ME, Weis J, Jaramillo J. Interdisciplinary Approach to restoration of Upper limb Function in Tetraplegia. Congress on Spinal Cord Medicine and Rehabilitation, 2009.

Jaramillo J, Manring K, Hong M, Kiratli J. Managing shoulder pain with a Tele-Exercise Program in people with chronic spinal cord injuries. Combined Sections Meeting (CSM) of the American Physical Therapy Association, 2010.
Jaramillo J, Fong D, Thompson A, Shahoumian T, Kiratli BJ. Reliability of Resetting the Work Space of an Upper Extremity Exoskeleton. Combined Sections Meeting (CSM) of the American Physical Therapy Association, 2011.
Fong D, Kiratli BJ, Jaramillo J, Thompson A, Hong M. Performance and Perceptions of Individuals with Spinal Cord Injury using Power Assist and Manual Wheelchairs. Combined Sections Meeting (CSM) of the American Physical Therapy Association, 2011.
Thompson A, Jaramillo J, Fong D, Kiratli BJ, Hong M. Comparison of stroke efficiency between manual wheelchairs and power assist wheelchairs. Combined Sections Meeting (CSM) of the American Physical Therapy Association, 2011.
Jaramillo J, Fong D, Thompson A, Shahoumian T, Kiratli BJ. Reliability of Resetting the Work Space of an Upper Extremity Exoskeleton. Combined Sections Meeting (CSM) of the American Physical Therapy Association, 2011.
Jaramillo J, Johanson ME, Murray W, Hentz V, Ashworth S, Bryden A, Lamberg S, O'Brian P, O'Dell M, Mayland E, Weis J. Multi-center Survey of Rehabilitation Protocols after Tendon Transfer to Restore Pinch in Tetraplegia. International Spinal Cord Society, June 2011.

Wagner D, Jaramillo J, Hong M, Kiratli BJ, Assessing upper extremity total limb work volume in individuals

with spinal cord injury during Wii gaming. Academy of Spinal Cord Injury Professionals,2012.

Jaramillo J, Johanson ME, Dairaghi C, Fong D, BS, Kiratli BJ, Electromyography of the Upper Extremity During Video Gaming of Persons with Tetraplegia. Academy of Spinal Cord Injury Professionals, 2012.

Awards:
Bay Area and Western Chapter of Paralyzed Veterans of America; Recognition for Assistance with the Annual SCI/PVA Awareness Fair showcasing the many activities available to veterans with Spinal Cord Injury. May 21,2011.

Elissa Zakrasek, MD
Va Palo Alto

(no CV uploaded)

Lisa Johanson, DPT
Va Palo Alto

(no CV uploaded)

Zoia Lateva, PhD
Va Palo Alto

(no CV uploaded)

Vandana Punj, MD
Va Palo Alto

(no CV uploaded)

Beatrice Kiratli, PhD
Va Palo Alto

(no CV uploaded)

Title: Presentation and treatment difficulties of Superior Mesenteric Artery syndrome in patient with acute traumatic tetraplegia: A case report

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Neel Chandel, MD
University of Texas Health and Science Center

CV:
● Currently, a fellow in Spinal Cord Injury Medicine at Memorial Hermann Hospital, University of Texas Health Science Center at Houston.
● Seven years of extensive experience in the field of rehabilitative medicine.
● Worked as a moonlighter at Burke Rehabilitation Hospital, White Plains, New York.
● Extensive research experience in the field of SCI
● Active member of ASIA, ASCIP, AAP, NYSPM&R and AAPM&R.
● Excellent communication, teaming, and critical thinking skills; committed to delivering responsibilities entrusted upon.
● Ability to work under stressful situations and utilize problem-solving skills effectively.
● Enthusiastic clinician, learner and researcher.

University of Texas Health Science Center at Houston Houston, TX
Fellow (PGY5), Department of Spinal Cord Injury Medicine July '18 to Current

Program Director: Matthew E. Davis, MD
Montefiore Medical Center/University Hospital for Albert Einstein College of Medicine Bronx, NY
Resident (PGY2-4), Department of Physical Medicine & Rehabilitation
Program Director: Mark Thomas, M.D.
July '15 - June '18

Daniel Nguyen, MD
Baylor College of Medicine

CV:
Resident physician at Baylor college of Medicine

Isaac Hernandez Jimenez, MD
University of Texas Health and Science Center

CV:
Attending physician at TIRR Memorial Hermann in Spinal Cord Injury

---

Concurrence between life impacts described by individuals with tetraplegia and clinical assessments for arm/hand surgical reconstruction: a mixed methods approach

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

(Kathryn) Anne Sinnott Jerram, MPhty
University of Sydney

CV:
2018 CURRICULUM VITAE

PERSONAL INFORMATION
Name: Kathryn ANNE Sinnott Jerram (previously Sinnott) D.O.B. 22/11/60
PO Box 88, Kurow 9435, New Zealand
Phone: +64 33-4360221 Fax: +64 3-4360549
Mobile: +64 21 994878 Email: annes@burwood.org.nz

QUALIFICATIONS
Master of Physiotherapy University of Otago July 1998
Certificate of Proficiency University of Otago July 1996
Diploma in Physiotherapy Otago Polytechnic, Nov 1981

PROFESSIONAL AFFILIATIONS/MEMBERSHIPS
International Spinal Cord Society (ISCOS)
New Zealand Society of Physiotherapy (NZSP)
New Zealand Rehabilitation Association (NZRA)

EMPLOYMENT HISTORY
2013-current: Research & Strategic Advisor, Burwood Academy of Independent Living
2008-current: Clinical Researcher Burwood Hospital Christchurch
2012-current: Clinical Physiotherapist: Back on Track Physiotherapy
2008-2015: Research Fellow, University of Otago, Christchurch
1999- 2007: Lecturer, Dept. of Medicine (Rehabilitation) Wellington School of Medicine
1998–2001: Clinical Tutor, School of Physiotherapy, University of Otago
1998-1999: Senior physiotherapist, Community Rehabilitation Centre, ISIS Centre, Dunedin
1996-1997: Research Fellow, Spinal Injuries Unit, Burwood Hospital, Christchurch

References
Sinnott Jerram K.A., Dunn, J.A., Smaill, R.P., Middleton, J.W. (2018) Using mixed methods to better appreciate the life impact of upper limb reconstruction surgeries for tetraplegia in New Zealand. Qualitative Health Research SUBMITTED

Snell, D.L., Hipango, J., Sinnott K.A., Dunn, J.A., Rothwell, A.G., Hsieh C.J., Gerben DeJong G., Hooper G. (2017): Rehabilitation after total joint replacement: a scoping study, Disability and Rehabilitation, DOI: 10.1080/09638288.2017.1300947

Sinnott, K. A., Dunn, J. A., Wangdell, J., Johanson, M. E., Hall, A. S., & Post, M. W. (2016). Measurement of outcomes of upper limb reconstructive surgery for tetraplegia. Archives of Physical Medicine & Rehabilitation, 97(6, Suppl. 2), S169-S181. doi: 10.1016/j.apmr.2015.10.110

Dunn, J. A., Sinnott, K. A., Rothwell, A. G., Mohammed, K. D., & Simcock, J. W. (2016). Tendon transfer surgery for people with tetraplegia: An overview. Archives of Physical Medicine & Rehabilitation, 97(6, Suppl. 2), S75-S80. doi: 10.1016/j.apmr.2016.01.034

Dunn, J. A., Hay-Smith, E. J., Keeling, S., & Sinnott, K. A. (2016). Decision-making about upper limb

tendon transfer surgery by people with tetraplegia for more than 10 years. Archives of Physical Medicine & Rehabilitation, 97(6, Suppl. 2), S88-S96. doi: 10.1016/j.apmr.2015.09.026

Harvey, L.A., Dunlop, S.A., Churilov, L., Galea M.P., Sinnott KA. Spinal Cord Injury Physical Activity (SCIPA) Hands On Trial Collaborators. (2016) Early intensive hand rehabilitation is not more effective than usual care plus one-to-one hand therapy in people with sub-acute spinal cord injury ('Hands On'):a randomised trial. Journal of Physiotherapy 62 (2016) 88–95

Post MWM, Charlifue S, Biering-Sørensen F, Catz A, Dijkers M, Geyh S, J Horsewell J, Noonan V, Noreau N, Tate D, Sinnott KA. International spinal cord injury data set for activities and participation. 2015. Spinal Cord. DOI:10.1038/sc.188·

Sinnott KA, Dunn JA, Rothwell AG, Hall AS, Post MWM. The development of the NZ upper limb surgery registry for tetraplegia. 2014. Spinal Cord. 52:8, 611-615

Dunn JA, Rothwell AG, Mohammed KM, Sinnott KA. The effects of aging on upper limb tendon transfers in patients with tetraplegia. 2014. J Hand Surg Am,39(2),317-323

Martin R, Levack WM, Sinnott KA. Life goals and social identity in people with severe acquired brain injury: an interpretative phenomenological analysis. Disability & Rehab 2014:24;1-8

Biering-Sorenson F. Bryden AM, Curt A, Friden J, Harvey L, Mulcahey MJ, Popovic M, Prochazka A, Sinnott KA, Snoek G. International spinal cord injury upper extremity basic data set. 2014. Spinal Cord. doi: 10.1038/sc.2014.87

Geyh S, Ballert C, Sinnott KA, Charlifue S, Catz A, D'Andrea Greve JM, Post MW. Quality of life after spinal cord injury: a comparison across six countries. 2013 Spinal Cord, 51(4), 322-326

James Middleton, PhD
University of Sydney

(no CV uploaded)

Jennifer Dunn, PhD
University of Otago

(no CV uploaded)

Richard Smaill, PhD
Burwood Academy of Independent Living

(no CV uploaded)

Characterizing practice patterns to inform therapeutic activity categories

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Stephanie Marrocco, MSc; PhD Student
Parkwood Institute; Western Univeristy

CV:
MANUSCRIPTS - PEER-REVIEWED
Crosby LD., Marrocco S., Brown J., Patterson KK. (2016). A novel bilateral lower extremity mirror therapy intervention for individuals with stroke. Heliyon. 2(12), e00208.

Marrocco S., Crosby LD., Jones IC., Moyer RF., Birmingham TB., & Patterson KK. (2016). Knee loading patterns of the non-paretic and paretic legs during post-stroke gait. Gait & Posture. 49, 297–302.

Tomasone J., Ma J., Scime N., Burke S., Sleeth L., Marrocco S., Wolfe DL. (2018) Use and effectiveness of behaviour change techniques for physical activity self-management among persons with spinal cord injury: a systematic review. Psychology of Sport & Exercise. 37(2018), 274-285.

PUBLISHED ABSTRACTS
Fielding M, Askes H, Cornell S, Hsieh J, Marrocco S, Wolfe D. (2017). Feasibility of a locomotor training protocol in an inpatient acquired brain injury program. Brain Injury. 31(6-7), 872.

Sleeth L, Ahmed S, Kras-Dupuis A, Marrocco S, Ware P, Wolfe D. (2016). Developing an online, theory based bladder self management program for persons with spinal cord injury through iterative consultations. Top Spinal Cord Inj Rehabil. 22(Suppl.), 99, 76.

Sleeth L, Brandow S, Hitzig SL, Marrocco S, Shepherd J, Wolfe D. (2016). What's up with self-management for persons with spinal cord injury: A scoping review of characteristics and components of existing programs. Top Spinal Cord Inj Rehabil. 22(Suppl.), 84, 49.

PRESENTATIONS - ORAL
Marrocco, S., Cornell, S., Giurleo, C. Finding out What Works and What Doesn't in Clinical Practice: Practice-Based Research (PBR) Methods, Parkwood Institute Research Day, St. Joseph's Health Care, London, ON, Canada, April 2018

Wolfe, D.L., Cornell, S., McGuire, S., Marrocco, S. A PRIME Directive: Developing a Practice-Based Research Approach to Improve Locomotor Training Outcomes, Grand Rounds, Parkwood Institute, St. Joseph's Health Care, London, ON, Canada, Dec 2016

Wolfe, D.L., Cornell, S., Marrocco, S. A PRIME Objective: Developing a Practice-Based Research Approach to Improve Locomotor Training Outcomes, Regional Rehabilitation Lunch and Learn, Parkwood Institute, St. Joseph's Health Care, London, ON, Canada, Nov 2016

PRESENTATIONS - POSTER
Wolfe D, Cornell S, Gagliardi J, Marrocco S. Re-shaping and re-invigorating SCI rehabilitation practice through practice-based research approach. Canadian National SCI Meeting. Nov 2017.

Marrocco S, Cornell S, Kras-Dupuis A, Fielding M, Hsieh J, Rudkovska A, Wolfe DL. Innovation in Locomotor Training Using a Practice-Based Research Approach. 56th ISCoS Annual Scientific Meeting. Dublin, Ireland. Oct 2017.

Miles, S., Marrocco, S., Paiva, M., Wolfe, D. Enhancing Upper Extremity Function using FES-assisted Cycle Ergometry. American Spinal Injury Association, Albuquerque, New Mexico. April 2017

Fielding, M., Askes, H., Cornell, S., Hsieh, J., Marrocco, S., Wolfe D. Feasibility of a Locomotor Training

Protocol in an Inpatient Brain Injury Program. International Brain Injury Association World Congress, New Orleans, Louisiana. March 2017

Marrocco, S., Aman, S., Cornell, S., Hsieh, J., Fielding, M., Wolfe, D. Development of a Clinical Decision Support System to Improve Locomotor Outcomes in Persons with Spinal Cord Injury. International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Cornell, S., Hsieh, J., Fielding, M., Marrocco, S., Wolfe, D. Optimizing mobility outcomes across locomotor training modalities: Clinical reflection during development of the PRIME algorithm – A case series. International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Sleeth, L., Wolfe, D., Kras-Dupuis, A., Marrocco, S., Jeske, S., McRae, S. User Feedback on an Online. Theory-based Bladder Self-Management Program for People with Spinal Cord Injury (SCI). International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Marrocco, S., Aman, S., Cornell, S., Hsieh, J., Fielding, M., Wolfe, D. Development of a Clinical Decision Support System to Improve Locomotor Outcomes in Persons with Spinal Cord Injury. PRAXIS – Rick Hansen Institute, Vancouver, BC, Canada. April 2016

Marrocco S, Crosby LD, Mansfield A, Chesworth B, Birmingham T, Patterson KK. Development and Evaluation of Community Ambulation Questionnaire. American Congress of Rehabilitation Medicine Conference, Toronto, ON. Oct 2014

Marrocco, S., Patterson, K. Effect of Inclines on Gait of Recovering Stroke Patients. Health & Rehabilitation Sciences - Graduate Research Forum, London, ON. Feb 2013

Dalton Wolfe, PhD
Parkwood Institute; Western Univeristy

CV:
PUBLICATIONS
(Refereed)
Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan VK, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves JD, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Evidence-based scientific exercise guidelines for adults with spinal cord injury: an update and a new guideline. Spinal Cord. 2018 Apr;56(4):308-321.

Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan V, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves J, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Response to correspondence from the ESSA Statement authors. Spinal Cord. 2018 Apr;56(4):409-411.

Burke SM, Tomasone JR, Scime NV, Ma JK, Harden SM, Wolfe DL. Physical activity self-management interventions for adults with spinal cord injury: Part 2 – Exploring the generalizability of findings from research to practice, Psychology of Sport and Exercise, 2018, ISSN 1469-0292

Lala D, Houghton P, Holyoke P, Wolfe D. Using a Modified ADAPTE Process to Enable Effective Implementation of Electrical Stimulation Therapy for Treating Pressure Ulcers in Persons With Spinal Cord Injury. Rehabilitation Process and Outcome https://doi.org/10.1177/1179572717745836. First Published December 19, 2017

Munce SEP, Allin S, Wolfe DL, Anzai K, Linassi G, Noonan VK, Jaglal SB. Using the theoretical domains framework to guide the development of a self-management program for individuals with spinal cord injury: Results from a national stakeholder advisory group. J Spinal Cord Med. 2017 Nov;40(6):687-695.

van der Scheer JW, Martin Ginis KA, Ditor DS, Goosey-Tolfrey VL, Hicks AL, West CR, Wolfe DL. Effects of exercise on fitness and health of adults with spinal cord injury: A systematic review. Neurology. 2017 Aug 15;89(7):736-745.

Gibbs JC, Gagnon DH, Bergquist AJ, Arel J, Cervinka T, El-Kotob R, Maltais DB, Wolfe DL, Craven, BC. Rehabilitation Interventions to modify endocrine-metabolic disease risk in Individuals with chronic Spinal cord injury living in the Community (RIISC): A systematic review and scoping perspective. J Spinal Cord Med. 2017 Nov;40(6):733-747.

Chan CW, Miller WC, Querée M, Noonan VK, Wolfe DL, SCIRE Research Team. The development of an outcome measures toolkit for spinal cord injury rehabilitation. Can J Occup Ther. 2017 Apr;84(2):119-129.

Lala, D, Houghton, PE, Kras-Dupuis A, Wolfe DL. Developing a model of care for healing pressure ulcers with electrical stimulation therapy for persons with spinal cord injury. Top Spinal Cord Inj Rehabil 2016;22(4):277–287.

Baron J, Swaine J, Presseau J, Aspinall A, Jaglal S, White B, Wolfe D, Grimshaw J. Self-management interventions to improve skin care for pressure ulcer prevention in people with spinal cord injuries: A systematic review protocol. Syst Rev 2016 5(1):150.

Guy SD, Mehta S, Harvey D, Lau B, Middleton JW, O'Connell C, Townson A, Truchon C, Wolfe D, Bradbury CL, Bryce TN, Casalino A, Côté I, Craven BC, Finnerup NB, Hitzig SL, Kras-Dupuis A, Moulin DE, Orenczuk S, Parrent AG, Potter P, Siddall PJ, Short C, Teasell R, Widerström-Noga E, Loh E. The CanPain SCI Clinical Practice Guideline for rehabilitation management of neuropathic pain after spinal cord: Recommendations for model systems of care. Spinal Cord 2016 54:S24-S27.

Guy SD, Mehta S, Casalino A, Côté I, Kras-Dupuis A, Moulin DE, Parrent AG, Potter P, Short C, Teasell R, Bradbury CL, Bryce TN, Craven BC, Finnerup B, Harvey D, Hitzig SL, Lau B, Middleton JW, O'Connell C, Orenczuk S, Siddall PJ, Townson A, Truchon C, Widerström-Noga E, Wolfe D, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Recommendations for treatment. Spinal Cord 2016 54:S14-S23.

Mehta S, Guy SD, Bryce TN, Craven BC, Finnerup NB, Hitzig SL, Orenczuk S, Siddall PJ, Widerström-Noga E, Casalino A, Côté I, Harvey D, Kras-Dupuis A, Lau B, Middleton JW, Moulin DE, O'Connell C, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Wolfe D. Bradbury CL, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Screening and diagnosis recommendations. Spinal Cord 2016 54:S7-13.

Loh E, Guy SD, Mehta S, Moulin DE, Bryce TN, Middleton JW, Siddall PJ, Hitzig SL, Widerström-Noga E, Finnerup NB, Kras-Dupuis A, Casalino A, Craven BC, Lau B, Côté I, Harvey D, O'Connell C, Orenczuk S, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Bradbury CL, Wolfe D. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Introduction, methodology and recommendation overview. Spinal Cord. 2016 54:S1-S6.

Ravenek KE, Wolfe DL, Hitzig SL. A scoping review of video gaming in rehabilitation. Disabil Rehabil Assist Technol. 2016 11(6):445-43.

Allison DJ, Chapman B, Wolfe D, Sequeira K, Hayes K, Ditor DS. Effects of a functional electrical stimulation-assisted cycling program on immune and cardiovascular health in persons with spinal cord injury. Top Spinal Cord Inj Rehabil. 2016 22(1):71-78.

Eng JJ, Noonan VK, Townson AF, Higgins CE, Rogers J, Wolfe DL. Impact of an online medical internet site on knowledge and practice of health care providers: a mixed methods study of the Spinal Cord Injury Rehabilitation Evidence project. J Med Internet Res. 2014 Dec 23;16(12):e296.

Bayley MT, Teasell RW, Wolfe DL, Gruen RL, Eng JJ, Ghajar J, Tavender E, Kua A, Bragge P. Where to build

the bridge between evidence and practice?: results of an international workshop to prioritize knowledge translation activities in traumatic brain injury care. J Head Trauma Rehabil. 2014 29(4):268-76.

Noonan VK, Wolfe DL, Thorogood NP, Park SE, Hsieh JT, Eng JJ. Knowledge translation and implementation in spinal cord injury: A systematic review. Spinal Cord. 2014 52(8):578-87.

Mays R, McIntyre A, Mehta S, Hill D, Wolfe D, Teasell R. A review of educational programs to reduce UTIs among individuals with SCI. Rehabil Nurs. 2014 39(5):240-49.

McIntyre A, Cheung K, Kwok C, Mehta S, Wolfe D, Teasell R. Quality of life and bladder management post spinal cord injury: A systematic review. Appl.Res.Qual.Life. 2014 9:1081-1096.

McIntyre A, Mays R, Mehta S, Janzen S, Townson A, Hsieh J, Wolfe D, Teasell R. Examining the effectiveness of intrathecal baclofen on spasticity in individuals with chronic spinal cord injury: A systematic review. J Spinal Cord Med. 2014 37(1):11-18.

Latimer-Cheung AE, Arbour-Nicitopoulos KP, Brawley LR, Gray C, Wilson AJ, Prapavessis H, Tomasone, JR, Wolfe DL, Martin Ginis KA. Developing physical activity interventions for adults with spinal cord injury. Part 2: Motivational counseling and peer-mediated interventions for people intending to be active. Rehabil Psychol. 2013 58(3):307-15.

Martin Ginis KA, Tomasone JR, Latimer-Cheung AE, Arbour-Nicitopoulos KP, Bassett-Gunter RL, Wolfe DL. Developing physical activity interventions for adults with spinal cord injury. Part 1: A comparison of social cognitions across actors, intenders and non-intenders. Rehabil Psychol. 2013 58(3):299-306.

Sweet SN, Martin Ginis KA, Tomasone JR, and The SHAPE-SCI Research Group. Investigating intermediary variables in the physical activity and quality of life relationship in persons with spinal cord injury. Health Psychol. 2013 32(8):877-85.

Sinden KE, Martin Ginis KA, and The SHAPE-SCI Research Group. Identifying occupational attributes of jobs performed after spinal cord injury: Implications for vocational rehabilitation. Int J Rehabil Res. 2013 36(3):196-204.

Mehta S, Hill D, McIntyre A, Foley N, Hsieh J, Ethans K, Teasell RW, Loh E, Welk B, Wolfe D. Meta-analysis of botulinum toxin A detrusor injections in the treatment of neurogenic detrusor overactivity after spinal cord injury. Arch Phys Med Rehabil. 2013 94(8):1473-81.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 2: Systematic review of dorsal root entry zone procedure. Top Spinal Cord Inj Rehabil. 2013 19(1):78-86.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 1: Systematic review of physical and behavioral treatment. Top Spinal Cord Inj Rehabil. 2013 19(1):61-77.

PRESENTATIONS:
Wolfe D. Research to practice innovations in locomotor training for persons with acquired brain or spinal cord injuries. Parkwood Institute Research Update. London, ON. Apr 21 2017.

Wolfe D. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. ONF Staff. Toronto, ON. Nov 3 2015.

Wolfe D, Flett H, Lala D, Musselman K. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. Ontario SCI Research Network Meeting. Toronto, ON. Oct 23 2015.

Wolfe, D, Athanasopoulos P. Making things happen by working together: Prevention and treatment of pressure sores. ONF Board of Directors Meeting, Toronto, ON. Oct 6 2015.

Basett-Spiers K, Athanasopoulos P, Wolfe D, Flett H, Bowman T, Boles L. Integrating people with SCI in best practice implementation across the continuum of care: Prevention and treatment of pressure sores. Ministry of Health and Long Term Care Meeting, Toronto, ON. Sept 9 2015.

Kras-Dupuis A, Guy S, Askes H, Wolfe D. Sustainability of the pressure ulcer prevention practice in persons with spinal cord injury on the inpatient rehabilitation unit. Western Nursing/STTI Iota Omicron Chapter 28th Annual Research Conference: Building Leadership in Nurses Everywhere from the Bedside to the Boardroom. London, ON. May 1 2015.

Koning C, Mumme L, Wolfe D, Scovil CY, Kras-Dupuis A, Brown J, Hamilton L, Mouneimne M, Laramée MT, Kerry Bayless, SCI KMN. Using Implementation Science: A guide for sustainable practice change in spinal cord injury rehabilitation. 91st American Congress of Rehabilitation Medicine(ACRM). Toronto, ON. Oct 7-11 2014.

Guy S, Kras-Dupuis A, Hsieh J, Wolfe D. Implementing a skin health self-management focused education practice for persons with spinal cord injury. ASIA 2014 40th Annual Scientific Meeting. San Antonio, Texas, USA. May 14-17 2014.

Wolfe D. Implementing better practice in pressure injury risk assessment and management in SCI. National Trauma Research Institute Forum: Promoting Best Practice in Risk Assessment and Management for Pressure Injuries following Spinal Cord Injury in the Community Setting. Melbourne, AU. Apr 30 2014.

Wolfe D. Knowledge Mobilization: Overview of SCI Research at Lawson Health Research Institute/Parkwood Hospital – London, Canada. Research Forum, University of Sydney, Rehabilitation Sciences Unit. Sydney, AU. Apr 28 2014.

Wolfe D (Invited Speaker). Making the connection: There's more than just knowing about secondary complications, so what do I do about it…and how does research help me? Spinal Cord Injury Ontario Information Forum. London, ON. Oct 31 2013.

Kras-Dupuis A, Guy S, Wolfe D, Hsieh J, the SCI KMN. Collaborative best practice: Implementation of pressure ulcer prevention in spinal cord injury. Canadian Association of Rehabilitation Nurses 2013 Conference. Vancouver, BC. May 29-31 2013.

Aman SJ (Rapid Podium Presentation), McGuire S, Wittig J, Wolfe DL. Case study of intensive body weight support protocol on a person with acquired brain injury. Current Concepts in Balance, Fitness and Mobility: Perspectives on Intensity in Rehabilitation. Toronto, ON. Jan 25 2013.

Melissa Fielding, BScPT
Parkwood Institute

(no CV uploaded)

Stephanie Cornell, MPT
Parkwood Institute

(no CV uploaded)

Anna Kras-Dupuis, MScN
Parkwood Institute

(no CV uploaded)

Heather Askes, BSc
Parkwood Institute

(no CV uploaded)

Jane Hsieh, MSc
Parkwood Institute

(no CV uploaded)

Cardiorespiratory Fitness in Individuals with Spinal Cord Injury before and after a 36-Session Exoskeleton Gait Training Program: Preliminary Case Series

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Peter Gorman, MD MS
University of Maryland School of Medicine

CV:
PETER H GORMAN, MD – Short CV

Positions and Employment
1989-1991 Instructor in Neurology
Case Western Reserve University
1991-1997 Assistant Professor of Neurology
University of Maryland School of Medicine
1997-present Associate Professor of Neurology
University of Maryland School of Medicine
1999-2000 Special Volunteer, Human Cortical Physiology Section, NINDS, National Institutes of Health (Sabbatical Year)
July 2000 - present Director, Spinal Cord Injury Service
Kernan Orthopaedics and Rehabilitation Hospital
July 2000 - present Attending Physician & Director of the SCI Support Team Clinic
Geriatrics and Long Term Care Service Line
VA Maryland Health Care System
July 2004 – June 2005 Acting Chief, Division of Rehabilitation Medicine
Department of Neurology, University of Maryland School of Medicine
July 2004 – present Chief, Division of Rehabilitation Medicine
Kernan Orthopaedics and Rehabilitation Hospital
July 2005 - present Chief, Division of Rehabilitation Medicine
Department of Neurology, University of Maryland School of Medicine
2008 - present Secondary Appointment
Associate Professor of Physical Therapy & Rehabilitation Science
University of Maryland School of Medicine
Honors
1991 Scientific Achievement Award, Second Place, Fellows Category, MetroHealth Medical Center, Case Western Reserve University.
1996 Golden Goniometer Award for Excellence and Dedication to Academic Instruction and Professional Mentorship, Sinai/Hopkins Residency Training Program in Physical Medicine and Rehabilitation
1998, 2002 VA Gold Pin Award for excellence in clinical care.
2002 Sidney and Elizabeth Licht Award for Excellence in Scientific Writing, American Congress of Rehabilitation Medicine
2004 Golden Goniometer Outstanding Teaching Award for Excellence and Dedication to Academic Instruction
and Professional Mentorship, Sinai/University of Maryland Residency Training Program in Physical Medicine and Rehabilitation
2005 Hero Award, University of Maryland Shock Trauma Gala
2007 Fellow, American Academy of Neurology
2009 Healthcare Hero Finalist, Advancements in Health Care Category, The Daily Record, Baltimore, MD
2009 20 year Service Award, Department of Veterans Affairs
2010 Voted one of Baltimore Magazine's 2010 "Top Docs"
2011 Voted Washington, DC – Baltimore – Northern Virginia "Super Doctor"
2012, 2013 Voted one of Baltimore Magazine's 2012 and 2013 "Top Docs"
2014 25 year Service Award, Department of Veterans Affairs

Selected Peer-reviewed publications (in chronological order).

1. Gorman PH and Mortimer JT. The effect of stimulus parameters on the recruitment characteristics of direct nerve stimulation. IEEE Transactions on Biomedical Engineering, Vol. BME-30: 407-414 (1983).
2. Gorman PH, Rigamonti D, and Joslyn JR. Intramedullary and Extramedullary Schwannoma of the Cervical Spinal Cord: Case Report. Surgical Neurology 32:459-62 (1989).
3. Carter RR, Crago PE, and Gorman PH. Nonlinear Stretch Reflex Interaction during Cocontraction. J. Neurophysiology, 69(3): 943-952 (1993).
4. Macko RF, DeSouza CA, Tretter LD, Silver KH, Smith GV, Anderson PA, Tomoyasu N, Gorman P, Dengel DR. Treadmill Aerobic Exercise Training Reduces the Energy Expenditure and Cardiovascular Demands of Hemiparetic Gait in Chronic Stroke Patients: A Preliminary Report. Stroke 28:326-330 (1997).
5. Gorman PH, Stroh-Woulle K, Peckham PH, Heydrick D. Patient Selection for an Upper Extremity Functional Electrical Stimulation Neuroprosthesis in Tetraplegia. Spinal Cord 35:569-573 (1997).
6. Gorman PH, Kikta DG, Peckham PH. Neurophysiologic Evaluation of Lower Motor Neuron Damage in Tetraplegia. Muscle & Nerve 21: 1321-1323 (1998).
7. Rodgers MM, Keyser RE, Gardner ER, Russell PR, Gorman PH: Influence of trunk flexion on biomechanics of wheelchair propulsion. J Rehabil Res Dev. 37:283-295 (2000).
8. Rodgers MM, Keyser RE, Rasch EK, Gorman PH, Russell PJ. Influence of training on biomechanics of wheelchair propulsion. J Rehabil Res Dev 38:505-511 (2001).
9. Peckham PH, Keith MW, Kilgore KL, Grill JH, Wuolle KS, Thrope JB, Gorman PH, Hobby J, Betz R, Carroll S, Hentz VR, Wiegner A, for the Implantable Neuroprosthesis Research Group. Efficacy of an Implanted Neuroprosthesis for Restoring Hand Grasp in Tetraplegia: A Multicenter Study. Arch PM&R 82:1380-1388 (2001).
10. Peckham, PH and Gorman PH. Functional Electrical Stimulation in the 21st Century. Topics in Spinal Cord Rehabilitation 10(2): 126-150 (2004).
11. Roghmann MC, Wallin MT, Gorman PH, Johnson, JA. Prevalence and Natural History of Colonization with Fluoroquinolone Resistant Gram-negative Bacilli in Community-dwelling People with Spinal Cord Dysfunction. Arch PM&R 87(10): 1305-1309 (2006).
12. Roghmann MC, Gorman PH, Wallin MT, Kreisel K, Shurland S. Johnson JA S. aureus Colonization in Community-dwelling People with Spinal Cord Dysfunction.. Arch PM&R. 88(8):979-983 (2007).
13. Gorman PH, Qadri SFA, Rao-Patel, A. Prophylactic Inferior Vena Cava (IVC) Filter Placement May Increase the Relative Risk of Deep Venous Thrombosis after Acute Spinal Cord Injury. J Trauma 66(3): 707-712 (2009).
14. Kortee KB, Gilbert M, Gorman PH, Wegener ST. Positive Psychological Variables in the Prediction of Life Satisfaction Following Spinal Cord Injury. Rehabilitation Psychology, 55(1): 40-47 (2010).
15. Gorman PH. Unilateral Hyperhidrosis From a Contralateral Source in a C4 Complete Tetraplegic Individual. J Spinal Cord Medicine. 33(4):428-430 (2010).
16. Gorman PH. The Review of Systems in Spinal Cord Injury and Dysfunction. Continuum: Lifelong Learning in Neurology, Volume 17(3) Neurorehabilitation; pp 630-634. (June 2011).
17. Geigle P, Frye S, Perreault J, Scott W, Gorman P. Atypical Autonomic Dysreflexia during Robotically Assisted Body Weight Supported Treadmill Training in an Individual with Motor Incomplete Spinal Cord Injury. J Spinal Cord Medicine. 36(2): 153-156 (2013).
18. Gorman PH, Geigle PR, Chen K, York H, Scott W. Reliability and Relatedness of Peak VO2 Assessments during Body Weight Supported Treadmill Training and Arm Cycle Ergometry in Individuals with Chronic Motor Incomplete Spinal Cord Injury. Spinal Cord, 52: 287-291 (2014).
19. Gorman PH, Scott W, York H, Theyagaraj M, Price-Miller N, McQuaid J, Eyvazzadeh M, Ivey FM, Macko RF. Robotically Assisted Treadmill Exercise Training for Improving Peak Fitness in Chronic Motor Incomplete Spinal Cord Injury: A Randomized Controlled Trial. J Spinal Cord Medicine. 39(1):32-44 (2016). PMID: 25520035
20. Perreault J, Geigle PR, Gorman PH, Scott WH. Improvement in Weight Loss and Ambulation Outcomes after Gastric Sleeve Surgery for a Person with Chronic Motor Incomplete Tetraplegia: Clinical Case Report. Spinal Cord. 54:750-753 (2016).
21. Estores I, Chen K, Jackson B, Lao L, Gorman PH. Auricular Acupuncture for Spinal Cord Injury Related Neuropathic Pain: A Pilot Controlled Clinical Trial. J Spinal Cord Medicine. 40(4): 432-438 (2017).
22. Goodrich C, York H, Shapiro A, Gorman PH. Focal Arm Weakness following Intradetrusor Botulinum Toxin Administration in Spinal Cord Injury: Report of Two Cases. J. Spinal Cord Medicine. Accepted for publication (2018).
23. Geigle P, Ogonowska-Slodownik A, Slodownik R, Gorman PH, Scott WH. Measuring peak volume of oxygen (peak VO2) in deep water for individuals with spinal cord injury: protocol development. J Aquatic

Phys Ther. 2018;26(1):30-35.

Research Support
1)CDMRP log # SC130234 Gorman, PH (co-PI: 5%) PI: Ann Spungen, Ph.D. 2014 - 2017
Department of Defense Congressionally Directed Medical Research Program – Spinal Cord Injury Research Program – Clinical Trial Award – Rehabilitation; A Randomized, Crossover Clinical Trial of Exoskeletal-assisted Walking to Improve Mobility, Bowel Function and Cardio-Metabolic Profiles in Persons with SCI.

2) Sub-Investigator, Local PI: Bizhan Aarabi, MD "A Multi-Center, Randomized, Placebo-Controlled, Double-Blinded, Trial of Efficacy and Safety of Riluzole in Acute Spinal Cord Injury"AOSpine North America Research Network SPN-12-001, 2014 -2016

3) Co-Investigator, Local PI: Bizhan Aarabi, MD "A Single-Blind, Randomized, Parallel Arm, Phase I Proof-of-Concept Study of the Safety and Efficacy of HuCNS-SC Transplantation in Cervical Spinal Cord Injury" StemCells, Inc. Protocol CL-SCI-201

4) 2010 - 2015 PI: 12% "Robotic Weight Support Treadmill Training and Aquatic Exercise Comparison in Chronic Motor Incomplete Spinal Cord Injury" Department of Defense Congressionally Directed Medical Research Program – Spinal Cord Injury Research Program – Clinical Trial Award – Rehabilitation, Contract No W81XWH-10-1-0981
First year direct costs: $ 467,164 Total direct costs $ 1,486,158

5) 2015 Co-Investigator; donated time, PI: Mary Claire Roghmann, MD "Antibiotic resistant Gram-negative bacteria and the Gut Microbiome in Adults with Spinal Cord Injury (SCI)" Funded by a Pilot Grant Award from VISN 5, Dept of Veterans Affairs.

6) 2012 - 2013 Co-PI 1.5% PI: Irene Estores, MD "Auricular Acupuncture for Spinal Cord Injury Related Neuropathic Pain" Paralyzed Veterans of America Research Foundation Grant #2806 Direct costs: $75,000

7) 2006 - 2010 PI, 20% "Cardiovascular Parameters for Lokomat Training in Chronic Incomplete Spinal Cord Injury" VA Merit Review Award, Rehabilitation Research and Development Service Annual direct costs: $150,000 Total direct costs: $450,000.

William Scott, MA
University of Maryland Rehabilitation and Orthopaedic Institute

(no CV uploaded)

Marni Kallins, PT, DPT, OCS
University of Maryland Rehabilitation and Orthopaedic Institute

(no CV uploaded)

Paula Geigle, PT, MS, PhD
University of Maryland Rehabilitation and Orthopaedic Institute

(no CV uploaded)

Ann Spungen, EdD
James J Peters Va Medical Center

(no CV uploaded)

Loneliness Among Men and Women with SCI: Preliminary Evidence of Risk Factors

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Susan Robinson-Whelen, PhD
Tirr-Memorial Hermann / Baylor College of Medicine

CV:
Biographical Sketch

Name: Susan Robinson-Whelen, PhD

Position Title: Scientist, Spinal Cord Injury and Disability Research Center, TIRR Memorial Hermann; Senior Investigator, Center for Research on Women with Disabilities; Assistant Professor, Department of Physical Medicine and Rehabilitation, Baylor College of Medicine

A. Personal Statement
I have always been drawn to investigators with a passion for research with real-world clinical relevance – research that has the potential to make a difference in people's lives. The research that we conduct at the TIRR-MH Spinal Cord Injury and Disability Center (SCIDR) and Baylor College of Medicine's Center for Research on Women with Disabilities (CROWD) has been guided by the issues that we hear are important to our study participants – either directly from them through focus groups or indirectly through the data we collect. We have heard study participants express concerns about social isolation and loneliness, and we have seen studies in the SCI literature that have highlighted the importance of loneliness; however, most of these studies have been qualitative studies. In examining the literature, we were surprised to learn that loneliness had been so understudied in this population. In fact, we could not find studies in the literature that administered the most widely used measure of loneliness to people with SCI. The few quantitative studies available administered a very short 3-item loneliness scale that utilized a 3-point response scale. As a result, we thought it was imperative that we begin to examine loneliness among people with SCI. This is all the more pressing given the rapidly growing literature demonstrating the adverse effects of loneliness on psychological health, including suicide, and physical health, including mortality. In an earlier effort to obtain funding to examine loneliness among people with SCI, we were not funded due in large part to the fact that there was no evidence in the literature that loneliness was an issue for people with SCI. We were fortunate to be able to incorporate the UCLA-LS-v3 measure in a survey study that was being initiated at TIRR-Memorial Hermann. We are hopeful that these results, highlighting the elevated loneliness scores among people with SCI, will prompt interest in better understanding the risk factors for loneliness, increasing our knowledge of the health consequences of loneliness in this population, and ultimately developing intervention strategies to address loneliness and the risk factors that promote it.

B. Positions and Honors
Positions and Employment

1997-2004 Research Health Science Specialist, VA Research & Development Service,
Michael E. DeBakey VA Medical Center, Houston, Texas

1997- Assistant Professor, Department of Physical Medicine and Rehabilitation (PM&R),
Baylor College of Medicine (BCM), Houston, TX

2002- Senior Investigator, Center for Research on Women with Disabilities (CROWD), Department of PM&R, BCM, Houston, TX (Investigator 2002-
2006; Senior Investigator, 2006-current)

2012- Scientist, The Institute for Rehabilitation and Research (TIRR) – Memorial Hermann, Spinal Cord Injury and Disability Research Center (SCIDR), Houston, TX

Other Experience and Professional Memberships

1989-2013 Member, Gerontological Society of America

1996-2017 Member, American Psychological Association: Division 20 (Aging and Adult Development)

Division 22 (Rehabilitation Psychology), Division 38 (Health Psychology)

1996-2010 Licensed Psychologist #5141, State Board of Psychology, Ohio

1998 Reviewer for journal: Basic and Applied Social Psychology

1999 Reviewer for journal: Personality and Individual Differences

1999-2001 Member, MEDVAMC Research and Development Neurobehavioral Subcommittee
Member, MEDVAMC Research and Development Rehabilitation Subcommittee

2000 Reviewer for journals: Health Psychology, Psychology and Aging (Psych Aging)

2001-2017 Provisionally Licensed Psychologist #31918, Texas State Board of Examiners of Psychology

2001-2005 Reviewer for journals: Psych Aging, Journal of the American Medical Association (JAMA), Psych Aging, Social Science Quarterly

2006-2010 Reviewer for journals: Health Education Research, JAMA, Rehabilitation Psychology, Research on Aging, Women's Health Issues (WHI), Psych Aging; Psychology, Health, & Medicine; Women and Health; Disability and Health, International Journal of Disability, Development and Education

2011 Member, Planning Committee, Inequity to Equity: Promoting the Health and Wellness of Women with Disabilities, conference sponsored by the American Psychological Association, Howard University Women's Health Institute, and Gallaudet University.

2011-2015 Reviewer for journals: Rehabilitation Psychology; Health Psychology; Topics in SCI Rehabilitation, Archives of Physical Medicine and Rehabilitation (Archives PM&R);Topics in SCI Rehabilitation,

2012-2017 Member, Women's Health Task Force on SCI, American Congress of Rehabilitation Medicine

2013-2017 Member, National Spinal Cord Injury Association

2014-2017 Member, American Congress of Rehabilitation Medicine

2016-2017 Reviewer for journal: Disability and Health

Honors and Awards

1982-1984 Undergraduate Honor Societies: Mu Sigma Rho, Phi Kappa Phi, Psy Chi

1987-1991 National Institute on Aging Predoctoral Trainee

1990 Passed Oral Exams with Distinction

1991 Student Travel Award - American Psychological Association Annual Convention

2002 Best Poster Award – 2002 National Meeting, VA Rehabilitation R & D Service

C. Contribution to Science – full Robinson-Whelen citation list at:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1n_vkls9XjXk4/bibliography/48054890/public/?sort=date&direction=ascending

1. Stress - My early research on stress was conducted with Janice Kiecolt-Glaser as part of her NIH-funded longitudinal study on the effects of caregiving stress on psychological and physical health in a sample of family members caring for a relative with Alzheimer's disease. Using a subset of that dataset, I compared former caregivers, current caregivers, and non-caregiving controls and found the negative consequences of caregiving remain years after caregiving ends. This was one of the first studies highlighting the ongoing needs of former care providers. With a growing understanding of the negative effects of stress in healthy populations, I sought to examine stress and its correlates among people with disabilities. In studies of women with physical disabilities and veterans with SCI, we found levels of stress to be higher than the general population with independent correlates including pain, social support, and abuse experience. We also found that social support moderated the negative effects of stress, with those low in social support the most vulnerable to the negative effects of stress. These findings led our team (Hughes–PI) to develop and test a stress self-management intervention for women with disabilities using a randomized controlled trial (RCT). With pre, post, and follow-up assessments, we found support for the efficacy of the intervention with reductions in stress relative to a wait-list control group and evidence that stress reduction mediated the impact of the intervention on other measures of mental health at follow-up. Recognizing the prevalence of stress among people with disabilities and the important impact of stress on psychological health and well-being, we have incorporated stress self- management in our psychological health promotion intervention to be tested in our site-specific study.

a. Robinson-Whelen, S., Kiecolt-Glaser, J. K., & Glaser, R. (2000). Effects of chronic stress on immune function and health in the elderly (pp. 71-84). In S. B. Manuck & A. S. Baum (Eds.), Behavior, Health, and Aging. Mahway, NJ: Lawrence Erlbaum Associates

b. Robinson-Whelen, S., Tada., Y., MacCallum, R. C., McGuire, L, & Kiecolt-Glaser, J. K. (2001). Long-term caregiving: What happens when it ends? Journal of Abnormal Psychology, 110, 573-584.

c. Hughes, R. B., Taylor, H. B., Robinson-Whelen, S., & Nosek, M. A. (2005). Stress and women with physical disabilities: Identifying correlates. Women's Health Issues, 15, 14-20.

d. Rintala, D., Robinson-Whelen, S, Matamoros, R. (2005). Subjective stress in male veterans with spinal cord injury. Journal of Rehabilitation Research and Development, 42 (3), 291-304.

2. Intervention Research - The stress self-management intervention is one of several we developed and tested to address the unique needs of people with disabilities. Our team of investigators (Nosek-PI) developed and tested a
group health promotion program for women aging with physical disabilities, including SCI, using a RCT. In that study, we demonstrated greater improvement among intervention group participants in a wide range of health behaviors as well as some physical health outcomes, with self-efficacy mediating the effect of the intervention on health behaviors. With funding from the Christopher & Dana Reeve Foundation, we offered an abbreviated and tailored version of the program to 58 women aging with paralysis throughout the Houston area, again demonstrating significant improvements from pre to posttest in self-efficacy and health behavior, improvements that were maintained at follow-up. The majority of our interventions have been group interventions led by peer facilitators (or co-led by a peer facilitator in our depression intervention), an intervention format we have found to be meaningful and effective for participants who are often socially isolated with few role models in their natural network facing the same struggles. Consistently well-received by participants, additional intervention programs we have developed and tested, primarily using RCTs, have included weight management, stress self-management, safety and abuse prevention, depression self-management, and, most relevant to this proposal, psychological health promotion.

a. Hughes, R. B., Robinson-Whelen, S., Taylor, H. B., Swedlund, N., & Nosek, M. A. (2004). Enhancing self-esteem in women with physical disabilities. Rehabilitation Psychology, 49, 295-302.

b. Hughes, R. B., Robinson-Whelen, S., Taylor, H. B., & Hall, J. W. (2006). Stress self-management: An intervention for women with physical disabilities. Women's Health Issues, 16, 389-399.

c. Robinson-Whelen, S., Hughes, R. B., Taylor, H. B., Colvard, M., Mastel-Smith, B., & Nosek, M. A. (2006).

Improving the health and health behaviors of women aging with physical disabilities: A peer-led health promotion program. Women's Health Issues, 16, 334-345.

d. Robinson-Whelen, S., Hughes, R. B., Gabrielli, J., Lund, E. M., Abramson, W., and Swank, P. (2014). A safety awareness program for women with diverse disabilities: A randomized controlled trial. Violence Against Women, 20 (7), 846-868.

3. Telehealth and Alternative Methods of Providing Interventions - People with disabilities face numerous barriers to psychoeducational programming, and those facing the greatest barriers (e.g., severe functional limitations, transportation, and poor health) are least likely to participate and, arguably, most in need of such services. In an effort to address these concerns, we developed an online self-guided health promotion program with access to a "health coach," but this format was less satisfying to participants than our programs with peer interaction. More recently, we have developed interventions using Second Life (SL), an online virtual world in which participants meet using avatars and participate in real-time group sessions from the convenience of their own homes. In a pilot test of a SL program designed to enhance self-esteem and psychological health among women with a wide range of mobility impairments (Nosek-PI), we found moderate effects on measures of self-efficacy and self-esteem and moderate to large effects on depression. Testing a modified version of this program in a nationwide sample of women with SCI (Robinson-Whelen-PI), we found the program to be well-received with participants stating the SL program was more convenient and offered the same or more opportunities for social interaction as an in-person program. We also recently completed a 16-week pilot test of a weight management program in SL and found a similarly positive response to the virtual reality intervention. In addition to developing interventions in SL, we (Robinson-Whelen-PI) recently received funding to modify our weight management intervention to make it unique and specific to the needs of people with SCI and to offer it using a WebEx platform to remove barriers to access.

a. Robinson-Whelen, S., Hughes, R. B., Powers, L. E., Oschwald, M., Renker, P., Swank, P., and Curry, M. A. (2010). Efficacy of a computerized abuse and safety assessment intervention for women with disabilities: A randomized controlled trial. Rehabilitation Psychology, 55, 97-107.

b. Nosek, M. A., Robinson-Whelen, S., Hughes, R. B., Porcher, E., Davidson, G., & Nosek, T. M. (2011). Self-Esteem in Second Life: An inworld group intervention for women with disabilities. Journal of Virtual Worlds Research, 4 (1), 4-9.

c. Nosek, M. A., Lee, R. E., Robinson-Whelen, S., Ledoux, T. A., Hughes, R. B., O'Connor, D. P., & Nosek, T. M. (2014, April). The Inclusion Challenge: How can general weight loss programs accommodate the needs of women with mobility impairments? In Annals of Behavioral Medicine (Vol. 47, pp. S64-S64). New York, NY 10013 USA: Springer.

d. Nosek, M. A., Robinson-Whelen, S., Ledoux, T. A., Hughes, R. S., O'Connor, D. P., Lee, R. E., Goe, R., Silveira, S. L., Markley, R., Nosek, T. M., and the GoWoman Consortium. (2018). A pilot test of the GoWoman weight management intervention for women with mobility impairments in the online virtual world of Second Life. Disability and Rehabilitation.[Epub ahead of print] doi: 10.1080/09638288.2018.1473511

4. Mental Health and Disability - Recognizing that rates of depression are high among people with disabilities, we examined the effect of depression on health care utilization (Nosek-PI) and found that utilization and costs were higher in those with depressive symptoms and increased with the frequency and severity of symptoms. In subsequent studies, we have examined the correlates and predictors of depression and found modifiable risk factors, such as pain interference, social isolation, and social support, to predict depression above and beyond demographic and disability characteristics. In response to these findings, we developed a group depression self-management intervention for women with physical disabilities, which was shown in an RCT, tested in centers for independent living across the nation, to reduce depression. However, we know that it is not enough to simply reduce the rates of clinical depression. We recognize that there is more to mental health than the mere absence of a clinical diagnosis. Many of our interventions have sought to promote psychological and social health, such as our psychological health promotion program that we propose to refine and test as our site-specific project. We have also recently examined loneliness as a factor that adversely affects psychological health – a line of research we look forward to

expanding through our proposed module project.

a. Robinson-Whelen, S., Hughes, R. B., Taylor, H. B., Hall, J. W., & Rehm, L. P. (2007). Depression self-management program for rural women with physical disabilities. Rehabilitation Psychology, 52, 254-262.

b. Robinson-Whelen, S., Taylor, H. B., Hughes, R. B., & Nosek, M. A. (2013). Depressive symptoms in women with physical disabilities: Identifying correlates to inform practice. Archives of Physical Medicine and Rehabilitation, 94 (12), 2410-2416.

c. Robinson-Whelen, S., Taylor, H. B., Hughes, R. B., Wenzel, L., and Nosek, M. A. (2014). Depression and depression treatment in women with spinal cord injury. Topics in Spinal Cord Injury Rehabilitation, 20, 23-31. d. Robinson-Whelen, S., Taylor, H. B., Feltz, and Whelen, M (in press). Loneliness among People with Spinal Cord Injury: Exploring the Psychometric Properties of the 3-item Loneliness Scale. Archives of Physical Medicine and Rehabilitation.

Complete List of Published Work in MyBibliography:
http://www.ncbi.nlm.nih.gov/sites/myncbi/1n_vkls9XjXk4/bibliography/48054890/public/?sort=date&direction=ascending

D. Research Support

Ongoing Research Support

90SI16000126 Taylor (PI) 09/30/2016 – 9/29/2021
National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)
Texas Model Spinal Cord Injury System
The goal is to conduct research that can improve services and outcomes for people with SCI.
Role: Co-Investigator

Texas Model Spinal Cord Injury System Primary Site Project: Promoting the Psychological Health of Women with SCI: A Virtual World Intervention
The goals of this project are to test the efficacy of a psychological health promotion intervention for women with SCI and examine the significance of self-efficacy, social connectedness, and perceived stress in mediating the effect of the intervention on the psychological health outcomes
Role: Principal Investigator

367592 Robinson-Whelen (PI) 04/29/16-10/31/18
Craig H. Neilsen Foundation
Development of an eHealth Group Weight Management Intervention for People with SCI
The goal is to adapt and expand a weight management program to meet the unique needs of men and women with SCI and pilot test the modified intervention in a sample of overweight and obese persons with SCI.
Role: Principal Investigator

901F099-01 Taylor (PI) 09/30/2015-09/29/2019
National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)
The Relations among Pain, Depression, and Resilience and their Prediction of Life Satisfaction
The goal of this study is to examine chronic pain, resilience, depression and satisfaction with life among approximately 100 men and 100 women with spinal cord injury.
Role: Co-Investigator

Completed Research Support

H133G130219 Hughes (PI) 10/01/2013-09/30/2016
National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)
Partnering with People with Intellectual Disabilities to Address Interpersonal Violence
The goal of this project is to develop and test a safety awareness intervention designed to meet the unique

safety needs of adults with intellectual disabilities.
Role: Co-Investigator/Project Director

H133G120192 Nosek (PI) 10/01/2012-09/30/2015
National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)
Development of a Virtual Reality Weight Management Intervention for Women with Mobility Impairments
The goal of this project is to develop a weight management intervention for women with mobility impairments and pilot test it online in the virtual world of Second Life.com.
Role: Co-Investigator/Project Director

Rosemary Hughes, PhD
University of Montana

(no CV uploaded)

Eva Widerstrom-Noga, DDS, PhD
University of Miami, Miller School of Medicine

(no CV uploaded)

Aime Urquieta, BS
Tirr-Memorial Hermann

(no CV uploaded)

Rachel Markley, MPH
Tirr-Memorial Hermann

(no CV uploaded)

Jose Vega, BA
Tirr-Memorial Hermann

(no CV uploaded)

Heather Taylor, PhD
Tirr-Memorial Hermann

(no CV uploaded)

Evaluating the Efficacy of Functional Electrical Stimulation Therapy Assisted Walking after Chronic Motor Incomplete Spinal Cord Injury: Effects on Bone Biomarkers and Bone Strength.

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

B. Catharine Craven, BA, MD, MSc
University Health Network - Toronto Rehabilitation Institute

CV:
NAME: Beverley Catharine (Cathy) Craven

MAIN AFFILIATIONS:
Physiatrist, Medical Lead, Spinal Cord Rehabilitation Program
Senior Scientist, Neural Engineering & Therapeutics Team, Toronto Rehab - UHN
Associate Professor, Dept. of Medicine, Div. of Physical Medicine & Rehabilitation, University of Toronto

A. Personal Statement
My passions for applied physiology, care of the “whole person” with SCI, and belief in the value and effectiveness of interprofessional care have influenced my career directions and choice of research activities. My initial career focus was on describing changes in lower extremity bone mass and bone quality after SCI. Subsequent efforts have aimed to help the field identify individuals with SCI, low bone mass, and high fracture risk who require therapy including systematic reviews describing, and intervention studies determining, which therapeutic interventions are effective for treatment of sublesional osteoporosis. Concurrent advances in bone physiology, the muscle-bone unit, and Wnt signaling, led me to conduct intervention studies evaluating the efficacy rehabilitation therapies (standing and whole body vibration) for augmenting lower extremity bone mass and reducing fracture risk. I continue to explore the related fates of bone, muscle and adipose tissue after SCI, and their roles in precipitating secondary health conditions including: declines in hip and knee region bone quality; reductions in muscle density; and, increases in abdominal, visceral and intramuscular fat. These events combine to directly or indirectly precipitate distal femur fracture, pressure sores, a pro-inflammatory state, cardiometabolic syndrome, and heart disease. My most recent primary and collaborative research has focused on preservation of tissue, and optimization of residual tissue function through the application of medical and neurorehabilitation strategies to prevent or ameliorate fractures and heart disease. I have worked to advance future SCI health service delivery through the publication of the first Atlas of Canadian SCI Rehabilitation (www.idapt.com/research/e-scan) and leadership of the SCI-High project.

B. Most recent publications

Journal Articles
1. El-Kotob R, Craven BC, Mathur S, Ditor DS, Oh P, Miyatani M, Verrier MC. (2018). Assessing Heart Rate Variability as a Surrogate Measure of Cardiac Autonomic Function in Chronic Traumatic Spinal Cord Injury. Top Spinal Cord Inj Rehabil. 24(1): 28-36.
2. Gibbs JC, Brown ZM, Wong AK, Craven BC, Adachi JD, Giangregorio LM. (2018). Measuring Marrow Density and Area Using Peripheral Quantitative Computed Tomography at the Tibia: Precision in Young and Older Adults and Individuals With Spinal Cord Injury. J Clin Densitom. 21(2): 269-280.
3. Singh H, Shah M, Flett H, Craven BC, Verrier M, Musselman K. (2018). Perspectives of individuals with sub-acute spinal cord injury after personalized adapted locomoter training. Disabil Rehabil. 40(7): 820-828. In Press
4. Singh H, Unger J, Zariffa J, Pakosh M, Jaglal S, Craven BC, Musselman KE. (2018). Robot-assisted upper extremity rehabilitation for cervical spinal cord injuries: A systematic scoping review. Disabil Rehabil Assist Technol. Epub(Epub): Epub. In Press
5. Furlan JC, Fehlings MG, Craven BC. (2018). Economic impact of aging on the initial spine care of patients with acute spine trauma: From bedside to teller. NEUROSURGERY. Epub(Epub): Epub. In Press
6. Jeyathevan G, Craven BC, Cameron J, Jaglal SB. (2018). Facilitators and Barriers to Supporting Individuals with Spinal Cord Injury in the Community - Experiences of Family Caregivers and Care Recipients. Disability and Rehabilitation. NA: NA. Submitted

7. Furlan JC, Craven BC. (2018). DEC - Traumatic spinal cord injury in military personnel versus civilians: A propensity score-matched cohort study. Neurosurgical Focus. NA: NA. Submitted
8. Choukou MA, Best KL, Craven BC, Hitzig SL. (2018). Identifying and Classifying Quality of Life Tools for Assessing Neurogenic Bowel Dysfunction After Spinal Cord Injury. Top Spinal Cord Inj Rehabil. Epub(Epub): Epub. In Press
9. Krassioukov K, Currie KD, Hubli M, Rashidi A, Nightingale T, Ramer L, Eng J, Ginis KM, macdonmj, hicksal, Ditor D, Oh P, Verrier M, Craven BC. (2018). Effects of exercise interventions on cardiovascular health in individuals with chronic, motor-complete spinal cord injury: Protocol for a randomized controlled trial. BMJ Open. NA(NA): NA. Submitted
10. Bhide R, Rivers C, Kurban D, Chen J, Noonan V, Farahani F, Flett H, Craven BC. (2018). Service Interruptions and Their Impact on Rehabilitation Length of Stay among Ontarians with Traumatic, Subacute Spinal Cord Injury. Critical Reviews in Physical and Rehabilitation Medicine. 29(1): 45-66.
11. Marinho-Buzelli AR, Rouhani H, Craven BC, Masani K, Barela JA, Popovic MR, Verrier MC. (2018). Effects of water immersion on quasi-static standing after incomplete spinal cord injury: A case series exploring center of pressure sway and trunk acceleration. to be entered. NA: NA.
12. Singh H, Sam J, Verrier MC, Flett HM, Craven BC, Musselman KE. (2018). Life after personalized adaptive locomotor training: a qualitative follow-up study. Spinal Cord Ser Cases. Epub(Epub): Epub. In Press 13. Rivers CS, Fallah N, Noonan VK, Whitehurst DG, Schwartz CE, Finkelstein JA, Craven BC, Ethans K, O'Connell C, Truchon BC, Ho C, Linassi AG, Short C, Tsai E, Drew B, Ahn H, Dvorak MF, Paquet J, Fehlings MG, Noreau L; RHSCIR Network. (2018). Health Conditions: Effect on Function, Health-Related Quality of Life, and Life Satisfaction After Traumatic Spinal Cord Injury. A Prospective Observational Registry Cohort Study. Arch Phys Med Rehabil. 99(3): 443-451.
14. Milligan J, Lee J, Hillier LM, Slonim K, Craven BC. (2018). Improving Primary Care for Persons with Spinal Cord Injury: Development of a Toolkit to Guide Care. J Spinal Cord Med. Epub(Epub): Epub. In Press

15. Chan BCF, Craven BC, Furlan JC. (2018). A scoping review on health economics in neurosurgery for acute spine trauma. Neurosurg Focus. 44(5): E15.
16. Pelletier C, Omidvar M, Miyatani M, Giangregorio L, Craven BC. (2018). Participation in moderate-tovigorous leisure time physical activity is related to decreased visceral adipose tissue in adults with spinal cord injury. Appl Physiol Nutr Metab. 43(2): 139-144.
17. Zleik N, Weaver F, Harmon RL, Le B, Radhakrishnan R, Jirau-Rosaly WD, Craven BC, Raiford M, Hill JN, Etingen B, Guihan M, Heggeness MH, Ray C, Carbone L. (2018). Prevention and Management of Osteoporosis and Osteoporotic Fractures in Persons with a Spinal Cord Injury or Disorder: A Systematic Scoping Review. J Spinal Cord Med. Epub(Epub): Epub. In Press
18. MH Shojaei, SM Alavinia, BC Craven. (2017). Management of obesity after spinal cord injury: a systematic review. J Spinal Cord Med. 40(6): 783-794.
19. Best KL, Ethans K, Craven BC, Noreau L, Hitzig SL. (2017). Identifying and classifying quality of life tools for neurogenic bladder function after spinal cord injury: A systematic review. J Spinal Cord Med. 40(5): 505-529.
20. Cervinka T, Lynch CL, Giangregorio LM, Adachi JD, Papaioannou A, Thabane L, Craven BC. (2017). Agreement between fragility fracture risk assessment algorithms as applied to adults with chronic spinal cord injury. Spinal Cord. 55(11): 985-993.
21. CD Moore, BC Craven, L Thabane, A Papaioannou, JD Adachi, LM Giangregorio. (2017). Do Muscle Atrophy and Fat Infiltration of Muscle Plateau or Persist in Chronic Spinal Cord Injury?. J Clin Densitom. S1094-6950(16): 30193-7.
22. Tremblay MS, Aubert S, Barnes JD, Saunders TJ, Carson V, Latimer-Cheung AE, Chastin SFM, Altenburg TM, Chinapaw MJM et al. (2017). Sedentary Behavior Research Network (SBRN) - Terminology Consensus Project process and outcome. Int J Behav Nutr Phys Act. 14(1): 75.
23. Gibbs JC, Gagnon DH, Bergquist AJ, Arel J, Cervinka T, El-Kotob R, Maltais DB, Wolfe D, Craven BC. (2017). Rehabilitation Interventions to modify endocrine-metabolic disease risk in Individuals with chronic Spinal cord injury living in the Community (RIISC): A systematic review and scoping perspective. J Spinal Cord Med. 40(6): 733-747.
24. Furlan JC, Gulasingam S, Craven BC. (2017). The Health Economics of the spinal cord injury or disease among veterans of war: A systematic review. J Spinal Cord Med. 40(6): 649-664.
25. Jaglal SB, Guilcher SJT, Ho C, Noonan V, Craven BC, Christie S, Welk B, Wai E, Tsai E, Screevasan V, Wilson J, Fehlings M, Kaleemuddin J. (2017). Identifying Non-Traumatic Spinal Cord Injury (NTSCI) from Administrative Health Data in Ontario: Advancing the NTSCI Algorithm. Topics in Spinal Cord Injury

Rehabilitation. Accepted
26. Craven BC, Kurban D, Farahani F, Rivers CS, Ho C, Linassi AG, Gagnon DH, O'Connell C, Ethans K, Bouyer L, Noonan VK, RHSCIR Network. (2017). Predicting rehabilitation length of stay in Canada: It's not just about impairment. J Spinal Cord Med. 40(6): 676-686. In Press
27. Loh E, Guy S, Kra Dupuis A, White B, Craven BC, Short C, Wolfe D, Lee J, Laramee Irglm MT, Salter M, Xia N,Guilcher S, Jerry, Hayes K, Phalgun J, Tara, Noonan V, Mehta S, Bassett-Spiers K. (2017). Advancing Research and Clinical Care in the Management of Neuropathic Pain after Spinal Cord Injury: Key Findings from a Canadian Summit. Canadian Journal of Pain. Epub: Epub. In Press
28. Guilcher SJT, Voth J, Ho C, Noonan VK, McKenzie N, Thorogood NP, Craven BC, Cronin S, Jaglal SB. (2017). Characteristics of non-traumatic spinal cord dysfunction in Canada using administrative health data. Topics in Spinal Cord Injury Rehabilitation. 23(4): 343-352.
29. Craven BC, Kuerban D, Farahani F, Rivers CS, Gagnon DH, Linassi AG, Bouyer L, Ethans K, Ho C, O'Connell C, Noonan VK, RHSCIR Network. (2017). It's not just about neurology: impairment, medical complexity, and functional ability predict rehabilitation length of stay in Canada. Journal of Spinal Cord Medicine. na: na. Submitted
30. Totosy de Zepetnek JO, Miyatani M, Szeto M, Giangregorio LM, Craven BC. (2017). The effects of whole body vibration on pulse wave velocity in men with chronic spinal cord injury. J Spinal Cord Med. 40(6): 795-802.
31. Rivers CS, Fallah N, Noonan VK, Whitehurst DGT, Schwartz C, Finkelstein J, Craven BC, Ethans K, O'Connell C, Truchon C, Ho C, Linassi AG, Short C, Tsai E, Drew B, Ahn H, Dvorak MF, Paquet J, Fehlings MG, Noreau L, RHSCIR Network. (2017). Secondary health conditions: impact on function, health-related quality of life, and life satisfaction following traumatic spinal cord injury. Archives of Physical Medicine and Rehabilitation. Accepted
32. Hoskin JD, Miyatani M, Craven BC. (2017). Quality reporting of carotid intima-media thickness methodology; Current state of the science in the field of spinal cord injury. J Spinal Cord Med. Eput(Epub): Epub.
33. Dance DL, Chopra A, Campbell K, Ditor DS, Hassouna M, Craven BC. (2017). Exploring daily blood pressure fluctuations and cardiovascular risk among individuals with motor complete spinal cord injury: a pilot study. J Spinal Cord Med. 40(4): 405-414.
34. Milligan J, Craven BC, Burns A, Lee J, Hillier L, Wolfe D, Bauman C. (2017). Enhancing Spinal Cord Injury Consumers by Clinical use of Videoconferencing. Spinal Cord Cases and Series. In Press
35. Craven BC, Giangregorio LM, Alavinia SM, Blencowe L, Desai N, Hitzig S, Masani K, Popovic MR. (2017). Evaluating the Efficacy of Functional Electrical Stimulation Therapy for Walking after Chronic Motor Incomplete Spinal Cord Injury: Effects on Bone Biomarkers and Bone Strength. J Spinal Cord Med. 40(6): 748-758.
36. Alavinia SM, Omidvar M, Farahani F, Bayley M, Zee J,Craven BC. (2017). Enhancing quality practice for prevention and diagnosis of urinary tract infection during inpatient spinal cord rehabilitation. J Spinal Cord Med. 40(6): 803-812.

Books

1. Craven C, Verrier M, Balioussis C, Wolfe D, Hsieh J, Noonan V, Rasheed A, Cherban E. (2012). Rehabilitation Environmental Scan Atlas: Capturing Capacity in Canadian SCI Rehabilitation.Craven C. Published, Rick Hansen Institute, Canada

Book Chapters

1. Craven BC, Lynch CL, Eng JJ. (2015). Bone Health Following Spinal Cord Injury.Craven BC, Lynch CL, Eng JJ. Spinal Cord Injury Rehabilitation Evidence. Version 5.0. (5) Published, Thomas Land Publishers, United States
2. Craven BC, Hadi SC, Popovic MR. (2014). Functional Electrical Stimulation Therapy: Enabling Function Through Reaching and Grasping. Craven BC, Hadi SC, Popovic MR. International Handbook of Occupational Therapy Interventions. (2): 587-605. Published, Springer Science + Business Media, Switzerland
3. Bodine C, Burne B, Burns A, Cardenas D, Craven C, Harvey L, Inglis G, Jensen M, Jessup N, Kennedy P, Krassioukov A, Levi R, Li J, Lukersmith S, Marshall R, Middleton J, Morris C, New P et al. (2013). Health Care and Rehabilitation Needs.Bickenbach J, Officer A, Shakespeare T, von Groote P. International Perspectives on Spinal Cord Injury (IPSCI). : 65-91. Published, World Health Organization, Canada
4. Burns AS, Wilson JR, Craven BC. (2012). The Medical Management of Secondary Complications following Spinal Cord Injury.Fehlings MG, Vaccaro A, Boakye M, Rossignol S, Ditunno J, Burns A. Essentials of Spinal Cord Injury. : 244-262. Published, Thieme Publishers Inc, Andorra
5. Ashe MC, Craven BC, Krassioukov A, Eng JJ. (2012). Bone Health Following Spinal Cord Injury.Ashe MC,

Craven BC, Krassioukov A, Eng JJ. Spinal Cord Injury Rehabilitation Evidence. Version 4.0. (4.0) Published, Thomas Land Publishers, United States
6. Craven C, Verrier M, Balioussis C, Hsieh J, Wolfe DL. (2012). The SCI Rehabilitation Framework.Craven C, Verrier M, Balioussis C, Wolfe D, Hsieh J, Noonan V, Rasheed A, Cherban E. Rehabilitation Environmental Scan Atlas: Capturing Capacity in Canadian SCI Rehabilitation. : 8-11. Published, Rick Hansen Institute, Canada
7. Craven C, Blencowe L, Burns AS, Coté I, Giangregorio LM and the E-Scan Investigative Team. (2012). Skeletal Integrity.Craven C, Verrier M, Balioussis C, Wolfe D, Hsieh J, Noonan V, Rasheed A, Cherban E. Rehabilitation Environmental Scan Atlas: Capturing Capacity in Canadian SCI Rehabilitation. : 115-126. Published, Rick Hansen Institute, Canada
8. Craven C, Balioussis C, Verrier MC, Hsieh JT, Cherban E, Rasheed A, Noonan V, Wolfe D. (2012). E-Scan Scoping Review Methods.Craven C, Verrier M, Balioussis C, Wolfe D, Hsieh J, Noonan V, Rasheed A, Cherban E. Rehabilitation Environmental Scan Atlas: Capturing Capacity in Canadian SCI Rehabilitation. : 12-13. Published, Rick Hansen Institute, Canada
9. Craven C, Verrier M, and the E-Scan Investigative Team. (2012). New Perspectives from E-Scan.Craven C, Verrier M, Balioussis C, Wolfe D, Hsieh J, Noonan V, Rasheed A, Cherban E. Rehabilitation Environmental Scan Atlas: Capturing Capacity in Canadian SCI Rehabilitation. : 199-209. Published, Rick Hansen Institute, Canada

Conference Publications

1. Singh H, Craven BC, Flett HM, Kerry C, Jaglal S, Silver M, Musselman KE. Views on fall prevention, management and training from theperspective of administrators of Canadian SCI rehabilitation hospitals. 57th ISCoS Annual Scientific Meeting, Abstract
2. Valenzano T, Peladeau-Pigeon M, Guida B, Mancopes R, Craven BC, Steele CM. Respiratory-Swallowing Coordination In Traumatic Spinal Cord Injury. NeuroTrauma 2018, Abstract
3. Miyatani M, Alavinia SM, Giangregorio LM, Blencowe LA, Anderson-Erisman K, Cheung AM, Nash MS, Craven BC. Statin Therapy as Potential Treatment for Endocrine MetabolicDisease in Individuals with Chronic Spinal Cord Injury: A Cross-Sectional Study. 2018 Annual Scientific Meeting of the American Spinal Injury Association, Poster
4. Chan B, Craven BC, Wodchis W, Cadarette S, Krahn M, Mittmann N. Expanded cohort identification algorithm identifies greater SCI population service need and potential health care costs. 7th National Spinal Cord Injury Conference, Abstract
5. Shojaei MH, Alavinia SM, Craven BC. Management of Obesity after Spinal Cord Injury. 7th National Spinal Cord Injury Conference, Abstract
6. Furlan JC, Craven BC, Fehlings M. A cost-utility analysis comparing younger versus elderly with traumatic cervical spinal cord injury. 2016 Annual Cervical Spine Research Society, Abstract
7. Patsakos E, Brisbois LM, Farahani F, Kaiser A, Craven BC. Implementation of longitudinal study participant retention methods & development of a standardized operating procedure to minimize participants attrition: Rick Hansen Spinal Cord Injury Registry (RHSCIR). 7th National Spinal Cord Injury Conference, Abstract
8. Patsakos E, Kaiser A, Brisbois LM, Farahani F, Craven BC. Effectiveness of retention strategies to minimize participant attrition: the Rick Hansen Spinal Cord Injury Registry (RHSCIR). 7th National Spinal Cord Injury Conference, Abstract
9. Brisbois LM, Craven BC, Verrier MC. Feasibility of a central recruitment process for research participation for individuals with spinal cord injuries during inpatient rehabilitation. 7th National Spinal Cord Injury Conference, Abstract
10. Bondi M, Alavinia SM, Blencowe L, Burns A, Gulasingam S, Craven BC. Evidence informed protocols for the treatment of sublesional osteoporosis after SCI. 7th National Spinal Cord Injury Conference, Abstract
11. Chan K, Verrier MC, Craven BC, Alappat C, Flett HM, Furlan JC, Musselman KE. Effects of personalized adapted locomotor training (PALT) on walking function in individuals in the subacute stage after spinal cord injury: a prospective case series. 7th National Spinal Cord Injury Conference, Abstract
12. Furlan JC, Fehlings MG, Craven BC. A cost-utility analysis comparing elderly and younger individuals with traumatic spinal cord injury regarding their initial care and rehabilitation. 7th National Spinal Cord Injury Conference, Abstract
13. Craven BC, Verrier MC. Feasibility of a Central Recruitment Process for Inpatients at a Lyndhurst Spinal Cord Injury Rehabilitation Centre. 7th National Spinal Cord Injury Conference, Abstract
14. Furlan JC, Craven BC. Delayed diagnosis of episodes of autonomic dysreflexia: experiences demanding more effective knowledge translation. 7th National Spinal Cord Injury Conference, Abstract

15. Furlan JC, Craven BC. Psychometric properties of the Japanese orthopedic association (JOA) score in the assessment of patients with cervical spondylotic myelopathy. 7th National Spinal Cord Injury Conference, Abstract
16. Craven BC, Brown A, Campbell KE, Hayes K, Swaine JM, Stacey MC, AUSCAN Pressure Ulcer Risk Scale Study Group. Screening to recruitment ratios – can our experience inform the recruitment calculations for your next study?. 56th ISCOS Annual Scientific Meeting, Poster
17. Singh H, Sam J, Flett H, Craven BC, Verrier MC, Musselman K. Life after personalized adaptive locomotor training: a qualitative follow-up study. 7th National Spinal Cord Injury Conference, Abstract
18. Rivers CS, Fallah N, Noonan VK, Whitehurst D, Schwartz C, Finkelstein J, Craven BC, Ethans K, O'Connell C, Truchon C, Ho C, Linassi AG, Short C, Tsai E, Drew B, Ahn H, Dvorak MF, Paquet J, Fehlings MG, Noreau L. Secondary Health Conditions: Impact on function, health-related quality of life, and life satisfaction following traumatic spinal cord injury. 7th National Spinal Cord Injury Conference, Abstract
19. Furlan JC, Gulasingam S, Craven BC. A systematic review of the health economics of the spinal cord injury or disease among veterans of war. 7th National Spinal Cord Injury Conference, Abstract
20. Miyatani M, Alavinia M, Blencowe L, Giangregorio LM, Craven BC. Association between Statin Treatment and Regional Bone Mineral Density in Individuals with Chronic Spinal Cord Injury: A Cross-Sectional Study. ONF-RHI, Poster
21. Furlan JC, Gulasingam S, Craven BC. Epidemiology of traumatic spinal cord injuries acquired by soldiers during wartime. 7th National Spinal Cord Injury Conference, Abstract
22. Craven BC, Flett H, Hitzig S, Farahani F, Alavinia SM, Omidvar M, Wiest M, Bayley M. Moving from prioritization to implementation: the spinal cord injury rehabilitation care high performance indicators (SCIHIGH) project. 7th National Spinal Cord Injury Conference, Abstract
23. Titman R, Craven BC. A Systematic Review of Diagnostic Accuracy and Feasibility of Depression Screening Tools in the Spinal Cord Injury Population. 7th National Spinal Cord Injury Conference, Poster
24. Heesters AM, Craven BC. Patient Recruitment in Spinal Cord Injured Population: an Ethical Model at Toronto Rehabilitation Institute. 65th CAPMR Annual Scientific Meeting, Abstract
25. Cervinka T, Giangregorio LM, Craven BC. pQCT Derived Bone Indicator Discriminates Between AIS Grades Among Individuals with Chronic Spinal Cord Injury. 55th Annual Meeting of the International Spinal Cord Society, Poster
26. Furlan JC, Craven BC, Fehlings MG. Acute Care and Rehabilitation Management of the Elderly with Traumatic Cervical Spinal Cord Injury: A Cost-Utility Analysis. 2016 Annual Scientific Meeting American Spinal Injury Association, Abstract
27. Alavinia SM, Omidvar M, Devji T, Farahani F, Zimcik H, Zee J, Bayley M, Craven BC. Strategies to Eliminate Hospital Acquired Urinary Tract Infection (HA-UTI) during Spinal Cord Injury (SCI) Rehabilitation. Rick Hansen Institute Praxis 2016, Abstract
28. Craven BC, Alavinia SM, Giangregorio LM, Jaglal S, Cheung AM , Mittmann N. Comparing the cost of new and old technology for lower extremity BMD assessment among Individuals with Spinal Cord injury: p-QCT versus DXA. The International Society For Clinical Densitometry (ISCD) Annual Meeting, Abstract
29. Alavinia SM, Farahani F, Flett H, Hitzig S, Bayley M, Craven BC. The SCI-HIGH (Spinal Cord Injury High Performance Indicators) process for advancing SCI rehabilitation care by 2020. Rick Hansen Institute Praxis 2016, Abstract
30. Craven BC.Making Real Change: In the Context of the “Exercise is Medicine”Paradigm.Rick Hansen Institute Praxis 2016, Abstract
31. Hu D, Musselman K, Craven BC, Verrier M. The role of robotic exoskeletons in SCI rehabilitation: a narrative synthesis of published data regarding the safety and efficacy of the technology. Canadian Physiotherapy Association¹s National Congress 2015, Abstract
32. Furlan JC, Craven BC. Acute Care and Rehabilitation Management of the Elderly with Traumatic Cervical Spinal Cord Injury: A Cost-Utility Analysis. The American Academy of Neurology 68th Annual Meeting, Poster
33. Furlan JC, Craven BC.The Japanese Orthopedic Association (JOA) Score in the assessment of patients with cervical spondylotic myelopathy: A Systematic Review and Critical Appraisal. Canadian Association of Physical Medicine and Rehabilitation 64th Annual Meeting, Abstract, Invited?: No
34. Cervinka T, Giangregorio LM, Craven BC.Capozza Index from pQCT Imaging Predicts 50% of Variance in Proximal Tibia DXA-derived Z-scores. Canadian Musculoskeletal Conference, Abstract
35. Loh E, Guy SC, Mehta S, Moulin DE, Bryce TN, Middleton JW, Siddall PJ, Hitzig SL, Widerstrom-Noga E, Finnerup NB, Kras-Dupuis A, Casalino A, Craven BC, Lau B, Cote I, Harvey D, O'Connell C, Orenczuk S, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Bradbury CL, Wolfe D. The CanPain SCI

Clinical Practice Guidelines for Rehabilitation Management of Neuropathic Pain after Spinal Cord: Introduction, methodology and recommendation overview. Canadian Musculoskeletal Conference 2016, Abstract
36. Furlan JC, Robinson L, Craven BC. Tardy Recognition of episodes of autonomic dysreflexia: Experiences demanding more effective knowledge translation. 64th Annual Meeting of Canadian Association of Physical Medicine and Rehabilitation, Abstract
37. Alavinia SM, Omidvar M, Devji T, Farahani F, Zee J, Bayley M, Craven BC. The SCI-HIGH (Spinal Cord Injury High Performance Indicators) Process for Advancing SCI Rehabilitation Care by 2020.Rick Hansen Institute Praxis 2016, Poster
38. Craven BC, Alavinia M, Flett H, Farahani F, Hitzig SL, Bayley M. Establishing Indicators for Optimal Spinal Cord Injury Care - Phase I: Prioritization of Rehabilitation Domains. 2016 42nd Annual Meeting of the American Spinal Injury Association, Abstract
39. Alavinia SM, Craven BC, Flett H, Farahani F, Hitzig SL, Bayley M.Establishing Indicators for Optimal Spinal Cord Injury Care-Phase I: Prioritization of Rehabilitation Domains. UHN-Toronto Rehabilitation Institute, Poster
40. Furlan J, Fehlings M, Massicotte EM, Craven BC. A Cost-Utility Analysis Comparing Early versus Delayed Surgical Decompression of the Spinal Cord after Acute Traumatic Tetraplegia. 2016 42nd Annual Meeting of the America Spinal Injury Association, Poster
41. Cervinka T, Giangregorio LM, Craven BC. pQCT Derived Bone Indicator Discriminates Between AIS Categories Among IndividualsWith Chronic SCI. UHN-Toronto Rehabilitation Institute, Poster
42. Cervinka T, Giangregorio L, Craven BC. pQCT Derived Bone Indicator Discriminates Between AIS Categories Among Individuals With Chronic SCI. TRI Research Day 2016, Poster
43. Titman R, Craven BC. Screening for Mood Disorders during Inpatient Spinal Cord Injury Rehabilitation. 64th Annual Meeting of Canadian Association of Physical Medicine and Rehabilitation, Abstract
44. Hoskin J, Miyatani M, Craven BC. Quality Reporting of Carotid Intima-media Thickness Methodology: Current State of the Science in the Field of Spinal Cord Injury. UHN-Toronto Rehabilitation Institute, Poster
45. Milligan J, Joe Lee, Craven BC, Wolfe D, Bauman C.E-Consultation: Building Capacity for Spinal Cord Injury Primary Care. Academy of Spinal Cord Injury Professionals 2016 Education Conference, Abstract, Invited?: No
46. Milligan J, Lee J, Craven BC, Wolfe D, Bauman C.E-Consultation: Building Capacity for Spinal Cord Injury in Primary Care. 55th Annual Meeting of the International Spinal Cord Society, Poster
47. Alavinia SM, Omidvar M, Farahani F, Devji T, Zimcik H, Zee J, Bayley M, Craven BC. Quality Improvement Strategies to Eliminate Urinary Tract Infection (UTI) Among Inpatients during Spinal Cord Injury (SCI) Rehabilitation - Innovations Influencing Rehabilitation. Rick Hansen Institute Praxis 2016, Poster
48. Cervinka T, Giangregorio L, Craven BC. Capozza Index from pQCT Imaging Predicts 50% of Variance in Proximal Tibia DXA-derived Z-scores. CMC 2016, Poster
49. Alavinia SM, Omidvar M, Farahani F, Devji T, Zimcik H, Zee J, Bayley M, Craven BC. Quality Improvement Strategies to Eliminate Urinary Tract Infection (UTI) among inpatients during Spinal Cord Injury (SCI) rehabilitation - Innovations influencing rehabilitation. GTA Rehab Network Best Practices 2016 Day, Abstract
50. Cervinka T, Giangregorio L, Craven BC. Minimum Standards for Tibia pQCT Assessment for Patients with Chronic SCI. CMC 2016, Poster
51. Guy S, Cote I, Craven BC, Loh E. What does clinical practice for spinal cord injury pain look like in Canada? A national survey of healthcare providers. 55th Annual Meeting of the International Spinal Cord Society, Poster
52. Furlan JC, Fehlings MG,Craven BC. A Cost-Utility Analysis Comparing Younger versus Elderly Regarding Acute Care and Rehabilitation Management after Acute Traumatic Cervical Spinal Cord Injury.2016 Annual Meeting of the America Spinal Injury Association - 42nd Annual Meeting., Abstract
53. Creasey GH, Andresen KD, Choi D, Clarke-Richardson P, Craven BC, Guest JD, Kleitman N, Kwon BK, McKerracher L, Hunder Peckham P, Steeves JD, Strachan D, Tomlinson M, Truchon C, White B, Joshi P.Bridging the Gaps from Spinal Cord Injury Research to Improved Outcomes: PRAXIS 2016. 55th Annual Meeting of the International Spinal Cord Society, Poster
54. Alavinia SM, Omidvar M, Devji T, Farahani F, Zee J, Bayley M, Craven BC.Strategies to Eliminate Hospital Acquired Urinary Tract Infection (HA-UTI) during Spinal Cord Injury (SCI) Rehabilitation.GTA Rehab Network Best Practices Day 2016, Poster
55. Titman R, Craven BC. How do you feel?: A review of mood disorder screening tools appropriate for use

during inpatient spinal cord injury rehabilitation. 2016 Canadian Association of Physical Medicine & Rehabilitation (CAPMR) - 64th Annual Scientific Meeting., Abstract
56. Alavinia SM, Omidvar M, Devji T, Farahani F, Zee J, Bayley M, Craven BC.Strategies to Eliminate Hospital Acquired Urinary Tract Infection (HA-UTI) during Spinal Cord Injury (SCI) Rehabilitation.Rick Hansen Institute Praxis 2016, Poster
57. Singh H, Shah M, Flett H, Craven BC, Verrier M, Musselman K. Perspectives on Personalized Adapted Locomotor Training from Canadian Participants with Sub-acute Spinal Cord Injury. UHN-Toronto Rehabilitation Institute, Poster
58. Cervinka T, Giangregorio LM, Craven BC.Minimum Standards for Tibia pQCT Assessment for Patients with Chronic SCI. Canadian Musculoskeletal Conference, Abstract
59. Alavinia SM, Omidvar M, Farahani F, Devji T, Zimcik H, Zee J, Bayley M, Craven BC. Quality Improvement Strategies to Eliminate Urinary Tract Infection (UTI) Among Inpatients during Spinal Cord Injury (SCI) Rehabilitation - Innovations Influencing Rehabilitation. GTA Rehab Network Best Practices Day 2016, Poster
60. Miyatani M, Szeto M, Alavinia SM, Oh PI, Craven BC.Relationship between Carotid-Femoral Arterial Stiffness and Carotid Intima-Media Thickness in Individuals with Chronic Spinal Cord Injury. 3rd International Autonomic Symposium: Dysfunctions of the Autonomic Nervous System, Poster
61. Burns A, Truchon C, Graveline C, Moore L, Craven BC, ACT Indicator National Working Group.Shaping the Optimal Continuum Of Care: Using Canadian Registry Data To Identify Key Community Indicators After Traumatic Spinal Cord Injury (tSCI). 4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting, Poster
62. Hitzig SL, Best KL, Burns AS, Craven BC, Noreau L.Identifying and classifying quality of life tools for assessing bowel dysfunction after spinal cord injury.4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting,, Poster
63. Popovic MR, Kapadia N, Hitzig SL, Giangregorio LM, Craven BC, Flett H.Functional Electrical Stimulation Therapy for Walking in Incomplete SCI Patients: Effects on Walking Competency. 4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting, Poster
64. Brown Z, Gibbs J, Wong AKO, Craven BC, Adachi JD, Giangregorio L.The Reliability of Peripheral Quantitative Computed Tomography-Derived Marrow Fat Density and Area Measures Using Three Analysis Techniques. American Society for Bone and Mineral Research (ASBMR), Abstract
65. Pelletier CA, Miyatani M, Moore C, Giangregorio L, Craven BC.Vigorous Physical Activity is Associated with a Lower Percentage Body Fat in Adults with Chronic Spinal Cord Injury. 4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting, Montreal, Canada Conference Date: 2015/5 Poster
66. Best KL, Hitzig SL, Ethans K, Craven BC, Noreau L.Identifying and classifying quality of life tools for assessing bladder dysfunction after spinal cord injury. 4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting, Montreal, Canada Conference Date: 2015/5 Poster
67. Guy S, Mehta S, Loh E, SCI NP Working Group.2015 Canadian Rehabilitation Practice Guidelines: Neuropathic Pain in Person with Spinal Cord Injury. 4th International Spinal Cord Society and American Spinal Injury Association's Joint Scientific Meeting, Montreal, Canada Conference Date: 2015/5 Poster
68. Miyatani M, Szeto M, Moore CD, Oh PI, McGillivray C, Craven BC.Exploring the Associations between Arterial Stiffness and Spinal Cord Impairment.Toronto Rehab's 10th Annual Research Day, Toronto, Canada Conference Date: 2014/12 Poster
69. Moore C, Craven BC, Thabane L, Laing AC, Frank-Wilson A, Kontulainen SA, Papaioannou A, Adachi JD, Giangregorio LM.Determinants of Calf Muscle Cross-Sectional Area and Density after Chronic Spinal Cord Injury. Toronto Rehab's 10th Annual Research Day, Toronto, Canada Conference Date: 2014/12 Poster
70. Lynch CL, Giangregorio L, Adachi JD, Papaioannou A, Thabane L, Craven BC.Fragility Fractures after Spinal Cord Injury: Insights from the Bone Quality in Individuals with Chronic SCI Study. Toronto Rehab's 10th Annual Research Day, Toronto, Canada Conference Date: 2014/12 Poster
71. Gabison S, Verrier M, Craven BC, Nadeau S, Duclos C, Gagnon D, Roy A.Trunk Strength and Function in Individuals with Non-Traumatic Spinal Cord Injury. Toronto Rehab's 10th Annual Research Day, Toronto, Canada Conference Date: 2014/12 Poster
72. Bradbury C, Budsin B, Sharma B, Mikulis D, Corbie J, Hitzig S, Craven BC, Green R.Use of diffusion tensor imaging for diagnosing and characterizing complex TBI populations.Toronto Rehab's 10th Annual Research Day, Toronto, Canada Conference Date: 2014/12 Poster
73. Craven BC, Ethans K, Gagnon D, Linassi AG, Tsui D, Townson A, Rivers C, Chen J, Noonan V.It's not just about Neurology: Impairment, Medical Complexity and Functional Ability Predict Rehab Length of Stay

in Canada.6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
74. Noonan V, Dvorak MF, Fallah N, Fisher CG, Rivers CS, Ahn H, Tsai EC, Linassi AG, Christie SD, Attabib N, Hurlbert RJ, Fourney DR, Johnson MG, Fehlings MG, Drew B, Bailey CS, Paquet J, Parent S, Townson A, Ho C, Craven BC, Gagnon D, Tsui D, Fox R, Mac-Thiong JM, Kwon BK, RHSCIR Network. Minimizing Errors in Traumatic Spinal Cord Injury Clinical Trials by Acknowledging the Heterogeneity of Spinal Cord Anatomy and Injury Severity: An Observational Canadian Cohort Analysis. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
75. El-Kotob R, Verrier MC, Mathur S, Craven BC.The Effect of Exercise on Heart Rate Variability in Spinal Cord Injury.6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
76. Lynch CL, Giangregorio L, Adachi JD, McCartney N, Papaioannou A, Popovic MR, Thabane L, Craven BC.Fragility Fractures after Spinal Cord Injury: Insights from the Bone Quality in Individuals with Chronic SCI Study. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract

77. Craven BC, Balioussis C, Verrier MC, Hsieh JT, Cherban E, Noonan V, Wolfe D.Moving from the E-Scan Atlas to Action: Development of a SCI Rehabilitation Manifesto. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
78. Moore C, Craven BC, Thabane L, Papaioannou A, Adachi R, Popovic M, Giangregorio L, McCartney N.Determinants of Calf Muscle Cross-Sectional Area and Density after Chronic Spinal Cord Injury. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
79. Pelletier C, Dumont F, Noreau L, Craven BC.Self Report of One-Year Incident Fractures: Findings from the SCI Community Survey. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
80. Hitzig SL, Routhier F, Noreau L, Kairy D, Atack L, Craven BC.The Participation and Quality of Life (PARQoL) Tool-Kit: Outcomes and Next Steps.American Congress of Rehabilitation Medicine (ACRM) Progress in Rehabilitation Research Annual Conference., Toronto, Canada Conference Date: 2014/10 Poster
81. Bhide RP, Farahani F, Flett H, Noonan VK, Santos A, Rivers CS, Craven BC and the RHSCIR Network.Rehab Interrupted: Frequency, Type And Duration Of Service Interruptions During Inpatient SCI Rehabilitation. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Poster
82. Gagnon D, Kandiloitis M, Verrier MC, Craven BC, Ethans K, Noonan V, Rivers C.Use of Mobility Assistive Devices Among Individuals with a Spinal Cord Injury Upon Discharge From Inpatient Rehabilitation: A Canadian Perspective. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
83. Hadi SC, Craven BC.Incorporating Evidence-Based Practice into Life Care Plans Through Scholarly Practice. 6th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2014/10 Abstract
84. Burns AS, St.-Germain D, Guindon A, Hitzig SL, Delparte JJ, Craven BC, Connolly M, Wolfe D.Neurogenic Bowel after Spinal Cord Injury (SCI): the Perceived Importance of Identified Concerns to Persons with SCI and Health Care Professionals. International Spinal Cord Society (ISCOS) 53rd Annual Scientific Meeting., Netherlands Conference Date: 2014/9 Poster
85. Gibbs JC, Craven BC, Moore C, Thabane L, Papaioannou A, Adachi JD, Popovic MR, McCartney N, Giangregorio L.Lower Extremity Muscle Size, Density and Function Is Associated with Indices of Bone Quality in Individuals with Chronic Spinal Cord Injury. American Society for Bone Mineral Research (ASBMR) 2014 Annual Meeting, Houston, United States Conference Date: 2014/9 Poster
86. Fortin C, Voth J, Jaglal S, Craven BC.Inpatient Rehabilitation Length of Stay and Survival following Malignant Spinal Cord Compression: Is It Worth It?. CAPM&R 2014 Annual Scientific Meeting, St. John's, Canada Conference Date: 2014/6 Poster
87. Deng G, Ethans K, Townson A, Jacquemin G, Short C, O'Connell C, Smith K, Askari S, Ho C, Hill D, Craven BC.Evaluating Practice Patterns in Thromboembolism Prophylaxis in Adults with Spinal Cord Injury: Practice of Canadian Spinal Cord Injury Rehabilitation Physiatrists. CAPM&R 2014 Annual Scientific Meeting, St. John's, Canada Conference Date: 2014/6 Poster
88. Craven BC, Zeng L, Farahani F, Hitzig SL.Is self-report of neurological impairment among persons living with chronic spinal cord injury sufficiently accurate for research studies?. CAPM&R 2014 Annual Scientific Meeting, St. John's, Canada Conference Date: 2014/6 Poster
89. Guy S, Mehta S, Gorski J, O'Connell C, Potter P, Townson A, Loh E, and CPG Working Group. The development of a clinical practice guideline for the diagnosis and management of neuropathic pain following spinal cord injury.CAPM&R 2014 Annual Scientific Meeting, St. John's, Canada Conference Date: 2014/6

Poster
90. Ahn H, Attabib N, Bailey C, Christie S, Craven BC, Drew B, Dvorak M, Fallah N, Fehlings M, Fisher C, Fourney D, Fox R, Gagnon D, Ho C, Hurlbert J, Johnson M, Kwon B, Linassi G, Mac-Thiong JM et al.Neurologic examinations - anatomy and severity.American Spinal Injury Association (ASIA) 41st Anniversary Scientific Meeting., San Antonio, United States Conference Date: 2014/5 Abstract
91. Sharma B, Bradbury CL, Corbie J, Hitzig SL, McGillivray C, Craven C, Mikulis D, Green R.Missed Acute Care Diagnosis of Traumatic Brain Injury in Patients with Spinal Cord Injury: Frequency and Risk Factors.The International Brain Injury Association's 10th World Congress on Brain Injury, San Francisco, United States Conference Date: 2014/3 Poster
92. Hadi S, Craven BC.Implications of Spinal Cord Injury Research in Life Care Planning. Toronto Rehab's 9th Annual Research Day, Toronto, Canada Conference Date: 2013/11 Poster
93. Moore C, Miyatani M, Oh PI, Craven BC.Metabolic Syndrome (MetS) Risk Factors are Insufficient to Detect Elevated Arterial Stiffness among People with Chronic Spinal Cord Injury (SCI). Toronto Rehab's 9th Annual Research Day, Toronto, Canada Conference Date: 2013/11 Poster
94. Mittmann N, Bannon G, Hassan S, Seung SJ, Kee P, Cartolano NS, Pinto PM, Smith K, Wolfe D, Craven C.Interim Results from the Burden of Bowel Dysfunction in Spinal Cord Injury Study.ISPOR 16th Annual European Congress, Dublin, Ireland Conference Date: 2013/11 Abstract
95. Farahani F, Verrier MC, Flett H, Burns A, Craven BC.Preliminary Face Validity of Target SCIM III Median Values for Prediction of Functional Outcomes after Traumatic SCI.Toronto Rehab's 9th Annual Research Day, Toronto, Canada Conference Date: 2013/11 Poster
96. Dance D, Chopra A, Szeto M, Campbell K, Ditor D, Hassouna M, Craven BC.Exploring Daily Blood Pressure Fluctuations Among Individuals with Chronic SCI During Activities of Daily Living. The 2nd International Symposium on Autonomic Dysfunctions Following Spinal Cord Injury., Vancouver, Canada Conference Date: 2013/11 Poster
97. Sharma B, Bradbury CL, Corbie J, Hitzig SL, McGillivray C, Craven C, Mikulis D, Green R.Missed Acute Care Diagnosis of Traumatic Brain Injury in Patients with Spinal Cord Injury: Frequency and Risk Factors.Toronto Rehab's 9th Annual Research Day, Toronto, Canada Conference Date: 2013/11 Poster
98. Farahani F, Verrier MC, Flett H, Burns A, Craven BC.Preliminary face validity of target SCIM III median values for prediction of functional outcome after traumatic SCI.International Spinal Cord Society (ISCOS) 52nd Annual Scientific Meeting., Istanbul, Turkey Conference Date: 2013/10 Poster
99. Boggild M, Erlandson MC, Tomlinson G, Szabo E, Slatkovska L, Giangregorio LM, Craven C, Alibhai S, Cheung AM.Effect of 1 year of whole-body vibration therapy on muscle density and volume in postmenopausal women: the Vibration Study.American Society of Bone and Mineral Research (ASBMR) 2013 Annual Meeting, Baltimore, United States Conference Date: 2013/10 Abstract
100. Szeto M, Delparte JJ, Giangregorio LM, Popovic MR, Craven BC.Adverse Events During Whole Body Vibration among Men with Paraplegia. Current Concepts in Balance, Fitness and Mobility: Perspectives on Intensity in Rehabilitation, Toronto, Canada Conference Date: 2013/1 Poster
101. Miyatani M, Moore C, Masani K, Oh PI, Popovic MR, Craven BC.Associations Between Arterial Stiffness & Heart Disease Risk Factors In People with Chronic Spinal Cord Injury. Toronto Rehab's 8th Annual Research Day, Toronto, Canada Conference Date: 2012/11 Poster
102. Craven BC, Szeto M, Delparte JJ, Giangregorio LM, Popovic MR.Adverse Events During Whole Body Vibration among Men with Paraplegia. Toronto Rehab's 8th Annual Research Day, Toronto, Canada Conference Date: 2012/11 Poster
103. Craven BC, Brisbois LM, Verrier MC.Exploring the Feasibility of Central Recruitment for Subacute SCI Patients. Toronto Rehab's 8th Annual Research Day, Toronto, Canada Conference Date: 2012/11 Poster
104. Lala D, Craven BC, Thabane L, Papaioannou A, Adachi JD, Popovic M, Giangregorio L.Associations Between Bone Density and Geometry and Prevalent Fractures Among Individuals with Spinal Cord Injury. Toronto Rehab's 8th Annual Research Day, Toronto, Canada Conference Date: 2012/11 Poster
105. Moore C, Miyatani M, Oh P, Craven BC.Cardiovascular Fitness Testing Considerations for Persons with Tetraplegia.Toronto Rehab's 8th Annual Research Day, Toronto, Canada Conference Date: 2012/11 Poster
106. Guilcher S, Lemieux-Charles L, Casciaro T, Craven BC, McColl MA, Jaglal S.Social Networks and Secondary Health Conditions: The Critical Secondary Team for Individuals with a Spinal Cord Injury. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
107. Craven C, Courtois F, Maltais D, Boulet M, Burns A, Coté I, Ditor D, Giangregorio L, Hitzig SL, Houghton P, Loh E, Mittmann N, Noreau L, St-Germain D, Wolfe D.SCI-IMPACT: Three Years of Collaboration to Facilitate Knowledge Transfer.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Abstract

108. Noonan VK, Townson A, Fox R, Hurlbert RJ, Linassi AG, Ethans K, Tsui D, Burns AS, Craven C, Wolfe D, Truchon C, Gagnon D, Charron J, Fehlings MG, Soril L, Santos A, Dvorak MF.Access to Care (ACT) for Traumatic Spinal Cord Injury: A Survey of Canadian Acute and Rehabilitation Centres.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
109. Munce S, Wodchis W, Guilcher SJT, Couris C, Verrier M, Fung K, Craven C, Jaglal S.Direct Costs of Adult Traumatic Spinal Cord Injury in Ontario.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
110. Guilcher S, Craven C, Calzavara A, McColl MA, Jaglal S.Is the Emergency Department an Appropriate Substitute for Primary Care for Persons with Traumatic Spinal Cord Injury?. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
111. Moore C, Miyatani M, Oh P, Craven BC.Metabolic Syndrome (MetS) Risk Factors are not Sufficient to Detect Elevated Arterial Stiffness among People with Chronic Spinal Cord Injury (SCI).5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
112. Verrier M, Carson J, Brisbois L, Craven C.Describing the Feasibility and Planning for the Scalability of Central Recruitment for Patients with Subacute SCI in Tertiary Academic Rehabilitation Centres.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Abstract
113. Kapadia N, Masani K, Craven C, Giangregorio L, Hitzig S, Richards K, Popovic MR.Functional Electrical Stimulation Therapy for Walking Versus Conventional Exercise Program for Patients with Chronic Incomplete Spinal Cord Injury: A Randomized Controlled Trial.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
114. Lala D, Craven BC, Thabane L, Papaioannou A, Adachi J, Popovic M, Giangregorio L.Associations Between Bone Density and Geometry and Prevalent Fractures Among Individuals with Spinal Cord Injury.American Society for Bone and Mineral Research (ASBMR) 2012 Annual Meeting, Minneapolis, United States Conference Date: 2012/10 Poster
115. Guindon A, Hitzig SL, Connolly M, Delparte JJ, Craven BC, St-Germain D, Burns AS.A phenomenological analysis of neurogenic bowel dysfunction following spinal cord injury. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
116. Lala D, Craven BC, Thabane L, Giangregorio L.Exploring relationships between knee region bone mineral density and prevalent fractures among individuals with SCI: A nested case-control study. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
117. Hitzig SL, Panjwani A, Craven BC, Desai N, Popovic MR.FES-assisted walking versus conventional exercise to augment gait in chronic spinal cord injury: Impact on quality of life and community integration. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
118. Guilcher S, Craven C, Lemieux-Charles L, Casciaro T, McColl MA, Jaglal S.Dealing with Secondary Health Conditions and Spinal Cord Injury: An Uphill Battle in the Journey of Care.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
119. Furlan J, Popovic M, Craven C.Lack of Generalizability of the Randomized Clinical Trial Data on Initial Management of Acute Traumatic Cervical Spinal Cord Injury to Elderly Patients in Clinical Practice.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Abstract
120. Miyatani M, Moore C, Masani K, Oh P, Craven C.Associations Between Arterial Stiffness and Traditional and SCI Specific Cardiovascular Disease Risk Factors. 5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
121. Giangregorio L, Craven C, Kapadia N, Richards K, Popovic MR.A Randomized Controlled Trial of Functional Electrical Stimulation Therapy for Walking Versus a Conventional Exercise Program in Patients with Chronic Incomplete Spinal Cord Injury: Effects on Body Composition.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
122. Mayo AL, McAdam L, Biggar WD, Craven BC.Cautions regarding subcapital whole body DXA scan interpretation among boys with Duchenne Muscular Dystrophy (DMD). 17th International Congress of the World Muscle Society, Perth, Australia Conference Date: 2012/10 Poster
123. Craven C, Coté I, Wolfe D, Boulet M, Giangregorio L.Knee DXA Measurement for the Assessment of Sublesional Osteoporosis after Spinal Cord Injury: A Knowledge Translation (KT) Initiative.5th National Spinal Cord Injury Conference, Toronto, Canada Conference Date: 2012/10 Poster
124. Moore C, Craven BC, Thabane L, Papaioannou A, Adachi JD, Blencowe L, Popovic MR, Laing A, Giangregorio L. Longitudinal Changes in Distal Lower-Extremity Muscle Area and Density after Chronic Spinal Cord Injury. American Society for Bone Mineral Research (ASBMR) 2014 Annual Meeting, Houston, United States Conference Date: 2012/9 Poster
125. Craven BC, Brisbois LM, Carson JR, Verrier MC.Exploring the feasibility and scalability of central

recruitment for patients with subacute SCI in tertiary academic rehabilitation centres. International Spinal Cord Society (ISCOS) 51st Annual Scientific Meeting, London, United Kingdom Conference Date: 2012/9 Poster
126. Craven BC, Szeto M, Delparte JJ, Giangregorio L, Popovic MR.The frequency and severity of adverse events during whole body vibration (WBV) and passive standing among individuals with chronic spinal cord injury.International Spinal Cord Society (ISCOS) 51st Annual Scientific Meeting, London, United Kingdom Conference Date: 2012/9 Poster
127. Craven BC, Hitzig SL, Giangregorio LM, Katz J, Noreau L, Wolfe D, Mittmann N.Predicting health preference in spinal cord injury. International Spinal Cord Society (ISCOS) 51st Annual Scientific Meeting, London, United Kingdom Conference Date: 2012/9 Poster
128. Miyatani M, Moore C, Masani K, Oh PI, Popovic MR, Craven BC.Association between arterial stiffness, cardiovascular risk factors, and injury related risk factors in people with spinal cord injury.International Spinal Cord Society (ISCOS) 51st Annual Scientific Meeting, London, United Kingdom Conference Date: 2012/9 Poster
129. Craven BC, Rashidi A, Alizadeh-Meghrazi M, Szeto M, Delparte JJ, Masani K, Giangregorio LM, Popovic MR.Development of a sham condition for a future whole body vibration intervention trial.International Spinal Cord Society (ISCOS) 51st Annual Scientific Meeting, London, United Kingdom Conference Date: 2012/9 Poster
130. Mayo A, Craven B, McAdam L, Biggar W.Bone Health in Boys with Duchenne Muscular Dystrophy on Long-term Daily Deflazacort Therapy. CAPM&R 60th Annual Scientific Meeting, Toronto, Canada Conference Date: 2012/6 Poster
131. Craven B, Verrier M, Balioussis C, Hsieh J, Rascheed A, Wolfe D, Noonan V.Using Scoping Review Methods to Describe & Evaluate Canadian SCI Rehabilitation Service Delivery.CAPM&R 60th Annual Scientific Meeting, Toronto, Canada Conference Date: 2012/6 Poster
132. Moore C, Miyatani M, Craven B, Oh P.Cardiovascular Fitness Testing Considerations for Persons with Tetraplegia.CAPM&R 60th Annual Scientific Meeting, Toronto, Canada Conference Date: 2012/6 Poster
133. Craven B, Adachi J, Hawker G, McGillivray C, Côté I, Giangregorio L.Knowledge Translation Initiatives to Increase the Detection and Improve Management of Sublesional Osteoporosis After SCI.CAPM&R 60th Annual Scientific Meeting, Toronto, Canada Conference Date: 2012/6 Poster
134. Jetha A, Craven BC, Badley E, Beaton D, Gignac M.Examining workplace activity limitations among young adults living with spinal cord injuries: A pilot study.Interdependence 2012 Global SCI Conference, Vancouver, Canada Conference Date: 2012/5 Poster
135. Miyatani M, Moore C, Masani K, Oh PI, Popovic MR, Craven BC.The Associations Between Aerobic Capacity and Arterial Stiffness in People with Chronic Spinal Cord Injury.ACSM's 59th Annual Meeting and 3rd World Congress on Exercise is Medicine, San Francisco, United States Conference Date: 2012/5 Poster
136. Tsui D, Drew B, Ansley B, Macrae L, Craven BC, Verrier M.Rick Hansen Spinal Cord Injury Registry and Ontario Spinal Cord Injury Registry: Relationships Between Respiratory Status and Length-Of-Stay in Acute Care and Rehabilitation.Interdependence 2012 Global SCI Conference, Vancouver, Canada Conference Date: 2012/5 Poster
137. Mittmann N, Seung SJ, Hassan S, Bannon G, Craven BC.Preliminary results from the baseline questionnaire of the burden of bowel dysfunction in spinal cord injury study.Canadian Association for Population Therapeutics (CAPT) Annual Conference, Montreal, Canada Conference Date: 2012/5 Poster
138. Verrier M, Guy K, Morris H, Williams J, Marinho A, Popovic M, Craven BC, Flett H.Walking Measures Inform SCI Rehabilitation Practice and Research. Interdependence 2012 Global SCI Conference, Vancouver, Canada Conference Date: 2012/5 Poster
139. Hitzig SL, Balioussis C, Craven BC, Nussbaum E, McGillivray C, Noreau L.Identifying Quality of Life Outcome Tools for Measuring the Impact of Pressure Ulcers in Persons with Spinal Cord Injury. Interdependence 2012 Global SCI Conference, Vancouver, Canada Conference Date: 2012/5 Poster
140. Craven C, Balioussis C, Verrier M, Hsieh J, Noonan V, Raschid A, Wolfe D, Cherban E.Using Scoping Review Methodology to Conduct a Canadian Spinal Cord Injury (SCI) Rehabilitation Environmental Scan (E-Scan). Interdependence 2012 Global SCI Conference, Vancouver, Canada Conference Date: 2012/5 Poster
141. Wong AKO, Bhargava A, Hummel K, Shaker S, Beattie KA, Gordon CL, Craven BC, Adachi JD, Giangregorio L.Reliability of pQCT-derived Muscle Area and Density Measures on Water-Shed versus Threshold-Based Segmentation Methods.IOF-ECCEO12 European Congress on Osteoporosis and Osteoarthritis., France Conference Date: 2012/3 Poster
142. Hitzig SL, Balioussis C, Craven BC, Panjwani A, Routhier F, Noreau L.The Development of an On-line Quality of Life Outcomes Tool-Kit for Spinal Cord Injury Professionals. GTA Rehab Network Best Practices

Day 2012: Building the Case for Rehab: Unlocking the Evidence, Toronto, Canada Conference Date: 2012/2 Poster
143. Verrier MC, Carson JR, Brisbois L, Craven BC.Central Recruitment Process: Exploring Feasibility and Scalability for SCI Research Studies.GTA Rehab Network Best Practices Day 2012: Building the Case for Rehab: Unlocking the Evidence, Toronto, Canada Conference Date: 2012/2 Poster
144. Hadi SC, Delparte JJ, Hitzig SL, Craven BC.USAbility of the WAVE or Juvent Whole Body Vibration Plates for Men with and without Spinal Cord Injury. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
145. Craven BC, Drew B, Ahn H, Fehlings MG, Ford M, Jaglal SB, Verrier M.Impairment and Rehabilitation Outcomes of Ontarians with Traumatic and Non-Traumatic SCI.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
146. Popovic MR, Kapadia N, Zivanovic V, Furlan JC, Craven BC, Nakazawa K, McGillivray C.FES Therapy for Grasping in Incomplete SCI: Randomized Control Trial.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
147. Rashidi A, Alizadeh M, Masani K, Popovic M, Giangregorio L, Craven BC.Development of a Sham Condition for a Future Whole Body Vibration Intervention Trials. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
148. Craven C, Balioussis C, Verrier M, Hsieh J, Noonan V, Rasheed A, Wolfe D.Using Scoping Review Methodology to Conduct a Rehab Environmental Scan. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
149. Alizadeh- Meghrazi M, Masani K, Sayenko D, Popovic MR, Craven BC.Whole Body Vibration and EMG Activation: Effects of Vibration Conditions.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
150. Craven BC, Blencowe LAR, Adachi JD, Hawker GA, McGillivray CF.Fragments 1.0: A Management Guide for Osteoporosis Following Spinal Cord Injury.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
151. Verrier MC, Carson JR, Brisbois L, Craven BC.Central Recruitment Process: Exploring Feasibility and Scalability for Research Studies in Spinal Cord Injury. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
152. Leber B, Miyatani M, Delparte J, Moore C, Szeto M, Ditor DS, Craven BC.Acute Effect of Whole- Body Vibration During Passive Standing on Arterial Stiffness in Individuals with Spinal Cord Injury. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
153. Hitzig SL, Panjwani A, Balioussis C, Craven BC, Routhier F, Noreau L.The Participation and Quality of Life (Par-QoL) Web-Based Tool-Kit.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
154. Hitzig SL, Verrier M, Giangregorio LM, Katz J, Mittmann N, Noreau L, Brisbois L, Craven BC.Aging and the Development of Health Conditions after Spinal Cord Injury.Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
155. Hitzig SL, Mittmann N, Katz J, Noreau L, Craven BC.Secondary Health Conditions and Health Preference in Spinal Cord Injury. Toronto Rehab's 7th Annual Research Day, Toronto, Canada Conference Date: 2011/11 Poster
156. Mayo AL, McAdam L, Biggar WD, Craven BC.How Bad Is Deflazacort For Bones In Boys With Duchenne Muscular Dystrophy?. 16th International Congress of the World Muscle Society, Portugal Conference Date: 2011/10 Abstract

---

Lora Giangregorio, PhD
University of Waterloo

(no CV uploaded)

Seyed Alivinia, PhD. MD
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Lindsie Blencowe, MSc
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Naaz Desai, BPT, MSc
University Health Network - Toronto Rehabilitation Institute

(no CV uploaded)

Sander Hitzig, PhD
St. John's Rehab Research Program - Sunnybrook Research Institute

(no CV uploaded)

Kei Masani, MEd, PhD
University Health Network - Toronto Rehabilitation Institute, Institute of Biomaterials and Biomedical Engineering Bbme, University of Toronto

(no CV uploaded)

Milos Popovic, PhD, PEng
University Health Network - Toronto Rehabilitation Institute, Institute of Biomaterials and Biomedical Engineering Bbme, University of Toronto

(no CV uploaded)

Rehabilitation goals and challenges in patient with rapid progressive weakness and respiratory failure without confirmatory diagnosis.

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Neel Chandel, MD
University of Texas Health and Science Center

CV:
● Currently, a fellow in Spinal Cord Injury Medicine at Memorial Hermann Hospital, University of Texas Health Science Center at Houston.
● Seven years of extensive experience in the field of rehabilitative medicine.
● Worked as a moonlighter at Burke Rehabilitation Hospital, White Plains, New York.
● Extensive research experience in the field of SCI
● Active member of ASIA, ASCIP, AAP, NYSPM&R and AAPM&R.
● Excellent communication, teaming, and critical thinking skills; committed to delivering responsibilities entrusted upon.
● Ability to work under stressful situations and utilize problem-solving skills effectively.
● Enthusiastic clinician, learner and researcher.

Aubrey Meissnest, MS
Baylor College of Medicine

CV:
PA student

Kyriakos Dalamagkas, MD
Ut Health Mcgovern Medical School

CV:
Resident in Physical Medicine and Rehabilitation

Lisa Wenzel, MD
University of Texas Health and Science Center

CV:
Attending physician at TIRR Memorial Hermann in Spinal Cord Injury

---

Preliminary analysis of comparing therapeutic practice patterns to outcomes associated with locomotor training

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Dalton Wolfe, PhD
Parkwood Institute; Western Univeristy

CV:
PUBLICATIONS
(Refereed)

Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan VK, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves JD, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Evidence-based scientific exercise guidelines for adults with spinal cord injury: an update and a new guideline. Spinal Cord. 2018 Apr;56(4):308-321.

Martin Ginis KA, van der Scheer JW, Latimer-Cheung AE, Barrow A, Bourne C, Carruthers P, Bernardi M, Ditor DS, Gaudet S, de Groot S, Hayes KC, Hicks AL, Leicht CA, Lexell J, Macaluso S, Manns PJ, McBride CB, Noonan V, Pomerleau P, Rimmer JH, Shaw RB, Smith B, Smith KM, Steeves J, Tussler D, West CR, Wolfe DL, Goosey-Tolfrey VL. Response to correspondence from the ESSA Statement authors. Spinal Cord. 2018 Apr;56(4):409-411.

Burke SM, Tomasone JR, Scime NV, Ma JK, Harden SM, Wolfe DL. Physical activity self-management interventions for adults with spinal cord injury: Part 2 – Exploring the generalizability of findings from research to practice, Psychology of Sport and Exercise, 2018, ISSN 1469-0292

Lala D, Houghton P, Holyoke P, Wolfe D. Using a Modified ADAPTE Process to Enable Effective Implementation of Electrical Stimulation Therapy for Treating Pressure Ulcers in Persons With Spinal Cord Injury. Rehabilitation Process and Outcome https://doi.org/10.1177/1179572717745836. First Published December 19, 2017

Munce SEP, Allin S, Wolfe DL, Anzai K, Linassi G, Noonan VK, Jaglal SB. Using the theoretical domains framework to guide the development of a self-management program for individuals with spinal cord injury: Results from a national stakeholder advisory group. J Spinal Cord Med. 2017 Nov;40(6):687-695.

van der Scheer JW, Martin Ginis KA, Ditor DS, Goosey-Tolfrey VL, Hicks AL, West CR, Wolfe DL. Effects of exercise on fitness and health of adults with spinal cord injury: A systematic review. Neurology. 2017 Aug 15;89(7):736-745.

Gibbs JC, Gagnon DH, Bergquist AJ, Arel J, Cervinka T, El-Kotob R, Maltais DB, Wolfe DL, Craven, BC. Rehabilitation Interventions to modify endocrine-metabolic disease risk in Individuals with chronic Spinal cord injury living in the Community (RIISC): A systematic review and scoping perspective. J Spinal Cord Med. 2017 Nov;40(6):733-747.

Chan CW, Miller WC, Querée M, Noonan VK, Wolfe DL, SCIRE Research Team. The development of an outcome measures toolkit for spinal cord injury rehabilitation. Can J Occup Ther. 2017 Apr;84(2):119-129.

Lala, D, Houghton, PE, Kras-Dupuis A, Wolfe DL. Developing a model of care for healing pressure ulcers with electrical stimulation therapy for persons with spinal cord injury. Top Spinal Cord Inj Rehabil 2016;22(4):277–287.

Baron J, Swaine J, Presseau J, Aspinall A, Jaglal S, White B, Wolfe D, Grimshaw J. Self-management interventions to improve skin care for pressure ulcer prevention in people with spinal cord injuries: A systematic review protocol. Syst Rev 2016 5(1):150.

Guy SD, Mehta S, Harvey D, Lau B, Middleton JW, O'Connell C, Townson A, Truchon C, Wolfe D, Bradbury CL, Bryce TN, Casalino A, Côté I, Craven BC, Finnerup NB, Hitzig SL, Kras-Dupuis A, Moulin DE, Orenczuk S, Parrent AG, Potter P, Siddall PJ, Short C, Teasell R, Widerström-Noga E, Loh E. The CanPain SCI Clinical Practice Guideline for rehabilitation management of neuropathic pain after spinal cord: Recommendations for model systems of care. Spinal Cord 2016 54:S24-S27.

Guy SD, Mehta S, Casalino A, Côté I, Kras-Dupuis A, Moulin DE, Parrent AG, Potter P, Short C, Teasell R, Bradbury CL, Bryce TN, Craven BC, Finnerup B, Harvey D, Hitzig SL, Lau B, Middleton JW, O'Connell C, Orenczuk S, Siddall PJ, Townson A, Truchon C, Widerström-Noga E, Wolfe D, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Recommendations for treatment. Spinal Cord 2016 54:S14-S23.

Mehta S, Guy SD, Bryce TN, Craven BC, Finnerup NB, Hitzig SL, Orenczuk S, Siddall PJ, Widerström-Noga E, Casalino A, Côté I, Harvey D, Kras-Dupuis A, Lau B, Middleton JW, Moulin DE, O'Connell C, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Wolfe D. Bradbury CL, Loh E. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Screening and diagnosis recommendations. Spinal Cord 2016 54:S7-13.

Loh E, Guy SD, Mehta S, Moulin DE, Bryce TN, Middleton JW, Siddall PJ, Hitzig SL, Widerström-Noga E, Finnerup NB, Kras-Dupuis A, Casalino A, Craven BC, Lau B, Côté I, Harvey D, O'Connell C, Orenczuk S, Parrent AG, Potter P, Short C, Teasell R, Townson A, Truchon C, Bradbury CL, Wolfe D. The CanPain SCI Clinical Practice Guidelines for rehabilitation management of neuropathic pain after spinal cord: Introduction, methodology and recommendation overview. Spinal Cord. 2016 54:S1-S6.

Ravenek KE, Wolfe DL, Hitzig SL. A scoping review of video gaming in rehabilitation. Disabil Rehabil Assist Technol. 2016 11(6):445-43.

Allison DJ, Chapman B, Wolfe D, Sequeira K, Hayes K, Ditor DS. Effects of a functional electrical stimulation-assisted cycling program on immune and cardiovascular health in persons with spinal cord injury. Top Spinal Cord Inj Rehabil. 2016 22(1):71-78.

Eng JJ, Noonan VK, Townson AF, Higgins CE, Rogers J, Wolfe DL. Impact of an online medical internet site on knowledge and practice of health care providers: a mixed methods study of the Spinal Cord Injury Rehabilitation Evidence project. J Med Internet Res. 2014 Dec 23;16(12):e296.

Bayley MT, Teasell RW, Wolfe DL, Gruen RL, Eng JJ, Ghajar J, Tavender E, Kua A, Bragge P. Where to build the bridge between evidence and practice?: results of an international workshop to prioritize knowledge translation activities in traumatic brain injury care. J Head Trauma Rehabil. 2014 29(4):268-76.

Noonan VK, Wolfe DL, Thorogood NP, Park SE, Hsieh JT, Eng JJ. Knowledge translation and implementation in spinal cord injury: A systematic review. Spinal Cord. 2014 52(8):578-87.

Mays R, McIntyre A, Mehta S, Hill D, Wolfe D, Teasell R. A review of educational programs to reduce UTIs among individuals with SCI. Rehabil Nurs. 2014 39(5):240-49.

McIntyre A, Cheung K, Kwok C, Mehta S, Wolfe D, Teasell R. Quality of life and bladder management post spinal cord injury: A systematic review. Appl.Res.Qual.Life. 2014 9:1081-1096.

McIntyre A, Mays R, Mehta S, Janzen S, Townson A, Hsieh J, Wolfe D, Teasell R. Examining the effectiveness of intrathecal baclofen on spasticity in individuals with chronic spinal cord injury: A systematic review. J Spinal Cord Med. 2014 37(1):11-18.

Latimer-Cheung AE, Arbour-Nicitopoulos KP, Brawley LR, Gray C, Wilson AJ, Prapavessis H, Tomasone, JR, Wolfe DL, Martin Ginis KA. Developing physical activity interventions for adults with spinal cord injury. Part 2: Motivational counseling and peer-mediated interventions for people intending to be active. Rehabil Psychol. 2013 58(3):307-15.

Martin Ginis KA, Tomasone JR, Latimer-Cheung AE, Arbour-Nicitopoulos KP, Bassett-Gunter RL, Wolfe DL. Developing physical activity interventions for adults with spinal cord injury. Part 1: A comparison of social cognitions across actors, intenders and non-intenders. Rehabil Psychol. 2013 58(3):299-306.

Sweet SN, Martin Ginis KA, Tomasone JR, and The SHAPE-SCI Research Group. Investigating intermediary variables in the physical activity and quality of life relationship in persons with spinal cord injury. Health Psychol. 2013 32(8):877-85.

Sinden KE, Martin Ginis KA, and The SHAPE-SCI Research Group. Identifying occupational attributes of jobs performed after spinal cord injury: Implications for vocational rehabilitation. Int J Rehabil Res. 2013 36(3):196-204.

Mehta S, Hill D, McIntyre A, Foley N, Hsieh J, Ethans K, Teasell RW, Loh E, Welk B, Wolfe D. Meta-analysis of botulinum toxin A detrusor injections in the treatment of neurogenic detrusor overactivity after spinal cord injury. Arch Phys Med Rehabil. 2013 94(8):1473-81.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 2: Systematic review of dorsal root entry zone procedure. Top Spinal Cord Inj Rehabil. 2013 19(1):78-86.

Mehta S, Orenczuk K, McIntyre A, Willems G, Wolfe D, Hsieh JTC, Short C, Loh E, Teasell RW, and SCIRE Research Team. Neuropathic pain post spinal cord injury Part 1: Systematic review of physical and behavioral treatment. Top Spinal Cord Inj Rehabil. 2013 19(1):61-77.

PRESENTATIONS:

Wolfe D. Research to practice innovations in locomotor training for persons with acquired brain or spinal cord injuries. Parkwood Institute Research Update. London, ON. Apr 21 2017.

Wolfe D. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. ONF Staff. Toronto, ON. Nov 3 2015.

Wolfe D, Flett H, Lala D, Musselman K. Implementing Best Practice Guidelines to improve SCI care: Lessons learned from the trenches. Ontario SCI Research Network Meeting. Toronto, ON. Oct 23 2015.

Wolfe, D, Athanasopoulos P. Making things happen by working together: Prevention and treatment of pressure sores. ONF Board of Directors Meeting, Toronto, ON. Oct 6 2015.

Basett-Spiers K, Athanasopoulos P, Wolfe D, Flett H, Bowman T, Boles L. Integrating people with SCI in best practice implementation across the continuum of care: Prevention and treatment of pressure sores. Ministry of Health and Long Term Care Meeting, Toronto, ON. Sept 9 2015.

Kras-Dupuis A, Guy S, Askes H, Wolfe D. Sustainability of the pressure ulcer prevention practice in persons with spinal cord injury on the inpatient rehabilitation unit. Western Nursing/STTI Iota Omicron Chapter 28th Annual Research Conference: Building Leadership in Nurses Everywhere from the Bedside to the Boardroom. London, ON. May 1 2015.

Koning C, Mumme L, Wolfe D, Scovil CY, Kras-Dupuis A, Brown J, Hamilton L, Mouneimne M, Laramée MT, Kerry Bayless, SCI KMN. Using Implementation Science: A guide for sustainable practice change in spinal cord injury rehabilitation. 91st American Congress of Rehabilitation Medicine(ACRM). Toronto, ON. Oct 7-11 2014.

Guy S, Kras-Dupuis A, Hsieh J, Wolfe D. Implementing a skin health self-management focused education practice for persons with spinal cord injury. ASIA 2014 40th Annual Scientific Meeting. San Antonio, Texas, USA. May 14-17 2014.

Wolfe D. Implementing better practice in pressure injury risk assessment and management in SCI. National Trauma Research Institute Forum: Promoting Best Practice in Risk Assessment and Management for Pressure Injuries following Spinal Cord Injury in the Community Setting. Melbourne, AU. Apr 30 2014.

Wolfe D. Knowledge Mobilization: Overview of SCI Research at Lawson Health Research Institute/Parkwood Hospital – London, Canada. Research Forum, University of Sydney, Rehabilitation Sciences Unit. Sydney, AU. Apr 28 2014.

Wolfe D (Invited Speaker). Making the connection: There's more than just knowing about secondary complications, so what do I do about it…and how does research help me? Spinal Cord Injury Ontario Information Forum. London, ON. Oct 31 2013.

Kras-Dupuis A, Guy S, Wolfe D, Hsieh J, the SCI KMN. Collaborative best practice: Implementation of pressure ulcer prevention in spinal cord injury. Canadian Association of Rehabilitation Nurses 2013 Conference. Vancouver, BC. May 29-31 2013.

Aman SJ (Rapid Podium Presentation), McGuire S, Wittig J, Wolfe DL. Case study of intensive body weight support protocol on a person with acquired brain injury. Current Concepts in Balance, Fitness and Mobility: Perspectives on Intensity in Rehabilitation. Toronto, ON. Jan 25 2013.

Stephanie Marrocco, MSc; PhD Student
Parkwood Institute; Western Univeristy

CV:

MANUSCRIPTS - PEER-REVIEWED

Crosby LD., Marrocco S., Brown J., Patterson KK. (2016). A novel bilateral lower extremity mirror therapy intervention for individuals with stroke. Heliyon. 2(12), e00208.

Marrocco S., Crosby LD., Jones IC., Moyer RF., Birmingham TB., & Patterson KK. (2016). Knee loading patterns of the non-paretic and paretic legs during post-stroke gait. Gait & Posture. 49, 297–302.

Tomasone J., Ma J., Scime N., Burke S., Sleeth L., Marrocco S., Wolfe DL. (2018) Use and effectiveness of behaviour change techniques for physical activity self-management among persons with spinal cord injury: a systematic review. Psychology of Sport & Exercise. 37(2018), 274-285.

PUBLISHED ABSTRACTS

Fielding M, Askes H, Cornell S, Hsieh J, Marrocco S, Wolfe D. (2017). Feasibility of a locomotor training protocol in an inpatient acquired brain injury program. Brain Injury. 31(6-7), 872.

Sleeth L, Ahmed S, Kras-Dupuis A, Marrocco S, Ware P, Wolfe D. (2016). Developing an online, theory based bladder self management program for persons with spinal cord injury through iterative consultations. Top Spinal Cord Inj Rehabil. 22(Suppl.), 99, 76.

Sleeth L, Brandow S, Hitzig SL, Marrocco S, Shepherd J, Wolfe D. (2016). What's up with self-management for persons with spinal cord injury: A scoping review of characteristics and components of existing programs. Top Spinal Cord Inj Rehabil. 22(Suppl.), 84, 49.

PRESENTATIONS - ORAL

Marrocco, S., Cornell, S., Giurleo, C. Finding out What Works and What Doesn't in Clinical Practice: Practice-Based Research (PBR) Methods, Parkwood Institute Research Day, St. Joseph's Health Care, London, ON, Canada, April 2018

Wolfe, D.L., Cornell, S., McGuire, S., Marrocco, S. A PRIME Directive: Developing a Practice-Based Research Approach to Improve Locomotor Training Outcomes, Grand Rounds, Parkwood Institute, St. Joseph's Health Care, London, ON, Canada, Dec 2016

Wolfe, D.L., Cornell, S., Marrocco, S. A PRIME Objective: Developing a Practice-Based Research Approach to Improve Locomotor Training Outcomes, Regional Rehabilitation Lunch and Learn, Parkwood Institute, St. Joseph's Health Care, London, ON, Canada, Nov 2016

PRESENTATIONS - POSTER
Wolfe D, Cornell S, Gagliardi J, Marrocco S. Re-shaping and re-invigorating SCI rehabilitation practice through practice-based research approach. Canadian National SCI Meeting. Nov 2017.

Marrocco S, Cornell S, Kras-Dupuis A, Fielding M, Hsieh J, Rudkovska A, Wolfe DL. Innovation in Locomotor Training Using a Practice-Based Research Approach. 56th ISCoS Annual Scientific Meeting. Dublin, Ireland. Oct 2017.

Miles, S., Marrocco, S., Paiva, M., Wolfe, D. Enhancing Upper Extremity Function using FES-assisted Cycle Ergometry. American Spinal Injury Association, Albuquerque, New Mexico. April 2017

Fielding, M., Askes, H., Cornell, S., Hsieh, J., Marrocco, S., Wolfe D. Feasibility of a Locomotor Training Protocol in an Inpatient Brain Injury Program. International Brain Injury Association World Congress, New Orleans, Louisiana. March 2017

Marrocco, S., Aman, S., Cornell, S., Hsieh, J., Fielding, M., Wolfe, D. Development of a Clinical Decision Support System to Improve Locomotor Outcomes in Persons with Spinal Cord Injury. International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Cornell, S., Hsieh, J., Fielding, M., Marrocco, S., Wolfe, D. Optimizing mobility outcomes across locomotor training modalities: Clinical reflection during development of the PRIME algorithm – A case series. International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Sleeth, L., Wolfe, D., Kras-Dupuis, A., Marrocco, S., Jeske, S., McRae, S. User Feedback on an Online. Theory-based Bladder Self-Management Program for People with Spinal Cord Injury (SCI). International Spinal Cord Society Annual Scientific Meeting, Vienna, Austria. Sept 2016

Marrocco, S., Aman, S., Cornell, S., Hsieh, J., Fielding, M., Wolfe, D. Development of a Clinical Decision Support System to Improve Locomotor Outcomes in Persons with Spinal Cord Injury. PRAXIS – Rick Hansen Institute, Vancouver, BC, Canada. April 2016

Marrocco S, Crosby LD, Mansfield A, Chesworth B, Birmingham T, Patterson KK. Development and Evaluation of Community Ambulation Questionnaire. American Congress of Rehabilitation Medicine Conference, Toronto, ON. Oct 2014

Marrocco, S., Patterson, K. Effect of Inclines on Gait of Recovering Stroke Patients. Health & Rehabilitation Sciences - Graduate Research Forum, London, ON. Feb 2013

Stephanie Cornell, MPT
Parkwood Institute

(no CV uploaded)

Melissa Fielding, BScPT
Parkwood Institute

(no CV uploaded)

Anna Kras-Dupuis, MScN

Parkwood Institute

(no CV uploaded)

Heather Askes, BSc
Parkwood Institute

(no CV uploaded)

Jane Hsieh, MSc
Parkwood Institute

(no CV uploaded)

Relationship between Carotid-Femoral Pulse Wave Velocity and Carotid Intima-Media Thickness in Individuals with Chronic Spinal Cord Injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Masae Miyatani, PhD
Toronto Rehabilitation Institute - University Health Network

CV:
NAME: Masae Miyatani, Ph.D.

TITLE: Clinical Research Coordinator

A. Personal Statement
Since completing my PhD training in Kinesiology in 2003 at the University of Tokyo, Japan, the substantial portion of my work has revolved around cardiovascular, skeletal muscle health and how body composition affects to human health in the general population and among people living with disabilities. Using lifestyle and exercise interventions and cross-sectional studies, my research has focused on how to prevent cardiovascular disease (CVD) and prolonged bedrest and CVD related morbidity and mortality. Since I joined the Toronto Rehabilitation Institute-University Health Network (TRI-UHN) in 2006 as a post-doctoral fellow, my clinical research focuses on cardiovascular health in people with chronic spinal cord injury (SCI). Specifically, I have been studying arterial stiffness and body composition as a potential screening tools for cardiovascular health and the efficacy of exercise and marketed drug on arterial stiffness and body composition in individuals SCI. As the world's first researcher to investigate arterial stiffness (aortic pulse wave velocity: PWV) in the spinal cord injury (SCI) population, I have found that the majority of people with SCI have abnormal PWV values suggesting a very high risk of future cardiovascular events and the need for more intensive lifestyle/ exercise interventions to improve cardiovascular health. Currently, I am working on a Health Canada approved study exploring the use of statins for the modification of bone mass and cardiometabolic disease risk in people with SCI (RoBaCO Trial, NCT03113994).

B. Positions and Honors

B-1. Positions

2015 – Present Clinical Research Coordinator, Spinal Cord Program/ Toronto, Rehabilitation Institute-UHN, Toronto, Canada
2014 – 2015 Research Analyst, Spinal Cord Program/ Toronto Rehabilitation Institute, Toronto, Canada
10/2005 – 07/2014 Post-doctoral Fellow, Spinal Cord Program/ Toronto Rehabilitation Institute-UHN, Toronto, Canada
10/2004 - 09/2005 Research Resident, Division of Health Promotion and Exercise, National Institute of Health and Nutrition, Tokyo, Japan
04/2003 - 03/2004 Post-doctoral Fellow Japan Society for the Promotion of Science (Department of Life sciences, University of Tokyo, Tokyo, Japan)
04/2001 - 03/2005 Lecturer (Health and Physical Education), Jyoshibi University of Art and Design, Tokyo, Japan
04/1999 - 03/2001 Lecturer (Exercise Physiology and Anatomy) Yokohama YMCA college, Kanagawa, Japan
04/1995 - 03/2001 Kinesiologist, Fitness Advisor Health and Fitness Care Clinic, Komazawa Olympic Park, Tokyo, Japan

B-2. Academic and Research Honors

01/2005 Travel Award for conference, Inoue Foundation for Science, Japan
05/2004 Committee of CIHR Skeletal Health Training Program Translational Research Workshop Conference Award Committee of CIHR Skeletal Health Training Program, Canada
08/2001 IVth World Congress of Biomechanics Conference Award Committee of IVth World Congress of

Biomechanics, Canada

B-3. Members

1999/4 Japanese Society of Exercise and Sports Physiology, Member
1999/4 Japanese Society of Physical Education, Member
1999/4 American College of Sports Medicine, Member
1996/5 Japan Society of Physical Fitness and Sports Medicine, Member
2009/3 - 2011/3 Canadian Society for Exercise Physiology, Member
2001/4 - 2004/3 Body Composition and Metabolism Research Association, Member

C. Contribution to Science

C-1. Selected Peer-Reviewed Publications

• Totosy de Zepetnek JO, Miyatani M, Szeto M, Giangregorio LM, Craven BC. (2017) The effects of whole body vibration on pulse wave velocity in men with chronic spinal cord injury. J Spinal Cord Med. DOI: 10.1080/10790268.2017.1369248.
• Hoskin JD, Miyatani M, Craven BC. (2017). Quality reporting of carotid intima-media thickness methodology; Current state of the science in the field of spinal cord injury. J Spinal Cord Med. DOI: 10.1080/10790268.
• Miyatani M, Alavinia SM, Szeto M, Moore C, Craven BC. (2017). Association between abnormal arterial stiffness and cardiovascular risk factors in peoplewith chronic spinal cord injury. Eur J Prev Cardiol. 24(5):552-558.
• Chopra AS, Miyatani M, Craven BC. (2016). Cardiovascular disease risk in individuals with chronic spinal cord injury: Prevalence of untreated risk factors and poor adherence to treatment guidelines. J Spinal Cord Med. DOI:10.1080/10790268.
• Pelletier CA, Miyatani M, Giangregorio L, Craven BC. (2016). Sarcopenic Obesity in Adults With Spinal Cord Injury: A Cross-Sectional Study. Arch Phys Med Rehabil. 97(11): 1931-1937.
• Miyatani M, Szeto M, Moore C, Oh P, McGillivray CF and Craven, BC. (2014). Exploring the Associations between Arterial Stiffness and Spinal Cord Impairment: A crosssectional study. J Spinal Cord Med. 37(5): 556-564.
• Miyatani M, Craven BC, McGillivray CF, Adachi JD. (2014).The Dietary Intakes of Calcium and Bone Health Related Nutrients among Individuals with and without Spinal Cord
Injury. Journal of Nutritional Therapeutics. 3(2): 103-113.
• Yoshida T, Masani K, Sayenko DG, Miyatani M, Popovic MR. (2013). Cardiovascular response to dynamic functional electrical stimulation during head-up tilt: preventing orthostatic hypotension in individuals with spinal cord injuries. IEEE Transactions on Neural Systems and Rehabilitation Engineering. 21(1): 37-46.
• Miyatani M, K. Masani K, C Moore C, M Szeto M, Oh P and Craven BC. (2012). Test-retest reliability of Pulse Wave Velocity in Individuals with Chronic Spinal Cord Injury. J Spinal Cord Med. 35(5): 400-405.
• Miyatani M, Masani K, Kawashima N, Craven BC, Thrasher TA, Popovic MR. (2012). Exercise Intensity during Treadmill Walking with Gait Patterned FES among Patients with Incomplete Spinal Cord Injury: Case Series.ISRN Rehabilitation. Article ID 251750.
• Miyatani M, Yang P, Oh PI. (2012). Bioelectrical impedance and dual-energy x-ray absorptiometry assessments of changes in body composition following exercise in patients with type 2 diabetes mellitus. Journal of Obesity. DOI: 10.1155/2012/953060.

D. Research Supports

03/2012 – 03/2014 Craig H. Neilsen Foundation (Research grant as a part of fellowship), Novel protocol for detection of asymptomatic heart disease after SCI (Grant reference
No. 191150) PI: Miyatani
05/2010 - 10/2011 Ontario Neurotrauma Foundation, Canada, Intermittent Whole Body Vibration and Passive Standing for Treatment of Lower Extremity Osteoporosis, Muscle Atrophy, and Adiposity Among Men with Incomplete Spinal Cord Injury (Grant reference No. ONF-SCI-2006- WAVE-445), PI: Craven Co: Morris, Giangregorio, Popovic, Sayenko, Miyatani, Hitzig
05/2009 – 12/2011 Ontario Neurotrauma Foundation, Canada(Research grant as a part of fellowship)

Development of a non-invasive protocol for detection of asymptomatic coronary artery disease after SCI: De`ning the associations between Arterial Stiffness and traditional and SCI speci`c risk factors (Grant reference No. 2008-SCIPDF- 692), PI: Miyatani
04/2002 – 03/2004 Grant-in-Aid for Scienti`c Research from Ministry of Education, Culture, Sports, Science and Technology, Japan, Predicting limb muscle mass using bioelectrical impedance method and the relationship between muscle volume and force generation capacity, PI: Miyatani

---

Maggie Szeto, BSc
Toronto Rehabilitation Institute - University Health Network

(no CV uploaded)

Mohammad Alavinia, PhD, MD
Toronto Rehabilitation Institute - University Health Network

(no CV uploaded)

Hatef Shojaei, MD, PhD
Toronto Rehabilitation Institute - University Health Network

(no CV uploaded)

Jordan D. Hoskin, BSc
Toronto Rehabilitation Institute - University Health Network

(no CV uploaded)

Cathy Craven, MD, MSc
Toronto Rehabilitation Institute - University Health Network

(no CV uploaded)

Social Network Analysis of The Most Cited Articles in Spinal Cord Injury

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Joseph Cesare, BS
Mayo Clinic

(no CV uploaded)

Anshit Goyal, MBBS
Mayo Clinic

CV:
Name: Anshit Goyal, MBBS
Position Title: Post-doctoral Research Fellow, Mayo Clinic Neuro-Informatics Laboratory, Department of Neurologic Surgery, Mayo Clinic, Rochester, Minnesota.

A. Personal Statement
I currently work as a Postdoctoral Research Fellow at the Department of Neurologic Surgery of Mayo Clinic, Rochester. My current areas of research interest could be summarized in two fields: Surgical Outcomes Research and Patient-Centered Outcomes Research for patients with spinal disease .
I am currently working on various projects regarding short-term and long-term surgical outcomes after various spinal procedures as well as predictive modeling for preoperative patient risk stratification and persistent opioid use. I am also actively involved in research projects that aim to optimize access of patients with low back pain and different racial and socioeconomic background to healthcare. I also aim to study socioeconomic disparities in access to oncologic care.

B. Positions and Honors
Positions and Employment

January 2016-June 2017 Rotating Intern, All India Institute of Medical Science, New Delhi, India
July 2017 - Present Postdoctoral Research Fellow, Mayo Clinic Neuro-Informatics Laboratory, Department of Neurologic Surgery, Mayo Clinic, Rochester, MN, USA
March 2018 - Present Master's candidate in Clinical and Translational Science, Center for Clinical and Translational Science, Mayo Graduate School, Rochester, MN, USA
Other Experience and Professional Memberships
2017-Present Member, North American Spine Society (NASS)
Honors
• 2017: Nominated for Dr. Atm Prakash Medal (AIIMS) for best undergraduate in surgery, Department of Surgical Disciplines, AII India Institute of Medical Sciences.
• 2016: Dr. Lankaji Sivaji Memorial Book Prize by AIIMSonians, the alumni association of AII India Institute of Medical Sciences.
• 2016: Nominated for Delhi Medical Association Medal 2015 for best undergraduate in MBBS.
• 2016: Nominated for Sorel Catherine Freymann Prize 2015 for best undergraduate in Pediatrics, Department of Pediatrics, AII India Institute of Medical Sciences.
• 2014: Academic scholarship for performance in 2nd Professional Examination MBBS, AII India Institute of Medical Sciences.
• 2014: Nominated for Sardari Lal Kalra Medal 2013 in Microbiology, Department of Microbiology, AII India Institute of Medical Sciences.

C. Contribution to Science
Book chapters
1. Goyal A, Belzberg AJ. Benign and Malignant Tumors of the Peripheral Nerve. Youmans textbook of Neurological Surgery, 7th Edition.

2. Bydon M, Goyal A, Alvi MA. Minimally Invasive Lumbar Discectomy: Indications and Techniques. Schmidek and Sweet's Operative Neurosurgical Techniques, 7th Edition. (In Press)

Peer reviewed publications (accepted/published)

1. Goyal A, Kerezoudis P, Alvi MA, Goncalves S, Bydon M. Outcomes following minimally invasive lateral transpsoas interbody fusion for degenerative low grade lumbar spondylolisthesis: A systematic review. Clin Neurol Neurosurg. 2018 Feb 16;167:122-128. doi: 10.1016/j.clineuro.2018.02.020.
2. Lu VM, Alvi MA, Goyal A, Kerezoudis P, Bydon M. The potential of minimally invasive surgery to treat metastatic spinal disease versus open surgery: a systematic review and meta-analysis. World Neurosurg. 2018 Feb 2. Pii: S1878-8750(18)30219-5. doi: 10.1016/j.wneu.2018.01.176.
3. Goyal A, Bydon M. To The Editor. Spine (Phila Pa 1976). 2018 Feb 6. Doi: 10.1097/BRS.0000000000002591.
4. Cuviello A; Goyal A; Zick A; Ahlawat S; Rodriguez F; Belzberg A; Pratillas C. Sporadic malignant glomus tumor of the brachial plexus with response to targeted therapy directed against oncogenic BRAF. JCO Precision Oncology May 2018:2, 1-7. doi: 10.1200/PO.17.00261
5. Alvi MA, Kerezoudis P, Wahood W, Goyal A, Bydon M. Operative Approaches for Lumbar Disc Herniation: A Systematic Review and Multiple Treatment Meta-Analysis of Conventional and Minimally Invasive Surgeries. World Neurosurg. 2018 Mar 14. pii: S1878-8750(18)30429-7. doi: 10.1016/j.wneu.2018.02.156.
6. Goyal A, Lu VM, Yolcu YU, Elminawy M, Daniels DJ. Endoscopic versus open approach in craniosynostosis repair: a systematic review and meta-analysis of perioperative outcomes. Childs Nerv Syst. 2018 Jun 30. Doi: 10.1007/s00381-018-3852-4.
7. Lu VM, Goyal A, Vaughan LS, McDonald KL. The impact of hyperglycemia on survival in glioblastoma: A systematic review and meta-analysis. Clin Neurol Neurosurg. 2018 Jul;170:165-169. doi: 10.1016/j.clineuro.2018.05.020.
8. Goyal A, Cajigas I, Ibrahim GM, Brathwaite CD, Khatib Z, Niazi T, Bhatia S, Ragheb J. Surgical treatment of intramedullary spinal metastasis in medulloblastoma: case report and review of literature. World Neurosurg. 2018 Jul 7. pii: S1878-8750(18)31474-8. Doi: 10.1016/j.wneu.2018.06.250.
9. Kerezoudis P, Alvi MA, Goyal A, Ubl DS, Meyer J, Habermann EB, Currier BL, Bydon M. Commentary: Utilization Trends of Cervical Disk Replacement in the United States. Oper Neurosurg (Hagerstown). 2018 Jul 27. doi: 10.1093/ons/opy181.
D. Research Support
Ongoing Research Support
• "CELLTOP: Phase I/II Clinical Trial of Autologous Adipose Derived Mesenchymal Stem Cells in the Treatment of Paralysis due to Traumatic Spinal Cord Injury" (IND #17387)
Role- Co-Investigator Bydon (PI) 2017 - Ongoing

• "Safety and Feasibility Study of Umbilical Cord Derived Stem Cell Injections in Rat Models of Spinal Contusion"
Funded by: Sabes Foundation; in collaboration with Animal Cell Therapies, Inc.
Role: Co-investigator Bydon (PI) 2017 - Ongoing

• "Association Between Bed Turnover Rate and Adverse Events"
Funded by: Mayo Clinic - Critical Care Research Committee, Mayo Clinic Rochester, MN
Role: Co-investigator Bydon (PI) 2017 - Ongoing

• "Long Term Outcomes Following Decompressive Surgery for Degenerative Spine Disease: A Population-Based Study"
Role: Co-investigator Bydon(PI) 2018 - Ongoing
• "Investigating the Association between Lumbar Puncture and Disc Degenerative Disease: Analysis from the Rochester Epidemiology Project (REP)"
Role: Co-investigator Bydon(PI) 2018 - Ongoing

• "Exploring the Molecular Dynamics of Spinal Cord Injury: An Autopsy Study"
Role: Co-investigator Bydon(PI) 2018 - Ongoing

• "The Effect of Epidural Steroid Injections on Vertebral and Hip Fracture Risk: A Population-Based Cohort

Study”
Role: Co-investigator Bydon(PI) 2018 - Ongoing

• “SLIP II REGISTRY”
Role: Co-investigator Bydon(PI) 2018 - Ongoing

• “Clinical Outcomes of Decompression versus Decompression and Fusion for Recurrent Disc Herniation”
Role: Co-investigator Bydon(PI) 2018 - Ongoing

Mohammed Alvi, MBBS
Mayo Clinic

(no CV uploaded)

Mohamad Bydon, MD
Mayo Clinic

(no CV uploaded)

Abdominal pain in an acute non-traumatic spinal cord injury (SCI) secondary to spinal infarct: A case report

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Beverly Hon, MD
Jfk Johnson Rehabilitation Institute

CV:
Chapter Publications:
Hon B, Wang J, Yonclas P, Kirshblum S. Neuro-Critical care management of acute spinal cord injury. In: Kirshblum S, Lin VL, eds. Spinal Cord Medicine. Third Edition. 2019. In Press.

Abstracts published and presented at national conferences:
Hon B, Linsenmeyer T. Autonomic dysreflexia in an individual with spina bifida during urodynamic evaluation. A case report. Accepted and pending publication.

Hon B, Kirshblum S. Prevalence of deep vein thrombosis on admission screening of complete spinal cord injury patients in acute rehabilitation. Abstract - J. Spin Cord Med. Sept. 2017, 28(5): 597-598

Hon B, Barrett AM. Assessing medication self administration performance and unawareness in rehabilitation patients. Abstract - Am J Phys Med Rehabil. March 2017, 96(3): a100

Hon B, Farag A. Complications from nonsurgical management of a distal femur fracture in a spinal cord injury patient. Abstract - Am J Phys Med Rehabil. March 2016, 95(3): a81-82

Hon B, Farag A. Successful conservative management of scapholunate dissociation in a spinal cord injury patient. Abstract - Am J Phys Med Rehabil. March 2016, 95(3): a113

Hon B, Bapineedu R. Bickerstaff encephalitis associated with cortical features: A case report. Abstract - PM R, September 2015, 7(9): Supplement, S119

Hon B, Anan E. Successful conservative management of an acutely displaced femoral head liner in a left total hip replacement. Abstract - Am J Phys Med Rehabil. March 2015, 94(3): S77-78

Peer reviewed articles:
Hon B, Kirshblum S. Duplex ultrasound surveillance for deep vein thrombosis after acute traumatic spinal cord injury at rehabilitation admission. J of Spinal Cord Med. Recommended for publication pending revision.

National oral presentations:
Routine duplex screening in rehabilitation after acute spinal cord injury. Accepted for platform presentation at Academy of Spinal Cord Injury Professionals (ASCIP) Educational Conference and Expo. New Orleans, Louisiana. September 2018.

Risk factors associated with deep vein thrombosis on admission screening of traumatic spinal cord injury patients in acute rehabilitation. Platform presentation at Association of Academic Physiatrists (AAP). Atlanta, Georgia. February 2018.

Prevalence of deep vein thrombosis on admission screening of complete spinal cord injury patients in acute rehabilitation. Platform presentation at ASCIP Educational Conference and Expo. Denver, Colorado. September 2017.

The Art of SCI admissions coordination: How to Juggle 100 inpatient SCI/D beds

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Samantha Mendelson, DO
Va

CV:
Presentation at PVA summit 2017 - How to run a large intrathecal baclofen program.

Faculty / Attending physician for University of South Florida PMR residency and SCI fellowship

---

Allan Alcantara, RN
Va

CV:
Presented at 2017 PVA summit - how to run a large intrathecal baclofen program

---

Improving ISNCSCI classification using a computerized algorithm: reach, use and usefulness of a new technology

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Kristen Walden, PT
Rick Hansen Institute

CV:
Name: Kristen Walden, PT
Positions:
2000-2001 Physiotherapist, Surrey Memorial Hospital, Surrey BC
2001-2004 Physiotherapist, Acute Spine Program, Vancouver General Hospital, Vancouver, BC
2004-2008 Physiotherapist, Spine Program, GF Strong Rehabilitation Centre, Vancouver, BC
2006-present National Clinical Liaison, Rick Hansen Institute, Vancouver, BC
2008-2009 Physiotherapist, Aquired Brain Injury Program, GF Strong Rehabilitation Centre, Vancouver, BC
2009-2014 Physiotherapist, Spine Program, GF Strong Rehabilitation Centre, Vancouver, BC
Appointments:
Member, International Standards Committee, American Spinal Cord Injury Association
Contributions to Science:
A M Round, A M, Park, S E, Walden, K, Noonan, V K, Townson, A, Krassioukov, A V. (2017). An evaluation of the International Standards to Document Remaining Autonomic Function after Spinal Cord Injury: input from the international community. Spinal Cord 55 (2): 198-203.
K Walden, K, BÃ©langer, L M, Biering-SÃ¸rensen, F, Burns, S P, Echeverria, E, Kirshblum, S, Marino, R J, Noonan, V K, Park, S E, Reeves, R K, Waring, W, Dvorak, M F. (2016). Development and validation of a computerized algorithm for International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI). Spinal Cord 2016, 54 (3): 197-203.

Lise Belanger, RN, BSN, MSN
Vancouver Spine Program, Vancouver General Hospital

(no CV uploaded)

Eduardo Echeverria, .
Rick Hansen Institute

(no CV uploaded)

Glenys MacIsaac, B.Sc., PMC, PMP
Rick Hansen Institute

(no CV uploaded)

Apolipoprotein E modulates respiratory motor plasticity following cervical spinal cord injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Lydia Hager, BS
University of Kentucky

CV:
Name: Lydia Hager
Position Title: Graduate Research Assistant

A. Personal Statement
As an undergraduate at Marshall University, I began my research career in the lab of Dr. Elmer Price, who was engineering biocompatible materials to direct the proliferation and differentiation of neural stem cells. During my time in that lab, I was given the opportunity to present my research as a poster at the Society for Neuroscience meeting. It was then, while interacting with neurobiology experts from all over the world that I realized science was my future. I was awarded an undergraduate fellowship from the NASA Space Grant Consortium to support my work, which also afforded me the ability to present at undergraduate research meetings. During my final year in the Price lab, I was also a contributing author on a manuscript published in Stem Cells and Development. Since beginning graduate school, my passion for neuroscience remains, but my focus has shifted to spinal cord injury. I joined the lab of Dr. Warren Alilain, who studies various approaches to restore breathing function following cervical SCI. My graduate work focuses on investigating the effects of different isoforms of apolipoprotein E on neural plasticity, which is an important means of recovery following SCI. As an expert in the field, Dr. Alilain has previously researched plasticity in multiple animal injury models and is well suited to train me in these techniques. During my first year in this lab, I was invited to present posters at two international meetings. I have also given three platform presentations on my preliminary work. I am confident in the potential for this project and excited for the chance to conduct work that could contribute to the SCI field. Exploring genetic influences on recovery after SCI will help pave the way for personalized medicine in the neurotrauma field, which is the type of clinically relevant research that I plan to continue in my post-graduate career. As a student from rural Appalachia, I am also passionate about using my experience to reach out to younger students in areas where there are fewer scientific learning opportunities. Throughout and after my graduate career, I will participate in outreach activities to encourage kids to be curious and excited about science and how it could affect their futures.
1) Clark, A.R., Carter, A.B., Hager, L.E. and Price, E.M. In Vivo Neural Tissue Engineering: Cylindrical Biocompatible Hydrogels That Create New Neural Tracts in the Adult Mammalian Brain. Stem Cells Dev. Aug 1;25(15):1109-18
2) 2017 International Spinal Research Trust meeting, London, UK: “Toward Precision Medicine After SCI: The Genetic Influence of ApoE on Respiratory Motor Plasticity” Poster Presenter
3) 2017 International Symposium on Neural Regeneration, Asilomar, CA “Toward Precision Medicine After SCI: The Genetic Influence of ApoE on Respiratory Motor Plasticity” Data Blitz Presenter
4) 2018 Therapeutic Intermittent Hypoxia Retreat, Gainesville, FL “The ApoE4 Gene as a Barrier to Respiratory Motor Plasticity” Data Blitz presenter

B. Positions and Honors
Positions
2013-2016 Undergraduate Researcher, Marshall University, Huntington, WV
2016-present Graduate Research Assistant, University of Kentucky, Lexington, KY

Profesional Memberships
2013-present Member, Alpha Chi Sigma fraternity for professionals in chemistry (Treasurer: 2014-2016)
2015-present Member, Society for Neuroscience
2016-present Member, University of Kentucky Biomedical Graduate Student Organization
2017-present Member, American Physiological Society

2017 Member, Women in Neurotrauma Research (WiNTR)

Honors
2012-2016 Scholarship, Arch Coal Scholar ($4,000)
2012-2016 West Virginia Promise Scholarship ($19,000)
2012-2016 Scholarship, John Marshall Scholar ($20,000)
2015-2016 Fellowship, NASA Space Grant Consortium ($4,000)
2017-2018 Fellowship, University of Kentucky College of Medicine Fellowship for Excellence in Graduate Research ($12,500)
2017 International Symposium on Neural Regeneration Travel Award ($500)
2018 Therapeutic Intermittent Hypoxia Retreat Travel Award ($500)
2018-2021 National Science Foundation Graduate Research Fellowship ($138,000)

C. Contributions to Science
1) Undergraduate Research- During my undergraduate career at Marshall University, I worked in the lab of Dr. Elmer Price. My work in the Price lab focused on reparation of damaged areas of the brain via repopulation with neural stem cells. I designed in vitro assays to test the effects of various growth factors (VEGF, BDNF, NGF, GDNF, etc.) on proliferation, migration, and differentiation of neural progenitor cells. I then designed biodegradable cylindrical matrices containing these factors. These cylinders were implanted in rat brains to simultaneously create a traumatic brain injury and create a microenvironment conducive to recruiting and rerouting neural progenitor cells along our new pathway to the damaged area of the brain. During my time in the Price lab, I had the valuable opportunity of presenting my work at various poster presentations, including the 2015 Summer Research Symposium at Marshall University. Next, I presented a poster at the 2015 Society for Neuroscience conference, where my audience included leaders in the field from all over the world. I also applied for, and received a fellowship through the West Virginia NASA Space Grant Consortium. At the conclusion of the fellowship, I presented my work at the 2016 NASA S.P.A.C.E Day in Fairmont, WV. I also contributed work to a publication by performing rotometer assays and immunohistochemistry.
a) Amanda R. Clark, Lydia E. Hager and Elmer M. Price “Engineered Fibrin Implants that Recruit Endogenous Neural Stem Cells as Therapies for Brain Disorders” 2015 West Virginia IDeA Network of Biomedical Research Excellence, Summer Research Symposium.
b) Lydia E. Hager, Amanda R. Clark and Elmer M. Price, “Fibrin-based microenvironments for in vitro studies of adult neurogenesis” Abstract: 91.17/AA44, Society for Neuroscience, Chicago, IL, 2015.
c) Lydia E. Hager, Amanda R. Clark, and Elmer M. Price, “Fibrin-based Microenvironments for Recruitment of Neural Stem Cells to Treat Neurological Disorders and Brain Injury”. 2016 NASA SPACE Day. Fairmont, WV
d) Amanda R. Clark, Arrin B. Carter, Lydia E. Hager. and Elmer M. Price. In Vivo Neural Tissue Engineering: Cylindrical Biocompatible Hydrogels That Create New Neural Tracts in the Adult Mammalian Brain. Stem Cells Dev. Aug 1;25(15):1109-18

2) Graduate Research- As a first year in UK’s Integrated Biomedical Sciences program, I spent two rotations with my current mentor, Dr. Warren Alilain. During that time, I performed left C2 hemisections on rats to provide a model of cervical spinal cord injury. Data from these rats was presented as a poster at the Experimental Biology meeting in Chicago in April of 2017. Since officially joining the lab in May, 2017, my research has focused on the effect of the apolipoprotein E, specifically the E4 allele, on neural plasticity. Thus far, I have performed diaphragmatic EMG recordings while dosing animals with human apoE proteins in order to observe the effect on long term facilitation (LTF), a form of respiratory motor plasticity. Preliminary data from my work indicates that the human E4 protein abolishes LTF. I presented a poster on my preliminary findings at two international meetings, as well as the Kentucky Spinal Cord and Head Injury Research Trust Symposium. I also gave platform presentations at the Kentucky Neuroscience Institute and the International Symposium on Neural Regeneration meetings. During this time, I additionally performed experiments that contributed to a manuscript published in Cell Reports in collaboration with investigators at Case Western Reserve University.
a) 2017 International Symposium on Neural Regeneration, Asilomar, CA “Toward Precision Medicine After SCI: The Genetic Influence of ApoE on Respiratory Motor Plasticity” Data Blitz Presenter
b) 2017 Kentucky Neuroscience Institute Clinical Translational Research Symposium, Lexington, KY “Toward

Precision Medicine After SCI: The Genetic Influence of ApoE on Respiratory Motor Plasticity" Platform Presenter
c) 2017 International Spinal Research Trust meeting, London, UK: "Toward Precision Medicine After SCI: The Genetic Influence of ApoE on Respiratory Motor Plasticity" Poster Presenter
d) 2018 Therapeutic Intermittent Hypoxia Retreat, Gainesville, FL: "The ApoE4 Gene as a Barrier to Respiratory Motor Plasticity" Data Blitz presenter

D. Additional Information: Research Support and/or Scholastic Performance
1) Research Support
2015-2016 Fellowship, NASA Space Grant Consortium
2017-2018 Fellowship, University of Kentucky College of Medicine Fellowship for Excellence in Graduate Research
2017 International Symposium on Neural Regeneration Travel Award
2018 Therapeutic Intermittent Hypoxia Retreat Travel Award
2018-2021 National Science Foundation Graduate Research Fellowship

---

Kyle Ritter, BS
University of Kentucky

(no CV uploaded)

Daimen Stoltz, BS
University of Kentucky

(no CV uploaded)

Chris Calulot, BS
University of Kentucky

(no CV uploaded)

Aaron Silverstein, BS
University of Kentucky

(no CV uploaded)

Emily Huffman, BS
University of Kentucky

(no CV uploaded)

Warren Alilain, PhD
University of Kentucky

(no CV uploaded)

Allogeneic umbilical cord derived mesenchymal stem cells transplantation improves motor function in spinal cord injured rats

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

F M Moinuddin, MBBS, PhD
Mayo Clinic

CV:

Biographical Sketch
Name: F M Moinuddin, M.B.B.S., PhD
Position Title: Post Doctoral research fellow, Mayo Clinic - Rochester, Department of Neurosurgery, United States
A. Personal Statement
My research could be characterized as “restorative neurology in spinal cord injury (SCI)” and is focused on neural regeneration and functional recovery following injury. I am especially interested in understanding the underlying mechanisms of this neural plasticity and how it could be augmented to bring about greater recovery.
In our animal lab, we are studying spinal cord injury using rat umbilical cord derived stem cell, Adipose tissue derived mesenchymal stem cell, different antibodies and inhibitors to find out the optimum treatment choice and combination.
In our human research, we are conducting a human phase I/II clinical trial using autologous adipose tissue derived mesenchymal stem cells treating spinal cord injury.
I also contribute to the field of spinal cord injury medicine/rehabilitation through meta-data analysis.
B. Positions and Honors
Positions
Aug 2017 – present Post Doctoral research fellow
Mayo Clinic - Rochester, Department of Neurosurgery
, United States
Jul 2016 – May 2017 Researcher
Kagoshima University, Department of Molecular Oncology & Department of Neurosurgery
, Japan
,

C. Contribution to Science –
1. Nishimuta Y, Awa R, Tokimura H, Hirano H, Moinuddin FM, Arita K: Long-term outcome after endovascular treatment of cavernous sinus dural arteriovenous fistula and a literature review. Acta Neurochir (Wien). 2017 Sep 20. doi:10.1007/s00701-017-3336-4.
2. Moinuddin FM, Ikbar Khairunnisa N, Hirano H, Kirishima M, Kamimura K, Arita K. Bilateral lateral ventricular subependymoma with extensive multiplicity presenting with hemorrhage. Neuroradiol J. 2017 Jan 1:1971400917718843. doi: 10.1177/1971400917718843
3. F M MOINUDDIN, Nadia DELIMA ANDINI, Novita IKBAR KHAIRUNNISA, Muhammad KAMIL, Yuko SADAMURA, Sei SUGATA, Hirofumi HIRANO, Yumi KASHIDA, Kazunori ARITA1,Magnetic Resonance Image Evidence of Occipital- Straight Sinus Dural Arteriovenous Fistula Causing Severe Bilateral Thalamic Edema – a Case Report. Hiroshima Journalof Medical Science.
4. Hajime Yonezawa, Hirofumi Hirano, Hiroyuki Uchida, Mika Habu, Ryosuke Hanaya, Tatsuki Oyoshi, Yuko Sadamura, Tomoko Hanada, Hiroshi Tokimura, Fm Moinuddin, Kazunori Arita: Efficacy of bevacizumab therapy for unresectable malignant glioma: A retrospective analysis. Molecular and Clinical Oncology 11/2016;, DOI:10.3892/mco.2016.1086
5. Shingo Fujio, Hiroshi Arimura, Hirofumi Hirano, Mika Habu, Manoj Bohara, F M Moinuddin , Yasuyuki Kinoshita, Kazunori Arita: Changes in quality of life in patients with acromegaly after surgical remission - A prospective study using SF-36 questionnaire. Endocrine Journal 09/2016;, DOI:10.1507/endocrj.EJ16-0182
6. F M Moinuddin, Yoshinari Shinsato, Masaharu Komatsu, Ryoichi Mitsuo, Kentaro Minami, Masatatsu Yamamoto, Kohich Kawahara, Hirofumi Hirano, Kazunori Arita, Tatsuhiko Furukawa: ATP7B expression confers multidrug resistance through drug sequestration. Oncotarget 03/2016; 7(16).,

DOI:10.18632/oncotarget.8059
7. Shingo Fujio, Ashari, Mika Habu, Hitoshi Yamahata, F M Moinuddin, Manoj Bohara, Hiroshi Arimura, Yui Nishijima, Kazunori Arita: Thyroid storm induced by TSH-secreting pituitary adenoma: A case report . Endocrine Journal 08/2014; 61(11)., DOI:10.1507/endocrj.EJ14-0278
8. Prasanna Karki, Hajime Yonezawa, Manoj Bohara, Tatsuki Oyoshi, Hirofumi Hirano, F M Moinuddin, Tsubasa Hiraki, Takako Yoshioka, Kazunori Arita: Third ventricular atypical meningioma which recurred with further malignant progression. Brain Tumor Pathology 03/2014; 32(1)., DOI:10.1007/s10014-014-0183-3
9. Shunji Yunoue, Hiroshi Tokimura, Atsushi Tominaga, Shingo Fujio, Prasanna Karki, Satoshi Usui, Yasuyuki Kinoshita, Mika Habu, Fm Moinuddin, Hirofumi Hirano, Kazunori Arita: Transsphenoidal surgical treatment of pituitary adenomas in patients aged 80 years or older. Neurosurgical Review 11/2013; 37(2)., DOI:10.1007/s10143-013-0509-3

Kathy Petrucci, DVM
Animal Cell Therapies

(no CV uploaded)

Ahad Siddiqui, PhD
Mayo Clinic

(no CV uploaded)

Gene Yeh, MD
Animal Cell Therapies

(no CV uploaded)

Anshit Goyal, MBBS
Mayo Clinic

(no CV uploaded)

Yagiz Yolcu, MD
Mayo Clinic

(no CV uploaded)

Waseem Wahood, MS
Mayo Clinic

(no CV uploaded)

Mohammed Alvi, MBBS
Mayo Clinic

(no CV uploaded)

Sandy Goncalves, MS
Mayo Clinic

(no CV uploaded)

Nicolas Madigan, M.B., B.Ch., B.A.O., Ph.D
Mayo Clinic

(no CV uploaded)

Anthony J. Windebank, MD, FAAN
Mayo Clinic

(no CV uploaded)

Mohamad Bydon, MD
Mayo Clinic

(no CV uploaded)

Pre- & Post- Treatment Urodynamic Studies in a Traumatic Spinal Cord Injury Patient with Silent Autonomic Dysreflexia: A Case Report

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Audrey Chun, MD
Icahn School of Medicine at Mount Sinai Hospital

CV:
CURRICULUM VITAE
Name: AUDREY CHUN, MD

Positions:
Current (2016-2019): PGY4 Resident Physician, Department of Physical Medicine & Rehabilitation (PM&R), Mount Sinai Hospital (MSH), NY
2015-2016: Preliminary Medicine Intern, Department of Internal Medicine, Greenwich Hospital, CT
2011-2015: Medical Student, Icahn School of Medicine at Mount Sinai (ISMMS), NY

Research:
Presentations
Chun A, Kolakowsky-Hayner S, Worobey L, Bird EA, Boninger ML. Assistive technology use: disparities within the spinal cord injury population.
Poster presentation, Academy of Spinal Cord Injury Professionals (ASCIP) Annual Educational Conference & Expo, New Orleans, LA [September 2018]

Chun A, Zakhary MA, Escalon MX. Rehabilitation of traumatic brain injury in a patient with a prior history of spinal cord injury (Case report).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, Atlanta, GA [February 2018]

Chun A, Escalon MX. Spinal cord injury rehabilitation following spinal metastasis of renal cell carcinoma (Case series).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, Atlanta, GA [February 2018]

Chun A, Ambrose A. Prescribing patterns for anticoagulation in patients sustaining intracerebral hemorrhage secondary to brain injury in the acute inpatient rehabilitation setting (Original research).
Poster presentation, Association of Academic Physiatrists (AAP) Annual Meeting, San Antonio, TX [March 2015]

Publications
Chun A, Reinhardt JP, Ramirez M, Ellis JM, Silver S, Burack O, Eimicke JP, Cimarolli V, Teresi JA. Depression recognition and capacity for self-report among ethnically diverse nursing home residents: Evidence of disparities in screening. J Clin Nurs. July 2017.

Ongoing Research
Title: The Validity of Interview Based Examination for Spinal Cord Injury (VIBES) for the Assessment of Sacral Sparing.
Objective: To design and validate the use of a comprehensive interview based equivalent of the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI) exam that could possibly allow the determination of the approximate level of spinal cord injury and injury severity without a hands-on physical exam. The first module of this study involves trialing a short questionnaire based on the anorectal portion of the ISNCSCI exam. Future developments will include further questionnaires corresponding to its motor and sensory portions.
Principal investigator: Bryce TN.
[December 2017 - present]

Title: Disparities in computer and mobile technology use among individuals with spinal cord injury and their

relationship to health-related behaviors and beliefs.
Objective: To assess baseline prevalence of computer, mobile device, e-mail and internet use among individuals with spinal cord injury. To identify any disparities that may exist between various demographic groups within this population. To explore whether computer, mobile device, e-mail and internet use has any relationship to health-related behaviors or beliefs within this population.
Principal investigator: Boninger ML.
[December 2017 - present]

Jasmin Harounian, MD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Michael Chiou, MD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Chandni Patel, Medical Student
Edward via College of Osteopathic Medicine

(no CV uploaded)

Vincent Huang, MD
Icahn School of Medicine at Mount Sinai Hospital

(no CV uploaded)

Cannabis use in women with spinal cord injury

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Amanda Lee, MSc
University of British Columbia, International Collaboration on Repair Discoveries (Icord)

CV:
PERSONAL STATEMENT
Amanda Lee recently completed her MSc in Experimental Medicine at the University of British Columbia, supervised by Dr. Krassioukov at the International Collaboration on Repair Discoveries (ICORD). She obtained a CIHR CGS-M scholarship to work on the present study, which served as one component of her thesis project. Amanda currently works with an interdisciplinary panel of health care practitioners, including sexual medicine clinicians, lactation consultants, nurses and occupational therapists to form evidence-based recommendations and clinician guidelines for postpartum care
of mothers with SCI, specifically in the areas of facilitating successful breastfeeding.

Amanda's research experience in the field of SCI includes both pre-clinical and clinical research. She has been involved in studies using rodent models to evaluate the impact of SCI on cardiovascular function and cognition: previously humans with SCI exhibit mild cognitive impairment as well as elevated risk
of cardiovascular disease associated with impaired cardiac function and vascular reactivity. Amanda's involvement in this area includes assessing whether novel interventions such as passive exercise mitigate the cardiovascular aberrations and cognitive deficits that follow chronic SCI, as well as the effects of SCI on vascular structure and cytoarchitecture (particularly the hippocampus). She has also been involved in studies examining the effects of cannabinoid agonist and antagonists in rodent models.

With respect to clinical research, Amanda conducted numerous projects in addition to her work on maternal health after SCI. Several of these projects have been published and a few studies are ongoing. Currently Amanda is interested in the phenomenon of neurovascular coupling (NVC) as a marker for cerebrovascular health in persons with SCI, and she is currently studying the implications of different durations of SCI and autonomic dysreflexia on global cerebral blood flow and cognition. This upcoming study, funded by the Heart & Stroke Foundation, will utilize ambulated blood pressure monitoring, hemodynamic assessments, neuroimaging (fMRI) and cognitive tasks. Additionally, Amanda is currently involved in clinical trials using intradetrusor onabotulinumtoxinA (Botox) administration to treat neurogenic detrusor overactivity and its subsequent impact on a) autonomic dysreflexia incidence/severity and b) cerebral autoregulation.

AWARDS:
2018 – Neurotrauma Travel Award to the 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care
2018 - 2nd Best Poster Presentation, ICORD Trainee Symposium
2018 - Runner-up for Best Poster Presentation, ICORD Annual Research Meeting
2018 - Publication Award, UBC Department of Experimental Medicine
2018 - Academic Award, UBC Department of Experimental Medicine
2017 - Trainee Travel Award, International Collaboration on Repair Discoveries (ICORD)
2017 - Go Global Self-Directed Research Award, University of British Columbia
2017 - Canada Graduate Scholarships - Master's Program (Experimental Medicine), Canadian Institutes of Health Research (CIHR)
2017 – 3rd Best Poster award at the 4th Annual International

Autonomic Symposium, International Collaboration on Repair Discoveries (ICORD)
2016 - Canada Graduate Scholarships - Master's Program (Clinical Neuropsychology), Canadian Institutes of Health Research (CIHR) – declined offer

2015 – Highly Commended Entrant, Undergraduate Awards, Ireland

RESEARCH FUNDING

Project #: 430818
Grant Title: Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia.
PI: Dr. Andrei Krassioukov
Funding Agency: Craig H. Neilsen Foundation
Dates: 10/31/2016 – 10/31/2017
Role: Project lead

Project #: 402831
Grant Title: Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreflexia. Translating knowledge to practice.
PI: Dr. Andrei Krassioukov
Funding Agency: Canadian Institutes of Health Research (Institute of Circulatory and Respiratory Health)
Dates: 05/01/2018 – 04/30/2019
Role: Co-applicant; project lead

CONTRIBUTION TO SCIENCE

Publications:

Krassioukov A, Holmgren T, Lee A, Shea H, Hamilton L, Sandholdt N, Hellsing I, Elliott S, Claes H. Breastfeeding and motherhood after spinal cord injury: Barriers and challenges.

Annals of Physical and Rehabilitation Medicine. 2018 Jul 1;61:e239. https://doi.org/10.1016/j.rehab.2018.05.555

Lee, A.H.X., Wen, B, Hocaloski, S., Sandholt, N., Hultling C., Elliott, S., Krassioukov, A.V. Breastfeeding before and after spinal cord injury: a case report of a mother with C6 tetraplegia. Minor revisions requested from the Journal of Human Lactation, July 17, 2018.

Holmgren, T., Lee, A.H.X., Hultling, C., Hocaloski, S., Elliott, S.L., & Krassioukov, A.V. (2018). The influence of spinal cord injury on breastfeeding ability and behavior. Journal of Human Lactation, 34 (3), 556-565.

Saleem, S., Vucina, D., Sarafis, Z., Lee, A.H.X., Squair, J., Barak, O.F., Coombs, G., Mijacika, T., Krassioukov, A.V., Ainslie, P., Dujic, Z., Tzeng, Y., & Phillips, A.A. Wavelet decomposition analysis is a clinically-relevant strategy to evaluate cerebrovascular buffering of blood pressure after spinal cord injury. American Journal of Physiology-Heart and Circulatory Physiology. March 26, 2018. Epub ahead of print. DOI: 10.1152/ajpheart.00152.2017

Lee, A.H.X., Phillips, A. A., Squair, J. W., Barak, O.F., Coombs, G., Ainslie, P.N., Sarafis, Z.K., Mijacika, T., Vucina, D., Dujic, Z., & Krassioukov, A.V. Alarming blood pressure changes during routine bladder emptying in a woman with cervical spinal cord

injury. Spinal Cord: Series and Cases. Dec 28, 2017.
eCollection 2017;3:17101. DOI: 10.1038/s41394-017-0022-y
Lee, A.H.X., Phillips, A.A., & Krassioukov, A.V. (2016) Increased central arterial stiffness after spinal cord injury: contributing
factors, implications and possible interventions. Journal of Neurotrauma, 34 (6):1129-1140.

Lee, A.H.X. (2016). CB1 receptor agonist HU-210 and antagonist AM-251 exert unique effects on male rat sexual behaviour when chronically exposed in adolescence. UBC Undergraduate Journal of Psychology, 4 (1), 3-12.
Lee, A., & Rigby, R. (2014). The effect of acute low doses of the CB1 receptor agonist HU-210 on sexual behaviour in male rats. UBC Undergraduate Journal of Psychology, 3 (1), 3 - 13.
Squair, J.W., Lee, A.H.X., Sarafis, Z.K., Chan, F., Day, T., & Phillips, A. A. Network analysis identifies consensus physiological measures of neurovascular coupling in humans. In submission to Journal of Cerebral Blood Flow and Metabolism. June 25, 2018 (revision requested July 29, 2018).
Walter, M., Lee, A.H.X., Kavanagh, A., Phillips, A. A., & Krassioukov, A.V. Acute effects of epidural spinal cord stimulation on lower urinary tract and bowel function in one individual with spinal cord injury. Minor revisions requested in Frontiers of Physiology. June 24, 2018.

Coombs, G.B., Barak, O.F., Phillips, A.A., Mijacika, T., Saras, Z.K., Lee, A.H.X., Squair, J.W., Bammert, T.D., DeSouza, N.M., Gagnon, D., Krassioukov, A.V., Dujic, Z., DESouza, C.A., & Ainslie, P.N. Vascular function in chronic cervical spinal cord injury: acute effects of passive heat stress. In submission to Circulation Research. June 15, 2018.
Saleem, S., Sarafis, Z., Lee, A.H.X., Squair, J.W, Barak, O.F., Sober-Williams, E., Coombs, G., Mijacika, T., Krassioukov, A.V., Ainslie, P., Dujic, Z., Tzeng, Y., & Phillips, A.A Spinal cord disruption is associated with a loss of Cushing-like blood pressure interactions. Accepted. Journal of Neurotrauma. Sep 1, 2018
Lee, A.H.X., Wen, B, Walter, M., Hocaloski, S., Hodge, K., Sandholt, N., Hultling C., Elliott, S., Krassioukov, A.V. Increased prevalence of postpartum depression and anxiety among women with spinal cord injury. In submission to Archives of Women's Mental Health. May 10, 2018.
Walter. M., Ramirez, A.L., Lee, A.H.X., Rapoport, D., & Krassioukov, A.V. Protocol for a phase II, open-label exploratory study investigating the ecacy of Fesoterodine for treatment of adult patients with spinal cord injury with neurogenic detrusor overactivity for amelioration of autonomic dysreexia. Under review in BMJ Open. May 10, 2018.
Frias, B., Phillips, A.A., Squair, J.W., Lee, A.H.X., Laher, I., & Krassioukov, A.V. Reduced colonic smooth muscle cholinergic responsiveness is associated with impaired bowel motility after chronic experimental high-level spinal cord injury. Autonomic Neuroscience: Basic and Clinical. (Revisions requested Jan 5, 2018).
Zheng, M. M. Z., Phillips, A. A., Golbidi, S., Lee, A. H. X., Laher, I., & Krassioukov, A.V. Impaired endothelium and remodelling in vasculature caudal to spinal cord transection that can be

reversed through TRPV4 and TGFβ pathways by increasing blood ow and shear forces. The Journal of Physiology.
Submitted 5 June 2017. Special Case Resubmission requested by journal July 4, 2017.
Squair, J.W., Lee, A.H.X., Saras, Z.K., Coombs, G., Barak, O., Cragg, J.J., Mijacika, T., Pecotic, R., Krassioukov, A.V., Dogas, Z., Ainslie, P.N., Dujic, Z., & Phillips, A. A. Sleep-disordered breathing is highly-prevalent and associated with impaired brain vascular function in individuals with spinal cord injury. (Pre-submission).
Lee, A.H.X., Romac, R., Squair, J.W., Barak, O., Coombs, G.F., West, C.R., Mijacika, T., Saras, Z.K., Krassioukov, A.V., Ainslie, P.N., Dujic, Z., & Phillips, A.A. Passive leg cycling in people with spinal cord injury acutely leads to integrated cardiorespiratory responses and improves femoral artery endothelial function. (In preparation)
Walter, M., Lee, A.H.X., Krassioukov, A.V. Bladder dysfunction following spinal cord injury: a cardiovascular nightmare? (In preparation).
Lee. A.H.X., Coombs, G., Phillips, A.A., Ainslie, P.N. Neurovascular coupling and global cerebral blood ow during passive heating intervention in patients with cervical spinal cord injury. (In preparation).
Lee, A.H.X., Khayambashi, S., Co, D., Frank, A., Sepehry, A.A., Krausz, M., & Schütz, C.G. Epilepsy and seizures in the mentally ill homeless: psychiatric comorbidities and substance use. (In preparation).
Chan, H., Stewart, L.C., Fayowski, C., Lee, A.H.X., & Brubacher, J. Injured elderly drivers and emergency department visits. (In preparation).
Presentations:
Lee, A.H.X., Hocaloski, S., Elliott, S., Wen, B., Hodge, K., Sandholt, N., Basso, M., Walter, M., Hultling, C., & Krassioukov, A.V. “Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia.” Poster presented at the 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care (Neurotrauma 2018), Toronto, ON, Canada. August 11-16, 2018.
Wen, B. Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hodge, K., Walter, M., Hultling, C., & Krassioukov, A.V. “Postpartum depression after spinal cord injury: Results from a multi-centre retrospective study.” Poster presented at UBC Psychiatry Research Day. June 7, 2018.
Lee, A.H.X. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia. Oral presentation at GF Strong Research Day 2018, Vancouver, BC, Canada. May 9, 2018
Lee, A.H.X., Hocaloski, S., Elliott, S., Wen, B., Hodge, K., Sandholt, N., Basso, M., Walter, M., Hultling, C., & Krassioukov, A.V. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia. 2nd best Poster presentation at the ICORD Trainee Symposium 2018. May 7, 2018.
Lee, A.H.X., Hocaloski, S., Hodge, K., Elliott, S., & Krassioukov A.V. “Motherhood after spinal cord injury: lactation,

breastfeeding and autonomic dysreexia." Course delivered at the American Spinal Injury Association (ASIA) Annual Scientic Meeting 2018, Rochester, Minnesota, USA. May 2-5, 2018.
Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hultling, C., & Krassioukov, A.V. "Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia." Runner up for Best Poster presentation at the ICORD Annual Research Meeting. March 13, 2018.
Lee, A.H.X., Basso, M., Hodge, K. "Rolling into parenthood: key physical, mental health and breastfeeding considerations when working with pregnant and new parents with physical disabilities." Oral presentation at the Perinatal Services BC's 3rd Biennial Conference: "Healthy Mothers and Healthy Babies. Working Together to Improve Perinatal Outcomes", Vancouver, BC, Canada. March 1-2, 2018.
Lee, A.H.X., Holmgren, T., Elliott, S., Hocaloski, S., Hultling, C., & Krassioukov, A.V. "Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia." Poster presented at the Faculty of Medicine Research Trainee Day, Vancouver, BC, Canada. February 16, 2018.
Lee, A.H.X. Motherhood after spinal cord injury: lactation, breastfeeding and autonomic dysreexia. Oral presentation at the 2017 Medicine Research Expo for Vancouver General Hospital, Vancouver, BC, Canada. October 31, 2017. Award for best trainee talk.
Elliott, S., Lee, A.H. X., Belich, B.N. "Pea app: a novel app for premature ejaculation." Moderated poster session presented at the 2017 Annual Fall Scientic Meeting of the Sexual Medicine Society of North America. 27 October 2017.
Lee. A. H. X., Phillips, A.A., Squair, J.W., Sayenko, D.G., Edgerton, V.R, Gerasimenko, Y., & Krassioukov, A.V. "Noninvasive electrical spinal cord stimulation restores autonomic cardiovascular function in individuals with spinal cord injury." Poster presented at the ICORD Trainee Symposium. 14 June 2017.
Lee, A. H. X., Zheng, M.M.Z., Wen, B., & Krassioukov, A.V. "Cardiovascular responses to ballroom dancing in wheelchair dancers." Poster presented at GF Strong Research Day. 3 May 2017.
Lee, A. H. X., Zheng, M.M.Z., Phillips, A.A., & Krassioukov, A.V. "Chronic autonomic dysreexia after T3 spinal cord injury results in impaired vascular function in femoral rat arteries." Poster presented at Experimental Biology. 26 April 2017.
Lee. A. H. X., Phillips, A.A., Squair, J.W., Sayenko, D.G., Edgerton, V.R, Gerasimenko, Y., & Krassioukov, A.V. "Noninvasive electrical spinal cord stimulation restores autonomic cardiovascular function in individuals with spinal cord injury." Poster presented at the SCI Symposium. 6 April 2017.
Lee, A. H. X., Zheng, M.M.Z., Phillips, A.A., & Krassioukov, A.V. "Chronic autonomic dysreexia after T3 spinal cord injury results in impaired vascular function in femoral rat arteries." Award for 3rd best poster presentation at the 4th International Autonomic Symposium. 22 February 2017.
Lee, A. H. X., Nikoo, M., Krausz, M., & Schutz, C. G. "Suicidality during opioid substitution treatment." Poster presented at UBC Psychiatry Research Day. 26 May 2016.

Lee, A. H. X., Dang, S.S., & Gorzalka, B.B. “Enhancement of endocannabinoid 2-arachidonoyl glycerol, but not arachidonoyl ethanolamide, suppresses sexual behavior in male rats.” Poster presented at the 41st Annual Meeting of the International Academy of Sex Research. 10 August 2015.
Lee, A. H. X., Chao, T.W., & Schütz, C.G. “Stress response to cognitive assessments in patients with concurrent mental health and substance use disorders.” Poster presented at UBC Psychiatry Research Day. 18 June 2015.
Rigby, R. & Lee, A. “The effects of chronic adolescent cannabinoid exposure on the sexual behaviour of male rats.” Poster presented at the 5th Annual Multidisciplinary Undergraduate Research Conference at UBC. 21 March 2015.
Lee, A., & Rigby, R. “The inhibitory effect of CB1 receptor agonist HU-210 on sexual behaviour in male rats.” Runner-up award for Top Poster Presentation at the 4th Annual Multidisciplinary Undergraduate Research Conference at UBC. 22 March 2014.

Matthias Walter, MD, PhD
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Thomas Nightingale, PhD
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Rahul Sachdeva, PhD
International Collaboration on Repair Discoveries (Icord)

(no CV uploaded)

Andrei Krassioukov, MD, PhD
International Collaboration on Repair Discoveries (Icord), Faculty of Medicine, University of British Columbia

(no CV uploaded)

Case Report: Subclavian vein thrombosis after removal of a peripherally inserted central catheter

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

HEERAK Kang, MD
Suny Upstate Medical University

CV:
Name: HeeRak Kang MD
Position Title: PGY-2 Resident Physician, PM&R, SUNY Upstate Medical University

Positions
2004-2010, Manufacturing Engineer, Welch Allyn (now part of Hill Rom)
2010-2013, Senior Regulatory Engineer, Welch Allyn (now part of Hill Rom)
2017-present, Resident Physician, PM&R, SUNY Upstate Medical University

---

Steven Brose, DO
Syracuse Va Medical Center

(no CV uploaded)

Establishing an Aquatic Therapy Protocol for Patients with AIS-A/B Spinal Cord Injury (SCI)

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Kara Bunting, DO
Baylor Scott and White Institute for Rehabilitation

CV:
EDUCATION

Baylor University Medical Center Dallas, TX
Physical Medicine and Rehabilitation Resident
Current PGY-4, To be Completed: June 2019

University of Oklahoma Health Sciences Center Tulsa, OK
Internal Medicine Preliminary Resident
Date of Completion: June 2016

Oklahoma State University College of Osteopathic Medicine Tulsa, OK
Doctor of Osteopathic Medicine
Date of Graduation: May 2015

Baylor University Waco, TX
Bachelor of Science in Neuroscience, Minor in Biology, Cum Laude
Date of Graduation: December 2010

MEDICAL SCHOOL ACADEMIC HONORS

• Dean's Honor Roll, Spring 2012

TEACHING EXPERIENCE

Oklahoma State University College of Osteopathic Medicine August 2012-May 2013
Osteopathic Manipulative Medicine Teaching Assistant
• Assisted in training first year students in their weekly OMM course
• Tutored individual students

Stress Management Leader August 2012-October 2012
• Taught first year medical students techniques for coping with stress during medical school in an 8 week course
• Created and edited a video to assist in the stress management course

ACTIVITIES

American Osteopathic College of Physical Medicine and Rehabilitation
Founder of OSU chapter, President August 2012-May 2013
• Responsibilities included arranging meetings and speakers, ordering food for meetings, managing club finances, ordering club t-shirts, communicating with the national organization, overseeing duties of other club officers

Student American Academy of Osteopathy
Secretary August 2012-May 2013
• Responsibilities included organizing and leading OMM reviews for first year students and keeping members informed about reviews and other club events

Christian Medical Association
Secretary August 2012-May 2013
• Responsibilities included keeping members informed about club events and assisting in organizing club retreats

OSU Student Ambassador
Ambassador August 2011-May 2013
• Responsibilities included giving tours of the medical school, recruiting future medical students, helping with first year students' orientation

AAPMR Resident Ambassador
Ambassador July 2016-June 2017
• Responsibilities included acting as liason between the national AAPMR association and my residency program at Baylor University Medical Center as well as completing surveys and any task asked of me by the national association regarding my local PM&R chapter.

PM&R Chief Resident
July 2018-June 2019
• Responsibilities include organizing and scheduling weekly didactics lectures, creating schedules for resident rotations, activities, call, etc., addressing any kind of resident issue, acting as liason between residents and the program director.

Additional Activities
• Mentored two first year medical students, volunteered at rural health fairs and Eugene Field Elementary health fairs, assisted with girl scout and boy scout physicals, performed high school and middle school physicals, performed OMM on Scrub Run participants, provided medical care to the Dallas Marathon participants, volunteered at local brain injury day camp, attended Global Missions Health Conference in Louisville, KY in 2011 and 2012

MEMBERSHIPS

• American Medical Association
• American Academy of Physical Medicine and Rehabilitation
• Association of Academic Physiatrists

Librada Callendar, MPH
Baylor Scott and White Institute for Rehabilitation

(no CV uploaded)

Monica Bennett, PhD
Baylor Scott and White Institute for Rehabilitation

(no CV uploaded)

Seema Sikka, MD
Baylor Scott and White Institute for Rehabilitation

(no CV uploaded)

Rita Hamilton, DO

Baylor Scott and White Institute for Rehabilitation

(no CV uploaded)

Measuring Upper Extremity Function in Traumatic Spinal Cord Injury: A TRACK-SCI Study

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Debra Hemmerle, RN
University of California, San Francisco

CV:
BIOGRAPHICAL SKETCH

A. PERSONAL STATEMENT

Maintaining a close affiliation with the TBI population throughout my professional career has allowed me to develop more refined research questions, and ultimately is what inspired me to begin my doctoral studies in nursing at UCSF. As a 2015 awardee of the T42 National Institutes of Occupational Safety and Health Traineeship, the overall goal of my doctoral studies has been to examine the impact of traumatic brain and spinal injury on returning to work and vocational outcomes. In May 2016, I was awarded the NIH-funded TL1 Yearlong Inquiry Program Fellowship through the UCSF Clinical & Translational Science Institute. My research project was “Subjective Cognitive Complaints and 6-Month Return to Work Following Traumatic Brain Injury,” and I presented a poster of preliminary results at the 2017 Annual Translational Science Meeting in Washington, D.C.
In June 2017, I completed the Advanced Training in Clinical Research certificate degree through the UCSF Department of Epidemiology and Biostatistics. This program not only provided me with rigorous education in clinical research methods, but also allowed me to begin collaborating with physicians and scientists of the UCSF Brain & Spinal Injury Center (BASIC). I currently work as a Research RN for the prospective multi-center TRACK-SCI study at BASIC, participating in data collection, curation & analysis. My role also includes being the primary ISNCSCI assessor of patients throughout their acute hospitalization and during their follow-up visits at 6- & 12-months post-SCI.
Being awarded the 2017/18 Targeted Research Training (TRT) Fellowship through the University of California, Berkeley, has allowed me more opportunities for growth as a junior investigator. With rigorous biostatistical counseling, I improved upon my dissertation work and presented “Subjective Cognitive Complaints and 6-Month Return to Work Following Traumatic Brain Injury” at the 2018 International Neurotrauma Conference in Toronto. I have been granted one-year renewal for my TRT fellowship and look forward to continuing my scholarly pursuit examining the occupational impacts of traumatic CNS injuries.

B. POSITIONS & HONORS

-Employment-
2011-2013: Utilization Management RN Care Coordinator, Dept. of Neurosurgery at San Francisco General Hospital (SFGH)
2013-2014: Utilization Management RN Care Coordinator, Emergency Dept. at SFGH
2014-2017: Registered Nurse, H42/42 Neuro & Truma Step-Down Unit at SFGH
2017-Current: Registered Nurse, H34/36 Neuro & Trauma ICU at SFGH
2017-Current: TRACK-SCI Research RN, UCSF Brain and Spinal Injury Center

-Honors & Awards-
2010: Jean Watson's Theory of Caring Award
2015-2016: T42 NIOSH Pre-Doctoral Traineeship, Occupational & Environmental Health Nursing, UCSF
2016-2017: TL1 Yearlong Inquiry Program Fellowship, Clinical & Translational Science Institute, UCSF
2017-Current: NIOSH Targeted Research Training Fellowship, Centers for Occupational & Environmental Health, University of California, Berkeley

C. CONTRIBUTIONS TO SCIENCE

2013: SFGH Utilization Management Emergency Dept. Data Collection Project
Developed process map of patient pathway from triage to admission; Collected and analyzed data to

identify barriers to safe community discharges from the ED; Summarized findings and proposed changes in presentation to hospital administration
2017: Poster Presentation, Annual Translational Science Meeting
“Subjective Cognitive Complaints and 6-Month Return to Work Following Mild Traumatic Brain Injury” Co-investigators: Dr. Michael Huang, Dr. Laura Ngwenya, Dr. Oi Saeng Hong
2018: Poster Presentation, International Neurotrauma Conference
“Subjective Cognitive Complaints and 6-Month Return to Work Following Mild Traumatic Brain Injury” Co-investigators: Dr. Michael Huang, Dr. Laura Ngwenya, Dr. Oi Saeng Hong, Dr. John Yue

---

Jacqueline Bresnahan, PhD
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Michael Beattie, PhD
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Xuan Duong-Fernandez, B.A.
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Leigh Thomas, B.A.
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Sanjay Dhall, M.D.
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Adam Ferguson, PhD
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Russell Huie, PhD
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Lisa Pascual, MD
Ucsf Dept. of Orthopedic Surgery

(no CV uploaded)

Vineeta Singh, MD
Ucsf Dept. of Neurology

(no CV uploaded)

William Whetstone, MD
Ucsf Dept. of Emergency Medicine

(no CV uploaded)

Nikolaos Kyritsis, PhD
Ucsf Dept. of Neurosurgery

(no CV uploaded)

Jason Talbott, MD
Ucsf Dept. of Radiology

(no CV uploaded)

Bilateral S1 Transforaminal Epidural Injection Resulting in Shingles outbreak in Unilateral Right L3 Dermatome: A Case Report

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Hasan Abad, DO
Emory University

CV:
Hasan Abad

EDUCATION
Chicago College of Osteopathic Medicine (CCOM), Downers Grove, IL 2013 – 2017
Doctor of Osteopathic Medicine, expected graduation May 2017
University of Illinois, Urbana-Champaign, IL 2008 – 2012
Bachelors of Science, Molecular & Cellular Biology, May 2012

ACADEMIC/RESEARCH EXPERIENCE
Schwab Rehabilitation Hospital, Chicago, IL – Medical Research Assistant 2015 – 2017
• Assisted Dr. Joseph Rabi MD, in open label trial, testing the efficacy of topical ketamine in treating neuropathic pain in spinal cord injury patients
• Conducted data collection and analysis and final paper review/editing for prospective medical journal publication
Schwab Rehabilitation Hospital, Chicago, IL – Medical Research Assistant 2015 – 2017
• Researched the overutilization of proton pump inhibitors (PPIs) in acute rehab patients
• Tested if educational intervention, via a formal lecture and emails regarding proper PPI use, would limit their overutilization
Institute for Genomic Biology, Urbana, IL – Laboratory Assistant 2012
• Facilitated in the development of renewable bioenergies from Miscanthus plants
• Performed PCR, DNA extraction, DNA storage, and culture preparations on over 2,000 plant samples

PUBLICATIONS/POSTER PRESENTATIONS
Topical Ketamine 10% for Neuropathic Pain in Spinal Cord Injury Patients: an Open Label Trial 2016
• Published in the International Journal of Pharmaceutical Compounding
The Over Utilization of PPIs in an Acute Rehabilitation Hospital and How to Fix it! 2016
• Presented at AAPM&R Annual Assembly in New Orleans, LA, October 2016

WORK EXPERIENCE
Emory University, Atlanta, GA – PM&R Resident 2018-Present
• PGY2 resident physician serving TBI, SCI, amputee, chronic pain patients
Advocate Illinois Masonic Medical Center, Chicago, IL – Internal Medicine Resident 2017 – 2018
• Preliminary internal medicine intern serving all types of patients in the Chicago-land area, ranging from outpatient services to inpatient and ICU
• Intern of the Year
Landstar JAR Brokering Agency, Orland Park, IL – Brokering Agent 2012 – 2013
• Coordinated the shipment and distribution of various manufactured products throughout the United States and Canada
One Palos Place Medical Center, Palos Heights, IL – Medical Assistant 2010 – 2012
• Assessed patients' vitals and prepped examination rooms, prior to physician examination
• Managed and monitored conversion of patients' paper medical records into electronic medical records
• Communicated with various insurance companies, regarding patient care and coverage

LEADERSHIP/PROFESSIONAL EXPERIENCE
Rush PM&R Medical Student Fellowship 2016 – Present
• Participated in multiple inpatient rehabilitation experiences at Rush University, including inpatient rehab care, formal case report presentations to attending physician, and proper use of evidence based medicine

• Worked with attending physicians to develop procedural skills required of physiatrists in both inpatient and outpatient settings
American-El Bireh Society Convention, Chicago, IL –
Committee Chair & Program Director 2015 – Present
• Directed executive board and general member meetings
• Organized national convention to be held in Chicago, IL, in August 2016
• Collaborated with sister chapters to organize networking events
COMCoach, Downers Grove, IL – Coach 2015 – 2017
• Mentored MS2 student via providing insight and guidance to setting and achieving academic goals
• Provided resources and study strategies as student prepares for medical board examinations

VOLUNTEER EXPERIENCE
Bank of America Shamrock Shuffle 8K, Chicago, IL – Medic 2016
• Obtained vitals and H&P of dehydrated runners, and triaged accordingly
CARA 10-Miler Race, Chicago, IL – Medic 2016
• Worked alongside resident physicians as part of first responding team for injured runners
Pain Treatment Centers of Illinois, Orland Park, IL – Shadow 2013 – 2015
• Shadowed pain management physician, Dr. Faris Abusharif
• Observed H&Ps, steroid injections, and EMGs
Doctors Without Borders, Chicago, IL – Field Partner 2015 – Present
• Recruited new members and provide monthly donations to ensure continued funding of programs
Ronald McDonald 5K through Advocate Hope, Chicago, IL – Volunteer 2012 – Present
• Raised and donated money to individuals battling cancer and their families
• Donated linens and sheets to family members staying overnight in hospitals
Carle Hospital, Urbana, IL – Volunteer 2010 – 2012
• Sat and conversed with patients, who did not have visitors, as they ate their meals
• Received pharmacy scripts from wards and delivered medication to patients accordingly
Relay for Life, Chicago, IL – Volunteer 2003 – Present
• Participated in multiple walks, raising money for cancer research
• Aided in organizing relay events for Chicagoland schools
AWARDS & CERTIFICATIONS
Intern of the Year – 2018
Advanced Cardiac Life Support 2014 – Present
Dean's List, University of Illinois 2012
James Scholar, University of Illinois 2008 – 2009

PROFESSIONAL/EXTRACURRICULAR ORGANIZATIONS
Association of Academic Physiatrists 2018 - Present
American Academy of Physical Medicine and Rehabilitation 2015 – Present
American Medical Association 2015 – Present

Joseph Rabi, MD
Pain Treatment Centers of Il/Schwab Rehabilitation Hospital

(no CV uploaded)

Intravesical Lactobacillus is Safe and Well-Tolerated in Adults and Children with Neurogenic Bladder due to Spinal Cord Injury and Spina Bifida

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Inger Ljungberg, MPH
Medstar National Rehabilitation Hospital

CV:
ROFESSIONAL EXPERIENCE

Feb 2013- Present Research Program Manager
MedStar Health Research Institute/ MedStar National Rehabilitation Hospital, Washington, D.C

June, 2009- Jan 2013 Research Associate
MedStar Health Research Institute/ MedStar National Rehabilitation Hospital, Washington, D.C

June, 2007- May, 2009 Research Coordinator
MedStar National Rehabilitation Hospital, Washington, D.C

Oct, 2005- June, 2007 Peer Mentor Coordinator
MedStar National Rehabilitation Hospital, Washington, D.C

Sep, 2003 - Oct, 2005 Database Developer
MedStar National Rehabilitation Hospital, Washington, D.C

PROFESSIONAL MEMBERSHIPS

American Spinal Cord Injury Association, 2010- Present
American Spinal Cord Injury Society, 2010- Present
American Public Health Association, 2007- 2010

PEER REVIEWED PUBLICATIONS
Tractenberg RE, Garver A, Ljungberg I, Shcladen MM, Groah SL (2017). Maintaining primacy of the patient perspective in the development of patient-centered patient reported outcomes. PLoS ONE 12(3): e0171114. Doi:10.1371/journal.pone.0171114

Nash MS, Tractenberg RE, Mendez AJ, David M, Ljungberg I, Tinsley EA, Burns PA, Betancourt LF, Groah SL. Cardiometabolic syndrome in People with spinal cord injury/disease: guideline-derived and Non-Guideline Risk Components in Pooled Sample. Arch Phys Med Rehabilitation SCI Model Systems special Edition 2017 (in press)

Groah SL, Perez-Losada M, Caldovic L. Ljungberg I, Sprague B, Castro-Nallar E, Chandal N, Hsiesh M, Pohl H. Redefining healthy urine: a cross-sectional exploratory metagenomic study of people with and without bladder dysfunction. JUrol 2016 (in press)

Groah SL, Ljungberg I, Lichy A, Oyster M, Boninger M. Dispartities in wheelchair procurement by payer among people with spinal cord injury. PM&R 2014 6(5) 412/417.

Ibrahim VM, Groah SL, Libin A, Ljungberg IH, Aufiero D, Patel K, Sampson S. Use of platelet rich plasma for the treatment of bicipital tendinopathy in spinal cord injury: a pilot study. Br J Sports Med 2013;47:e2doi.10.1136/bjsports-2013-092459.39 (abstract)

Silver J, Ljungberg I, Libin A, Groah S. Barriers for Individuals with Spinal Cord Injury Returning to the Community: A Preliminary Classification. J Disability Health 2012; 5(3):190-6.
Fouts DE, Pieper R, Szpakowski S, Pohl H, Knoblach S, Suh MJ, Huang ST, Ljungberg I, Sprague B, Lucas SK, Torralba M, Nelson KE, Groah SL. Integrated next-generation sequencing of 16S rDNA and metaproteomics differentiate the healthy urine microbiome from asymptomatic bacteriuria in neuropathic bladder associated with spinal cord injury. J Transl Med 2012;10:174 (doi:10.1186/1479-5876-10-174)

Kroll T, Kratz A, Kehn M, Jensen M, Groah S, Ljungberg I, Molton I, Bombardier C. Perceived Exercise Self-Efficacy as a Predictor of Exercise Behavior in Individuals Aging with Spinal Cord Injury. Am J PM&R 2012; 91(8):640-51. DOI 10.1097/PHM.0b013e31825a12cd
Ibrahim VM, Groah SL, Libin A, Ljungberg I. Use of platelet rich plasma for the treatment of bicipital tendinopathy in spinal cord injury: a pilot study. Top Spinal Cord Inj Rehabil 2012; 18(1):77-8. DOI 10.1310/sci1807-77

Anderson ,KD, Acuff, MC, Arp BGâ€¦Ljungberg, I et al. United States (US) Multi-center Study to Assess the Validity and Reliability of the Spinal Cord Independence Measure (SCIM III) Spinal Cord, 2011; 29(3); 1-6. DOI:10.1038/sc.2011.20

Myaskovsky, L, Burkitt, K, Lichy, A, Ljungberg, I et al. The Association of Race, Cultural Factors, and Health Related Quality of Life in Persons With Spinal Cord Injury. Arch of Phys Med Rehab, 2011; 92(3); 441-448.

Ljungberg I, Kroll T, Libin A, Gordon S, Groah S, Neri M. Using peer mentoring for people with spinal cord injury to enhance self efficacy beliefs and prevent medical complications. J of Clinical Nursing 2011, 20(3-4):351-358.DOI 10.111/j.1365-2702.2010.03432.x

PRESENTATIONS

Hsieh M, Groah SL, Perez-Losada M, Caldovic L, Davis T, Ljungberg IH, Rounds A, Sprague B, Pohl H. A Phase IA Clinical Trial of Intravesical Probiotic Instillation in Children and Adults Demonstrates Safety and Tolerability, and Suggests the Urine Microbiome Varies with Age.
Pediatric Urology Fall Congress 2017 September, 2017 (Montreal, Canada)

May 15-19 2015: Groah SL, Perez-Losada M, Caldovic L, Ljungberg IH, Sprague B, Castro-Nallar E, Shah N, Hsieh M, Pohl HG. All asymptomatic, all the time. Pyuria and asymptomatic bacteriuria is associated with novel and specific microbiomes. American Urological Association Annual Meeting, New Orleans, LA.
*Selected for presentation to the media during the AUA Press Program.

July 24, 2012: Knoblach S, Fouts D, Szpakowski Sâ€¦ Ljungberg I et al. Integrated 16S next-generation sequencing and metaproteomics differentiate the healthy urinary microbiome from asymptomatic bacteriuria in neuropathic bladder associated with spinal cord injury. 30th National Neurotrauma meeting, Phoenix, AZ.

April 19-21, 2012: Groah SL, Ljungberg I, Sprague B, Pohl H, Knoblach S. GENitoUrinary Cytokine Biomarkers after Spinal Cord Injury: The GENUSCIS Project
38th ASIA Annual Meeting, Denver, C)
*Award Poster

October 29- November 2, 2011: Schladen MM, Ljungberg I, Libin A, Groah SL. Development of a preliminary use case for personal health records in spinal cord injury health information self-management. 139th American Public Health Association Annual Meeting, Washington, DC.

June 6-8.2011: Ljungberg I, Lichy A. Groah S, Oyster M, Boninger M. Disparities in wheelchair type, wheelchair skill level, and community participation by payer source. Joint American Spinal Cord Injury 37th Annual Scientific Meeting/ International Spinal Cord Society 50th Annual Conference, Washington, DC

Suzanne Groah, MD, MSPH
Medstar National Rehabilitation Hospital

(no CV uploaded)

Amanda Rounds, PhD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Bruce Sprague, BS
Children's National Medical Center

(no CV uploaded)

Crystal Stroud, MS
Children's National Medical Center

(no CV uploaded)

Hans Pohl, MD
Children's National Medical Center

(no CV uploaded)

Ljubica Caldovic, PhD
Children's National Medical Center

(no CV uploaded)

Michael Hsieh, MD
Children's National Medical Center

(no CV uploaded)

Do Nursing Attitudes on Pressure Injury Prevention and Overall Satisfaction Change with a Biofeedback Device?

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Nina Carmela Tamayo, DO, MS, MPH
Louis Stokes Cleveland Va Medical Center

CV:
Name: Niña Carmela R. Tamayo, MS MPH DO
Position Title: Spinal Cord Injury Fellow, Case Western Reserve University MetroHealth Hospital, Cleveland OH

A. Personal Statement
While embracing all aspects of PM&R, my SCI rotation during my 3rd year of residency was where I felt most like a physiatrist. During my rotation, I saw how rehabilitation medicine transformed my SCI patients, and showed me how far it is possible to push through limits and change the impossible to possible. I was further attracted to the interdisciplinary nature of this geld. Being able to work with nurses, therapists, social workers towards a specigc goal was exactly how I wanted to practice medicine. As a Spinal Cord Injury Fellow, I had the opportunity to expand my interests and research ideas. My passion lies in the intersection of rehabilitation medicine, nutrition, public health and health policy. I hope to utilize my experiences in both basic science and clinical research as well as my work with the NYC Department of Public Health to continue improving quality, delivery, and access to health care for SCI patients. My research interest revolve around disability, specifically SCI/D and travel.

B. Positions and Honors
POSITIONS
July 2017-June 2018
Case Western University School of Medicine, Cleveland, OH
SCI Fellow/ Clinical Instructor

July 2016-June 2017
Mercy Medical Center, Rockville Centre, NY
Administrative Chief Resident

July 2015-June 2017
Mercy Medical Center, Rockville Centre, NY
Resident Representative - LECOMT 2016-2017

July 2015-June 2017
Mercy Medical Center, Rockville Centre, NY
Graduate Medical Education Committee/ Manual Subcommittee - Good Samaritan Hospital and Mercy Medical Center - 2016-2017

July 2015-June 2016
Mercy Medical Center, Rockville Centre, NY
Academic Chief Resident

HONORS/APPOINTMENTS
2017 – Present
American Spinal Injury Association Standards Subcommittee

2013 – 2017
American Osteopathic College of Physical Medicine and Rehabilitation
Resident Employment Liaison, Resident Physician Council 2016-2017

August 2009- May 2013
University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine
Dean's Scholar

April 2012
The Osteopathic Research Center Conference, Selected Representative for UMDNJ-SOM
UNTHSC/TCOM Presents: "Using Manual Therapies to Improve Musculoskeletal Health"

February 2012
Osteopathic Heritage Research Scholarship Nominee – UMDNJ-SOM
Research Project: "Patient Perceived Satisfaction, Effectiveness, and Awareness of OMT Treatment in a Geriatric Office Setting"

BOARD CERTIFICATIONS
2017 Physical Medicine and Rehabilitation (Part I)

C. Lectures/ Presentations
Tamayo, N., Zuziak, N., Conetsco, S., Zillich, N., Lash, A., Kuemmel, A. (2018, September). A Checklist for Travel for Spinal Cord Injury Patients: A Pilot Project. American Spinal Cord Injury Association Annual Meeting, New Orleans, LA.

Tamayo, N., Kiefer, P., Willoughby, G., Henzel, M. (2018, September). A 3-Phase Interdisciplinary Quality Improvement Project Optimizing Neurogenic Bladder Care Documentation in an SCI Unit at a Veterans Affairs Medical Center

Tamayo, N., Kiefer, P., Willoughby, G., Henzel, M. (2018, May). A 3 Phase Interdisciplinary Quality Improvement Project Optimizing Neurogenic Bladder Care Documentation in an SCI Unit at a Veterans Affairs Medical Center. Poster session presented at: American Spinal Injury Association Annual Meeting, Rochester, MN.

Zuziak, N., Tamayo, N., Rai, P. (2017, May). Paraneoplastic Cerebellar Degeneration: A Case Report. Poster session presented at: American Osteopathic College of Physical Medicine and Rehabilitation (AOCPMR) Mid Year Meeting, Hollywood, FL.

Tamayo, N., Dulai, P. (2017, May). IgG-4 Related Ophthalmic Disease: A Case Report. Poster session presented at: American Osteopathic College of Physical Medicine and Rehabilitation (AOCPMR) Mid Year Meeting, Hollywood, FL.

Siu, G., Polio, R., Tamayo, NC., Hyppolite, NA. (2013, October). "Proximal Muscle Weakness Secondary to Hyperkalemia in a Patient with Methylmalonic Acidemia: A Case Report." Poster presented at: American Academy of Physical Medicine and Rehabilitation Conference, National Harbor, MD.

Siu, G., Swanson, R., Tamayo, NC., Hyppolite, NA. (2013, October). "Treating Hemiplegic Shoulder Pain with Spencer Technique, an Osteopathic Manipulative Treatment: A Case Study." Poster presented at: American Academy of Physical Medicine and Rehabilitation Conference, National Harbor, MD.

"SCI and Barriers to Travel: More than an Accessibility Issue." United Spinal Association Chapter Meeting. Cleveland, OH. June 18, 2018.

"International Standards for Neurological Classification of Spinal Cord Injury." 17th Annual Spinal Cord Injury and Disorders Conference: Spinal Cord Injury Care in the 21st Century Bridging Knowledge of the Past and Present. Cleveland, OH. Sponsored by the Louis Stokes Cleveland VAMC. October 25-26, 2017.

"Treatment of Low Back Pain with OMM." Osteopathic Manipulative Medicine Club Monthly Meeting. New York University Langone Medical Center, New York, New York. Sponsored by the New York State PM&R Society. May 2016.

“Current Guidelines in Stroke Rehabilitation and Management.” Stroke: Updates, Treatments, and Management Conference. Mercy Medical Center, Rockville Centre, NY. Sponsored by the Mercy Medical Center Stroke Committee. September 26, 2016.

“Stroke Rehabilitation Updates.” Philippine American Physiatry Association, AAPMR Conference, New Orleans, LA. October 20, 2016.

Patricia Kiefer, MSN, RN, ACCNS-AG
Louis Stokes Va Medical Center

CV:
Name: Patricia L. Kiefer
Position: Spinal Cord Injury Clinical Nurse Specialist, Louis Stokes VA Medical Center, Cleveland, OH.

A. Personal Statement:
AS the Spinal Cord Injury (SCI) Clinical Nurse Specialist (CNS), I function within three spheres consisting of the patient, the system, and nurse. In this role, I recognize gaps in care not only on the SCI acute and long term care units but also through out the medical center regarding SCI patient care. I facilitate education and competency training with the assistance of the Acute Care CNS Team on neurogenic bowel and bladder care, wound care, autonomic dysreflexia protocol, and general care needs of SCI patients. This is especially important for non-SCI trained units, where SCI patients may be admitted when they require a higher level of care. Our goal has been to improve patient outcomes, create strong safety nets for our patients improve knowledge and increase confidence of non-SCI staff while caring for our SCI veterans.

Within the SCI unit, I consult and facilitate performance improvement projects to better patient outcomes and minimize current gaps in care. I have just finished the first phase of an educational intervention with the acute CNS team related to difficult urinary catheterizations for both the long term and acute care SCI units. We are currently in the second phase of our education in MRSA transmission rates project. I have developed several electronic medical record templates related to urinary catheter insertion and education for the Louis Stokes VA Medical Center.

B. Positions
Masters of Science of Nursing, Louis Stokes Cleveland Department of Veterans Affairs Medical Center
3/8/2015 — Present
Cleveland OH 44106
Spinal Cord Injury/D Clinical Nurse Specialist

Bachelor of Science of Nursing, Louis Stokes Cleveland Department of Veterans Affairs Medical Center
6/1/2003 — 2015
Cleveland OH 44106
Cardiac Intensive Care Unit
Medical Intensive Care Unit
Rapid Response Team
Charge Nurse Responsibilities/ Time Committee/ Education Committee

Undergraduate Nursing Clinical Instructor, University of Akron School of Nursing
1/1/2009 — 1/2016
Akron, OH 44325
Clinical instructor for 8200:211 and 8200:212, Sophomore level students
Clinical instructor for accelerated nursing students
Clinical instructor for 8200:360, Junior level students

Undergraduate Nursing Clinical Instructor, Chamberlain
College of Nursing
Cleveland, Ohio

Clinical instructor for Critical Care 4/1/2016 – 8/2017

Business Owner, Thimblewood
1/1/1994 — 1/1/2007
Smithville Ohio 44677

Adult Education Instructor, Wayne County Career Center
9/1/1989 — 1/1/2003
Smithville, OH 44677

C. Professional Memberships
Association of Spinal Cord Injury Professionals
Ohio Nurses Association
Sigma Theta Tau
Polytrauma & rehabilitation Field Advisory Committee National Association of Clinical Nurse Specialists
Cuyahoga County Voluntary Organizations Active in Disaster (COAD) Board Member
-Medical Center Diabetes Advisory Board Member
-Patient Education Committee/Chair
-Policy and Procedure Committee Member -Veteran Administration Omce of Nursing Services Committee

D. CERTIFICATIONS
Acute Care Clinical Nurse Specialist- Adult Gerotonlogical Acute Cardiac Life Support
Basic Life Support

E. PRESENTATIONS/POSTERS
Academy of Spinal Cord Injury Professionals/Poster Presentation 2017
National Association of Clinical Nurse Specialist /Podium Presentation 2017
LSVAMC Nursing Education Day /Quarterly Podium Presentation 2017
North East Ohio Clinical Nurse Specialist/ Poster Presentation 2016
-Wooster Community Hospital/ Health Literacy-Teach-Back/ Podium Presentation 2014

Development of Crosswalks to Aggregate International Spinal Cord Injury Functional Data

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

Linda Jones, PT, MS
Craig H. Neilsen Foundation

CV:
Biographical Sketch
Linda Ann Truett Jones-Norse
Program Officer, Craig H. Neilsen Foundation

A. Personal Statement

A physical therapist by training, I have an established career in spinal cord injury (SCI) research, in clinical trial management and as a Program Officer managing a translation research portfolio. Throughout my career I have had an interest in outcomes research. My master's thesis, "Reliability and Validity of the Acute Care Index of Function in the Critically Ill", established psychometrics for a functional outcome measure in the intensive care unit. After leaving clinical practice, I managed the first two cell based SCI studies, developing the skills to oversee large and complex projects. I also learned about the challenges and importance of the appropriate use of functional outcomes in clinical trials and sit on a number of committees and working groups addressing these challenges.

Currently, I manage a translation research portfolio at the Craig H. Neilsen Foundation. In this position, I have the opportunity to see the latest pre-clinical and clinical research directions, identify gaps in the field and consider ways in which they can be addressed.

My current focus through the Spinal Cord Outcomes Partnership Endeavor (SCOPE), Spinal Cord Injury Trials Toolkit (SCITT) and Spinal Trials Understanding Design and Implementation (STUDI) is in clinical trial design, outcomes and execution. Through my doctoral dissertation work, I am exploring methods to support the analysis of multiple large spinal cord injury databases.

B. Positions and Honors
1990 – 1994 Staff Physical Therapist, Denver General Hospital, Denver, Colorado
1994 – 2000 Senior Physical Therapist, Denver General Hospital, Denver, Colorado
1993 – 2002 Coordinator of Intensive Care Unit Physical Therapy, Denver General Hospital, Denver, Colorado
2000 – 2002 Inpatient Physical Therapy Coordinator, Denver General Hospital, Denver, Colorado
2002 – 2003 U.S. Study Coordinator, Proneuron Biotechnologies, Denver, Colorado/ Ness-Ziona, Israel
2003 – 2004 U.S. Clinical Program Manager, Proneuron Biotechnologies, Denver, Colorado/Ness-Ziona, Israel
2004 – 2006 Clinical Trial Manager, Proneuron Biotechnologies, Denver, Colorado/ Ness-Ziona, Israel
2006 – 2009 Clinical Trial Manager, Regenerative Medicine, Geron Corporation, Menlo Park, California
2009 – 2011 Senior Clinical Trial Manager, Regenerative Medicine, Geron Corporation, Menlo Park, California

2012 – 2013 Clinical Research Consultant, Spinal Cord Injury, Boulder, Colorado
2013 – Program Officer, Craig H. Neilsen Foundation, Encino, California
2014 – PhD student, Clinical Sciences, Clinical Investigation track, University of Colorado, Denver, Colorado

Honors
2008 – 2015 Member, American Spinal Injury Association, Education Committee
2008 – Member, American Spinal Injury Association, International Standards Committee
2009 – Member, Spinal Cord Injury Outcomes Endeavor
2013 – Member, American Spinal Injury Association, International Standards Research Sub-Committee

2012 – Steering Committee, National Institute of Neurological Disorders and Stroke, Common Data Elements for Spinal Cord Injury
2014 – Member, International Spinal Cord Injury Society, Scientific Committee
2015 – Vice Chair, American Spinal Injury Association, Research and Awards Committee
2016 – Participant in development of a spinal cord injury rehabilitation core dataset
2017 - Member, Spinal Cord Injury Trials Toolkit Group
2018 - Member, Spinal Trials Understanding Design and Implementation

C. Contributions to Science

Clinical trials and development of tools to support clinical trials
As a field, SCI is still developing in terms of initiating and completing clinical trials of drugs and biologics. I managed the first cell-based trial in spinal cord injury. Although the trial findings were equivocal, the study group disseminated trial findings after the study was closed, so the spinal cord injury community could benefit from the lessons learned. I led the publication on pragmatics, recruitment and demographics and participated in the analyses and publication of the safety and efficacy data. I subsequently managed another cell-based trial, and through my work with both of these trials, became aware of the critical need for tools to support clinical trials. I served on the Steering Committee and two working groups for the National Institute of Neurological Disorders and Stroke, Common Data Elements for SCI, recommending and, where needed, developing common tools/elements for use in SCI clinical trials. Recently, I contributed to the development of a novel linear scale for SCI, which uses items from existing measures to measure volitional motor performance following SCI.

2010 Jones L, Lammertse D, Charlifue S, Kirshblum S, Apple D, Ragnarrson K, Poonian D, Betz R, Knoller N, Heary R, Choudri T, Jenkins III A, Falci S, Snyder D. A phase 2 autologous cellular therapy trial in patients with acute complete spinal cord injury: Pragmatics, Recruitment and Demographics. Spinal Cord. 2010;48:799-807. PMID: 20386555

2012 Lammertse DP, Jones LA, Charlifue SB, Kirshblum SC, Apple DF, Ragnarsson KT, Falci SP, Heary RF, Choudhri TF, Jenkins AL, Betz RR, Poonian D, Cuthbert JP, Jha A, Snyder DA, Knoller N. Autologous incubated macrophage therapy in acute, complete spinal cord injury: results of the phase 2 randomized controlled multicenter trial. Spinal Cord. 2012;50(9):661-71. PMID:22525310

2015 Biering-Sørensen F, Alai S, Anderson K, Charlifue S, Chen Y, DeVivo M, Flanders AE, Jones L, Kleitman N, Lans A, Noonan VK, Odenkirchen J, Steeves J, Tansey K, Widerström-Noga E, Jakeman LB. Common data elements for spinal cord injury clinical research: a National Institute for Neurological Disorders and Stroke project. Spinal Cord. 2015 Apr;53(4):265-77. PMCID:PMC4393777

2017 Reed R, Mehra M, Kirshblum S, Maier D, Lammertse D, Blight A, Rupp R, Jones L, Abel R, Weidner N, EMSCI Study Group, SCOPE, Curt A, Steeves J. Spinal cord ability ruler: an interval scale to measure volitional performance after spinal cord injury. Spinal Cord. 2017. (Epub ahead of print) PMID: 28322239

Spinal cord injury assessment
As in many fields, outcome assessment for both clinical and research purposes is problematic. Without appropriately sensitive, clinically meaningful outcome measures, it is difficult to track response to an intervention. The most commonly used tool for assessing patients with SCI (International Standards for Neurological Classification of Spinal Cord Injury- ISNCSCI) was developed as a classification tool but is used in SCI research and clinical care. Despite its common use, there are challenges when using ISNCSCI in research and clinical settings. Following an ISNCSCI clinical trial training I organized, we published on the reliability and validity of ISNCSCI in 2008, ISNCSCI was also assessed for use in clinical trials for thoracic SCI, based on a retrospective review of a clinical trial database. I was then asked to join the committee that considers revisions to ISNCSCI, from which multiple revisions and publications have ensued. I currently sit on the International Standards Research Sub-Committee, which specifically addresses the use of ISNCSCI for research. Recognizing the shift in clinical trials towards individuals with cervical SCI, I conceptualized and organized a workshop on upper extremity outcomes and led a publication addressing challenges and solutions with these outcome measures.

2008 Marino, R, Jones L, Kirshblum S, Tal Y, Dasgupta A. Reliability of the motor and sensory examination of the international standards for neurological classification of spinal cord injury. J Spinal Cord Med. 2008;31(2):166-170. PMID: PMC2565479

2009 Harrop J, Maltenfort M, Geisler F, Coleman W, Jones L, Wirth E. Traumatic thoracic ASIA A examinations and potential for clinical trials. Spine. 2009;34:2525-2529. PMID:19927102

2011 Kirshblum S, Burns S, Biering-Sorensen F, Donovan W, Graves D, Jha A, Johansen M, Jones L, Krassioukov, A, Mulcahey, MJ, Schmidt-Read M, Waring W. International standards for neurological classification of spinal cord injury (Revised 2011). J Spinal Cord Med. 2011;34(6):535-546. PMCID: PMC3232636

2018 Jones LAT, Bryden A, Wheeler TL, Tansey KE, Anderson KD, Beattie MS, Blight A, Curt A, Field-Fote E, Guest JD, Hseih J, Jakeman LB, Kalsi-Ryan S, Krisa L, Lammertse DP, Leiby B, Marino R, Schwab JM, Scivoletto G, Tulsky DS, Wirth E, Zariffa J, Kleitman N, Mulcahey MJ, Steeves JD. Considerations and recommendations for selection and utilization of upper extremity clinical outcome assessments in human spinal cord injury trials. Spinal Cord. 2017 [Epub ahead of print] PMID: 29284795.

History of recovery of neurological function from spinal cord injury databases
Examination of existing databases has provided the opportunity to understand the history of natural recovery and consider clinical trial endpoints based on these data. Additionally, these data were used to develop novel statistical approaches to stratify patient groups by common characteristics, to improve clinical trial design. I have contributed to a series of publications using data from the European Multicenter Study about Spinal Cord Injury, resulting in the recommendation of a clinical trial endpoint in cervical sensorimotor complete SCI. The proposed Center for Large Data Research and Data Sharing in Rehabilitation project to develop a crosswalk between two SCI functional outcome measures is a critical step to expanding this prior work by including data from different databases and developing clinical trial endpoints for diverse SCI populations.

2011 Steeves J, Kramer J, Fawcett J, Cragg J, Lammertse D, Blight A, Marino R, Ditunno J, Coleman W, Geisler F, Guest J, Jones L, Burns S, Schubert M, van Hedel H, Curt A for the EMSCI Study Group. Extent of spontaneous motor recovery after traumatic cervical sensorimotor complete spinal cord injury. Spinal Cord. 2011:49(2):257-265. PMID: 20714334

2011 Zariffa J, Kramer J, Fawcett J, Lammertse D, Blight A, Guest J, Jones L, Burns S, Schubert M, Bolliger M, Curt A, Steeves J. Characterization of neurological recovery following traumatic sensorimotor complete thoracic spinal cord injury. Spinal Cord. 2011 Mar;49(3):463-71. PMID: 20938451

2012 Steeves JD, Lammertse DP, Kramer JL, Kleitman N, Kalsi-Ryan S, Jones L, Curt A, Blight AR, Anderson KD. Outcome measures for acute/subacute cervical sensorimotor complete (AIS-A) spinal cord injury during a phase 2 clinical trial.Top Spinal Cord Inj Rehabil. 2012 Winter;18(1):1-14. PMCID: PMC3519288

2015 Tanadini LG, Hothorn T, Jones LA, Lammertse DP, Abel R, Maier D, Rupp R, Weidner N, Curt A, Steeves JD. Toward inclusive trial protocols in heterogeneous neurological disorders: prediction-based stratification of participants with incomplete cervical spinal cord injury.Neurorehabil Neural Repair. 2015 Oct;29(9):867- 77. PMID:25644238

Gale Whiteneck, PhD
Craig Hospital

(no CV uploaded)

John Steeves, PhD
University of British Columbia

(no CV uploaded)

David Weitzenkamp, PhD
University of Colorado

(no CV uploaded)

Susie Charlifue, PhD
Craig Hospital

(no CV uploaded)

Chih-Ying Li, PhD
University of Texas Medical Branch at Galveston

(no CV uploaded)

Prediction of neurological recovery from MRI parameters in patients with traumatic spinal cord injury

Tuesday, April 02, 2019 02:25 PM - 03:25 PM

Joanie Martineau, MSc
Universite De Montreal

(no CV uploaded)

Julien Goulet, MD
Universite De Montreal

(no CV uploaded)

Andreane Richard-Denis, MD, MSc
Hopital Du Sacre-Coeur De Montreal

(no CV uploaded)

Jean-Marc Mac-Thiong, MD, PhD
Hopital Du Sacre-Coeur De Montreal

CV:
•Associate Professor, Department of Surgery, University of Montreal, Canada
•Head of Medtronic Research Chair in Spinal Trauma, University of Montreal, Canada
•Orthopedic surgeon and researcher, CHU Sainte-Justine, Canada
•Orthopedic surgeon and researcher, Hopital du Sacre-Coeur de Montreal, Canada
•Orthopedic surgeon, Montreal Shriners Hospital, Canada
•Research program director, Division of orthopedic surgery, Department of Surgery, University of Montreal, Canada

Peer-reviewed publications on spinal cord injury
• Goulet J, Richard-Denis A, Thompson C, Mac-Thiong J-M. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. Accepted in Am J Phys Med Rehabil
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Quality of life in the sub acute period following a cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective study. Accepted in Spinal Cord
• Richard-Denis A, Nguyen B-H, Mac-Thiong J-M. The impact of early spasticity on the intensive functional rehabilitation phase and community reintegration following traumatic spinal cord injury. Accepted in J Spinal Cord Med
• Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong J-M. Early predictors of global functional outcome after traumatic spinal cord injury: a systematic review. Accepted in J Neurotrauma
• Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong J-M. The use of classification tree analysis to assess the influence of surgical timing on neurological recovery following traumatic complete cervical spinal cord injury. Spinal Cord 2018 Feb 26 [Epub ahead of print] (Featured paper)
• Facchinello Y, Beauséjour M, Richard-Denis A, Thompson C, Mac-Thiong J-M. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 Oct 25 [Epub ahead of print]
• Cheng CL, Noonan VK, Shurgold J, Chen J, Rivers CS, Hamedani HK, Humphreys S, Bailey C, Attabib N, Mac-Thiong J-M, Goytan M, Paquet J, Fox R, Ahn H, Kwon BK, Fourney DR, RHSCIR network. Geomapping of traumatic spinal cord injury in Canada and factors related to triage pattern. J Neurotrauma 2017 Mar 22 [Epub ahead of print]

• Richard-Denis A, Erhmann-Feldman D, Thompson C, Mac-Thiong J-M. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2017 Feb 15 [Epub ahead of print]
• Fradet L, Cliche F, Petit Y, Mac-Thiong J-M, Arnoux P-J. Strain rate dependent behavior of the porcine spinal cord under transverse dynamic compression. Proc Inst Mech Eng H 2016 Jun 23 [Epub ahead of print]
• Richard-Denis A, Feldman DE, Thompson C, Parent S, Mac-Thiong J-M. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med 2017 Jul 19 [Epub ahead of print]
• Richard-Denis A, Feldman D, Thompson C, Albert M, Mac-Thiong J-M. The impact of a specialized cord injury center as compared with non-specialized centers on the acute respiratory management of patients with complete tetraplegia: an observational study. Spinal Cord 2018;56:142-150
• Thompson C, Feldman DE, Mac-Thiong J-M. Surgical management of patients following traumatic spinal cord injury: identifying barriers to early surgery in a specialized spinal cord injury center. J Spinal Cord Med 2018;41:142-148
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Reply to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14:885
• Squair JW, Bélanger LM, Tsang A, Ritchie L, Mac-Thiong J-M, Parent S, Christie S, Bailey C, Dhall S, Street J, Ailon T, Paquette S, Boyd M, Dea N, Fisher CG, Dvorak MF, West CR, Kwon BK. Spinal cord perfusion pressure predicts neurological recovery in acute spinal cord injury. Neurology 2017;89:1660-1667
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a new 2-level scale based on the Spinal Cord Independence Measure. Int J Phys Med Rehabil 2017;5:4
• Facchinello Y, Wagnac É, Ung B, Pradhan P, Peyrache L-M, Mac-Thiong J-M. The development of an instrumented spinal cord surrogate using optical fibers: a feasibility study. Med Eng Phys 2017;48:212-216
• Kaminski L, Cordemans V, Cernat E, M'Bra KI, Mac-Thiong J-M. Functional outcome prediction after traumatic spinal cord injury based on acute clinical factors. J Neurotrauma 2017;34:2027-2033
• Streijger F, Skinnider M, Rogalski JC, Balshaw R, Shannon CP, Prudova A, Bélanger LM, Ritchie L, Tsang A, Christie S, Parent S, Mac-Thiong J-M, Bailey C, Urquhart J, Ailon T, Paquette SJ, Boyd MC, Street J, Fisher CG, Dvorak MF, Borchers CH, Foster LJ, Kwon BK. A targeted proteomis Analysis of cerebrospinal fluid after acute human spinal cord injury. J Neurotrauma 2017;34:2054-2068
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. Int Wound J 2017;14:874-881
• Richard-Denis A, Ehrmann Feldman D, Thompson C, Bourassa-Moreau E, Mac-Thiong J-M. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: the impact of early transfer to specialized acute SCI center. Am J Phys Med Rehabil 2017;96:449-456 (CME article)
• Wu Y, et al. Parallel metabolomic profiling of cerebrospinal fluid and serum for identifying biomarkers of injury severity after acute human spinal cord injury. Sci Rep 2016;6:38718
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Do patients with complete spinal cord injury benefit from early surgical decompression? Analysis of neurological improvement in a prospective cohort study. J Neurotrauma 2016;33:301-6
• Richard-Denis A, et al., Mac-Thiong J-M. Does the acute care spinal cord injury settings predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehabil 2016;95:300-8
• Thompson C, et al., Mac-Thiong J-M. The changing demographics of traumatic spinal cord injury: an 11-year study of 831 patients. J Spinal Cord Med 2015;38:214-23
• Berube M, et al., Mac-Thiong J-M. Development of theory-based knowledge translation interventions to facilitate the implementation of evidence-based guidelines on the early management of adults with traumatic spinal cord injury. J Eval Clin Pract 2015;21:1157-68
• Petit Y, et al., Mac-Thiong JM. Simulation of high energy vertebral fractures on complete porcine specimens. Conf Proc IEEE Eng Med Biol Soc 2015;2015:3901-4
• Dvorak MF, et al. Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma 2014;31:1540-47

• Boisclair D, Mac-Thiong J-M, et al. Compressive loading of the spine may affect the spinal canal encroachment of burst fractures. J Spinal Disord Tech 2013;26:342-6
• Bourassa-Moreau É, Mac-Thiong J-M, et al. Non-neurological outcomes following complete traumatic spinal cord injury: The impact of surgical timing. J Neurotrauma 2013;30:1596-601
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Complications in acute phase hospitalization of traumatic spinal cord injury: does surgical timing matter? J Trauma Acute Care Surg 2013;74:849-54

Using a Virtual Platform to Promote Exercise in SCI: Interim Results

Thursday, April 04, 2019 01:25 PM - 02:25 PM

Katherine Froehlich-Grobe, PhD
Baylor Scott & White Institute for Rehabilitation

CV:
Biographical Sketch: Katherine Froehlich-Grobe

A. Personal Statement.
Dr. Froehlich-Grobe received her master's and doctoral training in behavioral psychology and is currently the Associate Director of Research at Baylor Institute for Rehabilitation after spending 16 years in academic settings. Dr. Froehlich-Grobe brings 20 years of research experience conducting studies that explore and promote the health and function of individuals with physical disabilities. Most of her research career to date has focused on exploring and targeting theory-based approaches to address barriers to promoting health for this population. Her currently funded research program includes a study to promote weight loss among a mobility impaired sample and developing a web-based intervention to promote exercise among an SCI sample. She has also conducted focus groups (Froehlich, Nary, & White, 2002), surveys (Froehlich et al., 2002; Nary, Froehlich, & White, 2000) and randomized clinical trials promoting exercise (Froehlich-Grobe et al., 2014; Froehlich-Grobe et al., 2012; Froehlich-Grobe & White, 2004) with heterogeneous samples of individuals with physical disabilities. She was PI of an NIH-funded randomized controlled home-based exercise trial conducted with wheelchair users (Froehlich-Grobe et al., 2014) that delivered a phone-based intervention. She has also performed physical accessibility surveys of recreation facilities (Nary et al., 2000), polling places (Pohl et al., 2006), and public housing (Froehlich-Grobe et al., 2008). Her extensive knowledge and background in the area of disability research, also encompasses more recent research into obesity for this population (Froehlich-Grobe & Lollar, 2011), including analyses of the disparity in obesity prevalence based on disability status (Froehlich-Grobe, Lee, & Washburn, 2013) and piloting an evidence-based intervention adapted for individuals with mobility impairment (Betts & Froehlich-Grobe, 2017).

B. Positions and Honors
1993-1994 Research Assistant, National Center for Medical Rehabilitation Research, NICHD, NIH, Bethesda, MD
1995-1996 Graduate Teaching Assistant, Dept of Human Development and Family Life, University of Kansas, Lawrence, KS
1994-1997 Graduate Research Assistant, Research and Training Center on Independent Living, Schiefelbusch Life-Span Institute, University of Kansas, Lawrence, KS
1997-2001 Project Coordinator, Research and Training Center on Independent Living, Schiefelbusch Life-Span Institute, University of Kansas, Lawrence, KS
1999-2001 Clinical Instructor, Occupational Therapy Education Dept, University of Kansas Medical Center, Kansas City, KS
2001-2005 Assistant Professor, Occupational Therapy Education Dept, University of Kansas Medical Center, Kansas City, KS
2006-2009 Assistant Research Professor, Schiefelbusch Life-Span Institute, University of Kansas, KS
2009-2010 Associate Research Professor, Schiefelbusch Life-Span Institute, University of Kansas, KS
2010-2016 Associate Professor, Division of Health Promotion and Behavioral Sciences (HPBS), University of Texas School of Public Health, Dallas Regional Campus, Dallas, TX
2016- Associate Director of Research, Baylor Institute for Rehabilitation, Dallas, TX
2016- Adjunct Associate Professor, HPBS, University of Texas School of Public Health
Other Experience and Professional Memberships
1994- Member, American Public Health Association (APHA)
1994- Member, Society of Community Psychologists
1999-2002 Member, Association of Teachers of Preventive Medicine
2002- Member, Society of Behavioral Medicine
2004-2007 Treasurer, DisAbility Forum Special Interest Group, American Public Health Association
2010- Member, Member of the Board of Directors of REACH Independent Living Center, Dallas, TX.

2013- Editorial Board, Disability and Health Journal
2017- Member, American Spinal Injury Association
2017- Member, American Spinal Cord Injury Professionals
2018- Program Chair-Elect, Disability Section, American Public Health Association
Honors
2009 Honorable mention for poster, Obesity among a diverse, yet invisible population: Wheelchair users presented to the inaugural conference of the Texas Obesity Research Center in Houston, TX.

C. Contribution to Science
Publications with *** are completed with Baylor Team Members

1. Dr. Froehlich-Grobe's research program has predominantly focused on (1) examining personal and environmental barriers facing people with disabilities from engaging in healthy behaviors and (2) developing and testing theory-based interventions to promote physical activity, exercise, and healthy diet and weight. Dr. Froehlich-Grobe's initial intervention work addressed promoting physical activity, but she has recently expanded her research program to address how the growing obesity epidemic affects individuals with disabilities. While the nation has focused on addressing the obesity epidemic and obesity-related chronic conditions, Dr. Froehlich-Grobe has been leading efforts to examine how Americans living with disabilities are affected. She published a conceptual paper addressing this neglected, yet important area. This concern emerged, in part from observing differences between self-reported versus measured height and weight among a regional of sample wheelchair users. These findings propelled her to examine national data that used measured versus self-reported height and weight to examine obesity prevalence among a representative national sample of those with disability. She and colleagues published the first national study that analyzed prevalence of obesity and obesity-related chronic conditions, comparing Americans with disabilities to those without disability based on data collected from the National Health and Nutrition Examination Survey. Obesity and obesity-related chronic condition prevalence was significantly higher for those with disabilities than those without. These findings subsequently launched her into modifying an existing evidence-based weight-loss program, the Group Lifestyle Balance (GLB) Program, a direct adaptation of the Diabetes Prevention Program to address the unique needs of people living with mobility impairment. Her initial small pilot study demonstrated promise with this approach individuals with mobility impairment, with participants achieving an average 7.4% weight loss over 20 weeks. She recently completed CDC-funded RCT in which they tested the effectiveness of having adapted an existing evidence-based approach for weight loss, the Group Lifestyle Balance (GLB) to be appropriate for a mobility-impaired sample (GLB AIM, adapted for impaired mobility).

a. Froehlich-Grobe, K & Lollar, D. (2011). Obesity disparity in disability: Time to act. American Journal of Preventive Medicine, 41(5), 541-545. doi:10.1016/j.amepre.2011.07.015.
b. Froehlich-Grobe, K., Nary, D.E., VanSciver, A., Washburn, R., & Aaronson, L. (2012). Truth be told: Evidence of wheelchair users accuracy in reporting their height and weight. Archives of Physical Medicine and Rehabilitation, 93(11), 2055-2061. doi: 10.1016/j.apmr.2012.05.005.
c. Froehlich-Grobe, K., Washburn, R., & Lee, J. (2013). Disparities in obesity and related conditions among Americans with disabilities. American Journal of Preventive Medicine, 45(1), 83-90.
d. Betts, A. & Froehlich-Grobe, K. (2017). Accessible weight loss: Adapting a lifestyle intervention for adults with impaired mobility. Disability and Health Journal 19(1), 139-144, DOI:10.1016/j.dhjo.2016.06.004.
e. Betts, A., Froehlich-Grobe, K., Driver, S., Carlton, D., & Kramer, K. (2017, in press). Reducing barriers to healthy lifestyle: Planned and responsive adaptations to a lifestyle intervention to serve people with impaired mobility. Disability and Health Journal. doi:10.1016/j.dhjo.2017.10.008

2. Dr. Froehlich-Grobe's initial research developing health promotion behavioral interventions among people living with disabilities focused on physical activity. The 1996 release of the Surgeon General's Report on Physical Activity and Health which reported on the health benefits of moderate-intensity physical activity and recommended new guidelines, revealed that the new guidelines (lower intensity, with activity accumulated over multiple, shorter activity bouts) held particular relevance to people with disabilities. The evidence base made physical activity and its associated health benefits more achievable for individuals living with disabilities. Dr. Froehlich-Grobe was among the first researchers to examine perceived and environmental barriers to physical activity for those with disabilities, and among the first to develop and test interventions to promote physical activity and dietary interventions for those with impaired mobility.

Relatedly, she has examined compliance with the ADA in various community settings, including polling stations and public housing. She recently explored additional health issues facing different disability groups. She and colleagues published work that examined health disparities between those with and without disability using data from the Behavioral Risk Factor Surveillance System related to health behaviors and self-rated health, use of cancer screening services among Montana women with and without disabilities, and disparities among incarcerated adults with and without disabilities related to early childhood experiences and use of educational and vocational services within prison.

a. Nary, D.E., Froehlich, A.K., & White, G.W. (2000). Accessibility of fitness facilities for persons with physical disabilities using wheelchairs. Topics in Spinal Cord Injury Rehabilitation, 6, 87-98.
b. Hildenbrand, W. & Froehlich, A.K. (2002). Promoting health: Historical roots, renewed vision. OT Practice, 7, 10-15.
c. Froehlich, A.K., Nary, D.E., & White, G.W. (2002). Identifying barriers to participation in physical activity for women with disabilities. SCI Psychosocial Process, 15, 21-28.
d. Froehlich-Grobe, K., & White, G.W. (2004). Promoting physical activity among women with mobility impairments: A randomized controlled trial to assess a home- and community-based intervention. Archives of Physical Medicine and Rehabilitation, 85, 640-648. PMID: 15083442.
e. Pohl, P., Froehlich-Grobe, K., McKiernan, B., Vacek, K., Donnelly, M., & Gaughan, J. G. (2006). Access to polling places in the 2004 Presidential Election: the experience of one metropolitan Midwestern city. American Journal of Occupational Therapy, 60(4), 404-408. PMID: 16915870
f. Froehlich-Grobe, K., Regan, G., Booth, K., Reese-Smith, J., and Lee, R. E. (2008). Physical access in urban public housing authorities. Disability and Health Journal, 1, 25-29. doi:10.1016/j.dhjo.2007.11.003
g. Froehlich-Grobe, K., Figoni, S.F., Thompson, C., & White, G.W. (2008). Exploring the health of women with mobility impairments. Women's Health, 48(1), 21-41.
h. Froehlich-Grobe, K., Aaronson, L., Washburn, R., Little, T., Lee, J., Nary, D.E., VanSciver, A., Nesbitt, J., & Norman, S.E. (2012). An exercise trial for wheelchair users: Project Workout on Wheels. Contemporary Clinical Trials, 33, 351-363. 10.1016/j.cct.2011.10.014 PMC3148840
i. Froehlich-Grobe, K, Lee, J, Aaronson, L, Nary, D.E., Washburn, R.A. Little, T. (2014). Exercise for Everyone: A randomized controlled trial of Project Workout On Wheels (WOW) in promoting exercise among wheelchair users. Archives of Physical Medicine and Rehabilitation, 95,20-28. 10.1016/j.apmr.2013.07.006
j. Prizer, L.P., Gay, J.L., Gerst-Emerson, K. & Froehlich-Grobe, K. (2016). The role of age in moderating the association between disability and light- intensity physical activity. American Journal of Health Promotion, 30(3), e101-e109. http://dx.doi.org/10.4278/ajhp.140225-QUAN-85
k. Froehlich-Grobe, K., Shropshire, W.C., Zimmerman, H., VanBrunt, J., & Betts, A. (2016). Reach of the Montana Cancer Control Program to women with disabilities. Journal of Community Health, 41(3), 650-657. DOI: 10.1007/s10900-015-0141-y
l. Froehlich-Grobe, K., Jones, D., Businelle, M., Kendzor, D., & Balasubramanian, B. (2016). Impacts of disability and chronic conditions on health. Disability and Health Journal, 9(4), 600-608. doi: 10.1016/j.dhjo.2016.04.007.

3. The disability and rehabilitation fields were undergoing a major conceptual shift over the time when Dr. Froehlich-Grobe received her doctoral training. In the late 1980s, concurrent with the grassroots movement that successfully led to Congress passing federal legislation (Americans with Disabilities Act of 1990) to protect the civil rights of Americans with disabilities, clinicians and investigators began to view disability within a social rather than medical model. This perspective provided the field a new lens from which to see people with disabilities as being able to achieve health. This new paradigm thus offered a platform for Dr. Froehlich-Grobe to study and intervene upon personal and environmental factors that could facilitate the ability of people with disabilities having the ability to engage in healthy behaviors, including physical activity and exercise. Yet, as Dr. Froehlich-Grobe began initiated research in this emerging research area she faced a lack of psychometrically sound instruments to measure health changes for people with disabilities. Thus, a portion of her research efforts have addressed developing new and assessing existing and well validated and widely distributed health measures (SF-36) for use among samples with mobility impairment related disability. She conducted a small pilot study that examined whether wording changes to the SF 36 that eliminated the potential confounds of walking ability with health, developed and conducted initial psychometric testing of a disability-specific measure of perceived stress, and has examined the best approach for measuring height among adults with mobility impairment who cannot stand.

a. Figoni, S.F., Thompson, C.J. Froehlich, A.K., Nary, D.E., Marquis, J., & White, G.W. (2003). Preliminary

validation of a mobility obstacle course for persons with mobility impairment. Clinical Kinesiology, 57(1), 7-14.
b. Froehlich-Grobe, K., Andresen, E., Caburnay, C., & White, G. W. (2008). Measuring health-related quality of life for persons with physical disabilities: An enabled version of the Short-form 36 (SF-36E). Quality of Life Research, 17, 751-770. PMID: 18427950
c. Froehlich-Grobe, K., Nary, D.E., VanSciver, A., Lee, J., & Little, T., (2011). Measuring height without a stadiometer: Empirical investigation of four height estimates among wheelchair users. American Journal of Physical Medicine and Rehabilitation, 90(8):658-666. PMCID: PMID: 21681063. doi: 10.1097/PHM.0b013e31821f6eb2
d. Rhode, P., Froehlich-Grobe, K., Hockemeyer, J., Carlson, J., & Lee, J. (2012). Assessing stress among individuals with physical limitations: Developing and Piloting the Disability Related Stress. Disability and Health Journal, 5(3), 168-176.
4. In line with work in developing behaviorally based approaches to promote health, Dr. Froehlich-Grobe has collaborated with Dr. Driver to conduct a scoping review of self-management interventions in treating secondary conditions among people with mobility impairments. This project has led to writing 3 separate literature reviews that address the effectiveness of self-management interventions applied to treating pain, depression, and fatigue. The findings suggest that self-management interventions have successfully been used to reduce pain, depression, and fatigue even across various delivery platforms (web, group-based, one on one). Notably, studies mostly enrolled samples with chronic back or musculoskeletal pain or arthritis.

a. Froehlich-Grobe, K., Driver, S., Sanches, K. (2016). Self-management interventions to prevent the secondary condition of pain in people with disability due to mobility limitations. Rehabilitation Process and Outcome, 5, 19-42. doi:10.4137/RPO.S12339
b. Driver, S., Froehlich-Grobe, K., Sanches, K. (2016). Self-management interventions to prevent depression in people with mobility limitations. Rehabilitation Process and Outcome, 5, 43-54. doi: 10.4137/RPO.S39720.

c. Sanches, K., Froehlich-Grobe, K., Driver, S. (2017). Self-management interventions to prevent the secondary condition of fatigue in people with disability due to mobility limitations. Submitted to Rehabilitation Process and Outcome.

D. Research Support
Ongoing Research Support
541948 Froehlich-Grobe (PI) 05/01/18-04/30/20
Sikka, S. (Co-Investigator)
Craig H. Nelson Foundation
Impact of contextual factors nutrition and weight gain over 12 months after spinal cord injury
This study examines how the nutritional, environmental, and personal profiles (psychosocial, physiological, and energy requirements) of people with SCI during the first 12-months post injury are related to weight gain.

90IFRE0003-01-00 Powers (PI) 09/30/17-09/29/20
Froehlich-Grobe, K. (Co-Investigator)
National Institute on Disability Independent Living and Rehabilitation Research, Administration for Community Living
Project Title: Prolonged Exposure Therapy (PE) for Posttraumatic Stress Disorder (PTSD) in Spinal Cord Injury (SCI): A Randomized Controlled Trial
The project goal is to identify the effect of prolonged exposure therapy on PTSD symptoms after acute SCI.

90IF0106-01-00 Froehlich-Grobe (PI) 09/01/15-08/31/18
Driver, S. (Co-Investigator)
Shegog, R. (Co-Investigator)
National Institute on Disability Independent Living and Rehabilitation Research, Administration for Community Living
Project WOWii: Developing & testing a web-based intervention to promote exercise among those with SCI
This study examines the effectiveness of an online physical activity intervention for individuals with SCI.

5U01DD001007 Froehlich-Grobe (PI) 09/30/2014-01/31/2018
Driver, S. (Co-Investigator)
Kramer, M.K. (Co-Investigator)
Translating the GLB for people with mobility impairment
National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention

The study purpose is to 1) adapt this evidence-based behavioral intervention for a mobility impaired sample and 2) evaluate the intervention for usability, feasibility, and effectiveness. The proposed study builds upon existing clinical interventions that we previously conducted for those with mobility impairments and includes community based participatory research to guide adapting the Group Lifestyle Balance program.

Completed Research Support

Froehlich-Grobe (PI) 09/01/2013-08/30/2016
Kohl, H. (Co-Investigator)
UT School of Public Health
Front of the Envelope Award
Spinal Cord Injury as a Potential Human Model for Studying Sedentary Behavior on Metabolic Abnormalities
This study examines the feasibility of using people with SCI to study potential mechanisms of metabolic abnormalities associated with sedentary behavior and will assess whether effects observed in rodent models from inactivity in weight bearing skeletal muscles can be observed in people with SCI. Thirty wheelchair users will be divided into 3 groups to examine whether lipoprotein lipase levels differ in the skeletal muscle based on sedentary status.

Froehlich-Grobe (PI) 09/01/2013-08/30/2014
UT School of Public Health
New faculty award
Feasibility of delivering a modified DPP weight loss program to a mobility-impaired sample
This pilot study examined the usability, feasibility, and effectiveness of adapting an existing evidence-based weight loss program, the Group Lifestyle Balance to be appropriate for people with mobility impairment

R01 HD04628-05 Froehlich-Grobe (PI) 01/01/2006-08/30/2011
National Center on Medical Rehabilitation Research/NICHD/NIH
A Randomized Exercise Trial for Wheelchair Users
This RCT tested the effectiveness of a behavioral intervention to promote physical activity adoption and maintenance among manual wheelchair users. One-hundred twenty-eight manual wheelchair users were randomly assigned to an intensive 6-month, home-based intervention or a minimal-contact control group and then followed for another 6 months. The study assessed: (1) the effectiveness of the intervention for promoting physical activity adoption and maintenance, and (2) the factors that influenced the intervention's effectiveness.

R01 HD04628-05S1 Froehlich-Grobe (PI) 01/2006-08/30/2011
National Center on Medical Rehabilitation Research/NICHD/NIH
A Randomized Exercise Trial for Wheelchair Users – Disability Supplement
These supplemental funds supported pre and postdoctoral training in health research of an individual with a disability.

Amber Merfeld Lopez, MPH
Baylor Scott & White Institute for Rehabilitation

(no CV uploaded)

Christa Ochoa, MPH

Baylor Scott & White Institute for Rehabilitation

(no CV uploaded)

Simon Driver, PhD
Baylor Scott & White Institute for Rehabilitation

(no CV uploaded)

Travel Resource Utilization Matrix: Oh The Places You Will Go!

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Nina Carmela Tamayo, DO MS MPH
Louis Stokes Va Medical Center

CV:
Name: Niña Carmela R. Tamayo, MS MPH DO
Position Title: Spinal Cord Injury Fellow, Case Western Reserve University MetroHealth Hospital, Cleveland OH

A. Personal Statement
While embracing all aspects of PM&R, my SCI rotation during my 3rd year of residency was where I felt most like a physiatrist. During my rotation, I saw how rehabilitation medicine transformed my SCI patients, and showed me how far it is possible to push through limits and change the impossible to possible. I was further attracted to the interdisciplinary nature of this geld. Being able to work with nurses, therapists, social workers towards a specigc goal was exactly how I wanted to practice medicine. As a Spinal Cord Injury Fellow, I had the opportunity to expand my interests and research ideas. My passion lies in the intersection of rehabilitation medicine, nutrition, public health and health policy. I hope to utilize my experiences in both basic science and clinical research as well as my work with the NYC Department of Public Health to continue improving quality, delivery, and access to health care for SCI patients. My research interest revolve around disability, specifically SCI/D and travel.

B. Positions and Honors
POSITIONS
July 2017-June 2018
Case Western University School of Medicine, Cleveland, OH
SCI Fellow/ Clinical Instructor

July 2016-June 2017
Mercy Medical Center, Rockville Centre, NY
Administrative Chief Resident

July 2015-June 2017
Mercy Medical Center, Rockville Centre, NY
Resident Representative - LECOMT 2016-2017

July 2015-June 2017
Mercy Medical Center, Rockville Centre, NY
Graduate Medical Education Committee/ Manual Subcommittee - Good Samaritan Hospital and Mercy Medical Center - 2016-2017

July 2015-June 2016
Mercy Medical Center, Rockville Centre, NY
Academic Chief Resident

HONORS/APPOINTMENTS
2017 – Present
American Spinal Injury Association Standards Subcommittee

2013 – 2017
American Osteopathic College of Physical Medicine and Rehabilitation
Resident Employment Liaison, Resident Physician Council 2016-2017

August 2009- May 2013

University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine
Dean's Scholar

April 2012
The Osteopathic Research Center Conference, Selected Representative for UMDNJ-SOM
UNTHSC/TCOM Presents: "Using Manual Therapies to Improve Musculoskeletal Health"

February 2012
Osteopathic Heritage Research Scholarship Nominee – UMDNJ-SOM
Research Project: "Patient Perceived Satisfaction, Effectiveness, and Awareness of OMT Treatment in a Geriatric Office Setting"

BOARD CERTIFICATIONS
2017 Physical Medicine and Rehabilitation (Part I)

C. Lectures/ Presentations
Tamayo, N., Zuziak, N., Conetsco, S., Zillich, N., Lash, A., Kuemmel, A. (2018, September). A Checklist for Travel for Spinal Cord Injury Patients: A Pilot Project. American Spinal Cord Injury Association Annual Meeting, New Orleans, LA.

Tamayo, N., Kiefer, P., Willoughby, G., Henzel, M. (2018, September). A 3-Phase Interdisciplinary Quality Improvement Project Optimizing Neurogenic Bladder Care Documentation in an SCI Unit at a Veterans Affairs Medical Center

Tamayo, N., Kiefer, P., Willoughby, G., Henzel, M. (2018, May). A 3 Phase Interdisciplinary Quality Improvement Project Optimizing Neurogenic Bladder Care Documentation in an SCI Unit at a Veterans Affairs Medical Center. Poster session presented at: American Spinal Injury Association Annual Meeting, Rochester, MN.

Zuziak, N., Tamayo, N., Rai, P. (2017, May). Paraneoplastic Cerebellar Degeneration: A Case Report. Poster session presented at: American Osteopathic College of Physical Medicine and Rehabilitation (AOCPMR) Mid Year Meeting, Hollywood, FL.

Tamayo, N., Dulai, P. (2017, May). IgG-4 Related Ophthalmic Disease: A Case Report. Poster session presented at: American Osteopathic College of Physical Medicine and Rehabilitation (AOCPMR) Mid Year Meeting, Hollywood, FL.

Siu, G., Polio, R., Tamayo, NC., Hyppolite, NA. (2013, October). "Proximal Muscle Weakness Secondary to Hyperkalemia in a Patient with Methylmalonic Acidemia: A Case Report." Poster presented at: American Academy of Physical Medicine and Rehabilitation Conference, National Harbor, MD.

Siu, G., Swanson, R., Tamayo, NC., Hyppolite, NA. (2013, October). "Treating Hemiplegic Shoulder Pain with Spencer Technique, an Osteopathic Manipulative Treatment: A Case Study." Poster presented at: American Academy of Physical Medicine and Rehabilitation Conference, National Harbor, MD.

"SCI and Barriers to Travel: More than an Accessibility Issue." United Spinal Association Chapter Meeting. Cleveland, OH. June 18, 2018.

"International Standards for Neurological Classification of Spinal Cord Injury." 17th Annual Spinal Cord Injury and Disorders Conference: Spinal Cord Injury Care in the 21st Century Bridging Knowledge of the Past and Present. Cleveland, OH. Sponsored by the Louis Stokes Cleveland VAMC. October 25-26, 2017.

"Treatment of Low Back Pain with OMM." Osteopathic Manipulative Medicine Club Monthly Meeting. New York University Langone Medical Center, New York, New York. Sponsored by the New York State PM&R Society. May 2016.

"Current Guidelines in Stroke Rehabilitation and Management." Stroke: Updates, Treatments, and

Management Conference. Mercy Medical Center, Rockville Centre, NY. Sponsored by the Mercy Medical Center Stroke Committee. September 26, 2016.

“Stroke Rehabilitation Updates.” Philippine American Physiatry Association, AAPMR Conference, New Orleans, LA. October 20, 2016.

Angela Kuemmel, PhD
Louis Stokes Va Medical Center

(no CV uploaded)

Aubrey Lash, CTRS
Louis Stokes Va Medical Center

(no CV uploaded)

Sarah Conetsco, OTR/L
Louis Stokes Va Medical Center

(no CV uploaded)

Nicole Zillich, CTRS
Louis Stokes Va Medical Center

(no CV uploaded)

Intravesical Probiotic Use Decreases Urinary Symptoms

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Amanda Rounds, PhD
Medstar National Rehabilitation Hospital

CV:
Published Papers:
Rounds, A. Resiliency & Self-Efficacy: Keys to Participation and Quality of Life in Chronic Stroke Survivors and the Effects of Community-Based Exercise. ProQuest https://search-proquest-com.mutex.gmu.edu/docview/2071302983?accountid=14541
(Published March 27, 2018)

Tractenberg, R; Groah, S; Rounds, A; Ljungberg, I; Schladen, M. Preliminary validation of a
Urinary Symptom Questionnaire for individuals with Neuropathic Bladder using Intermittent Catheterization (USQNB-IC): A patient-centered patient reported outcome. PLOS ONE https://doi.org/10.1371/journal.pone.0197568
(Published July 10, 2018)

Published Abstracts:
Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A; Guccione, A; Keyser, R; VO2 Off-Kinetics Following Exhaustive Upper Body Exercise Test in Spinal Cord Injury Med Sci Sports Exerc 2017; 49:629-630

Baattaiah, B; Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A; Guccione, A; Keyser, R. Association of Six Minute Push Test Distance and Measures of Cardiorespiratory Fitness in Spinal Cord Injury Med Sci Sports Exerc 2017; 49(5S): 409

Lydick S, Rounds A, Bryson CA, Herrick JE, Collins JP, Groah SM, Short JL, Guccione AA. Group cohesion and participation in adaptive sport: spinal cord injury and other mobility limiting conditions. Arch Phys Med Rehabil 2016; 97:e101

Jo PY, Rounds A, Lichy AM, Gollie JM, Panza GS, Guccione AA. Gait adaptation following task-specific locomotor training in an individual with incomplete spinal cord injury. Med Sci Sports Exerc 2016; 48(5 Suppl 1):401-2.

Rounds, A; Lydick SE, Lichy AM, Gollie JM, Panza GS, Jo PY, Guccione AA. Doing better but not feeling it: self-efficacy and ambulation ability in incomplete spinal cord injury. Med Sci Sports Exerc 2016; 48(5 Suppl 1):424.
Podium Presentation:
Rounds, A; Schladen, M; Ljungberg, I; Nash, M; Groah, S. Cardiometabolic Syndrome Criteria and Their Application to with Spinal Cord Injury (Presented at ASIA, 2017).

Abstracts:
Rounds, A; Woolstenhulme, J; Lydick, S; Weinstein, A; Chin, L; Chan, L; Keyser, R (FACSM); Relationship Between Physical Activity and 6-minute Walk Distance in Patients with Pulmonary Arterial Hypertension (Accepted ACSM Poster, 2015)

Gollie, J; Panza, G; Lydick, S; Puri,S; Jo, P; Lichy, A; Rounds, A; Murray, D; Guccione, A; Muscle Oxygen Utilization Following Activity-Based Rehabilitation in a Person With Incomplete Spinal Cord Injury. ACRM Annual Conference Submission (Accepted ACRM Poster, 2015)

Harrington, R; Abraham, D; Chan, E; Harris-Love, M; Mohapatra, S; Rounds, A; Wutzke, C; Comparing stimulation of bihemispheric motor sites on a reaching task in mild and severe arm impairment after stroke. ASNR Annual Conference Submission (Accepted ASNR Poster, 2015)

Rounds, A; Wutzke, C; Harrington, R; Chan, E; Harris-Love, M; Relationship between Sub-Sections Of Upper Extremity Fugl-Meyer Scores and Reaching Performance in Chronic Stroke Survivors (Accepted WCNR Poster, 2016)

Lichy, A; Neville, B; Gollie, J; Rounds, A; Panza, G; Jo, P; Guccione, A; Task-specific Performance Based Training: Effects on Gait and Balance in an Ambulatory Spinal Cord Injured Population (Accepted ASIA Poster, 2016)

Rounds, A; Lydick, S; Lichy, A; Gollie, J; Panza, G; Jo, P; Guccione, A; Doing Better But Not Feeling it: Self-Efficacy and Ambulation in Incomplete Spinal Cord Injury (Accepted ACSM Poster, 2016)

Jo, P; Rounds, A; Lichy, A; Guccione, A; Gait adaptation following 15 weeks of task-specific locomotor training (LT) in incomplete spinal cord injury (Accepted ACSM Poster, 2016)

Rounds, A; Lichy, A; Gollie, J; Wutzke, C; Guccione, A; Task Specific Overground Locomotor Training Is Associated With Improved Gait And Balance in Incomplete Spinal Cord Injury: Case Report (Accepted, ASB, 2016)

Baattaiah, B; Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A; Guccione, A; Keyser, R. Association of Six Minute Push Test Distance and Measures of Cardiorespiratory Fitness in Spinal Cord Injury (Accepted, ACSM, 2017)

Murray, D; Cowan, R; Groah, S; Ljungberg, I; Rounds, A; Guccione, A; Keyser, R. VO2 Off-Kinetics following Exhaustive Upper Body Exercise Testing After Spinal Cord Injury (Accepted, ACSM, 2017).

Rounds, A; Ljungberg, I; Groah, S. CASE STUDY: Do Urinary Symptoms, Inflammatory Biomarkers, and the Bacterial Ecosystem Change After Change in Bladder Management (Accepted, ASIA, 2018).

Suzanne Groah, MSPH, MD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Inger Ljungberg, MPH
Medstar National Rehabilitation Hospital

(no CV uploaded)

Bruce Sprague, BS
Childrens National Hospital

(no CV uploaded)

Elizabeth Davis, MPP
Medstar National Rehabilitation Hospital

(no CV uploaded)

Manon Schladen, MSE, PhD
Medstar National Rehabilitation Hospital

(no CV uploaded)

Rochelle Tractenberg, PhD, MPH, PhD
Medstar National Rehabilitation Hospital

(no CV uploaded)

A retrospective chart review to determine whether infections following traumatic spinal cord injury (tSCI) are associated with changes in motor scores during acute inpatient rehabilitation

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Emily Robbins, DO
University of Texas Health Sciences Center - Houston

CV:
CURRICULUM VITAE

NAME: Emily A. Robbins, D.O.
BIRTH DATE: September 3, 1974
WORK E-Mail: emily.a.robbins@uth.tmc.edu
HOME E-Mail: emilyrbbns3@gmail.com
BUSINESS PHONE: 713-500-5874

EDUCATION AND TRAINING
Undergraduate:
May 2000 to May 2005
Bachelor of Science, Chemistry and Psychology
University of Colorado at Denver
Denver, Colorado
Departmental Honors in Chemistry

Graduate:
August 2010 to May 2014
Doctor of Osteopathic Medicine
Arizona College of Osteopathic Medicine
Midwestern University, Glendale, Arizona
19555 N 59th Ave, Glendale, AZ 85308

Post-Graduate:
July 1, 2014- June 30, 2018 Physical Medicine and Rehabilitation Residency
(Internship – Internal Medicine 2014-2015)

University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA
Department of Physical Medicine and Rehabilitation Graduated June 9, 2018

Fellowship:
Starting July 1, 2018
Spinal Cord Injury Medicine Fellowship
University of Texas Health Science Center at Houston
TIRR- Memorial Hermann Hospital-Texas Medical Center
Michael E. Debakey VA Medical Center
Expected graduation: June 30, 2019

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES
Academy of Spinal Cord Injury Professionals February 2016 to present

American Paraplegia Society February 2016 to present

Association of Academic Physiatrists September 2015 to present

American Academy of Physical Medicine and Rehabilitation August 2015 to present

PUBLICATIONS

Articles:
Sinha A, Kreem L, Robbins E. MELAS and other mitochondrial disorders: A primer for physiatrists. UPMC Rehab Grand Rounds. Winter 2018.

Stevens KE, Adams CE, Mellott TJ, Robbins E, Kisley MA. Prenatal choline deficiency produces abnormal sensory inhibition in Sprague-Dawley rats. Brain Research. 2008; 1237:84-90.

Kisley MA, Olincy A, Robbins E, Polk SD, Adler LE, Waldo MC, Freedman R. Sensory gating impairment associated with schizophrenia persists into REM sleep. Psychophysiology. 2003; 40(1):29-38.

Manuscripts awaiting submission:
Robbins E, Zamora R, Huang W, Constantine G, Brienza D, Vodovotz Y Sowa G. Distinct dynamic networks of inflammation characterize differences in the balance of inflammatory responses in patients with spinal cord injuries above vs below T6.

Published Abstracts:
Robbins EA, Vodovotz Y, Huang W, Zamora R, Sowa G. Differences in the dynamic immune response following spinal cord injury at T6 and above vs below T6. American Journal of Physical Medicine & Rehabilitation. 2017; 96(3): Supplement 1. a115

Robbins EA, McMichael BD, Lemberg JD, Nora G. Rheumatoid vasculitis presenting with numbness, dysesthsias and an inability to ambulate. American Journal of Physical Medicine & Rehabilitation. 2016; 95(3): Supplement 1. a57

Oral Presentations:
American Association of Anatomists Langman Graduate Student Platform Presentation Award Winner, Experimental Biology 2012 Conference, April 21-25, 2012; San Diego, CA. Robbins EA, Shlifer IG, Manning D, Jones CB, Jones TB. The effects of angiotensin receptor blockade on functional recovery and inflammatory gene expression following spinal cord injury.

Poster Presentations:
Robbins EA, Vodovotz Y, Huang W, Zamora R, Sowa G. Differences in the dynamic immune response following spinal cord injury at T6 and above vs below T6. UPMC Annual Rehabilitation Institute Research Day, Pittsburgh, PA. May 10, 2017.

Robbins EA, Vodovotz Y, Huang W, Zamora R, Sowa G. Differences in the dynamic immune response following spinal cord injury at T6 and above vs below T6. Association of Academic Physiatrists Annual Meeting, Las Vegas, NV. February 9, 2017.

Robbins EA, Cleveland C. Recurrent idiopathic syringomyelia resulting in axonal degeneration and functional decline. Academy of Spinal Cord Injury Professionals Educational Conference & Expo, Nashville, TN. September 6, 2016.

Robbins EA, McMichael BD, Lemberg JD, Nora G. Rheumatoid vasculitis presenting with numbness, dysesthsias and an inability to ambulate. Association of Academic Physiatrists Annual Meeting, Sacramento, CA. February 18, 2016.

COMMITTEE AND SERVICE
November 2017
EQT 10 Miler Medical Volunteer for Handcyclist

March 2017
5th Annual Just Ice Sled Hockey Challenge to Benefit the Mighty Penguins Sled Hockey Team

August 2016

Ossur Running and Mobility Clinic
Volunteer for amputee runners

May 2016
Pittsburgh Marathon Medical Volunteer for Handcyclists

July 2015-June 2018
UPMC PM&R Patient Safety Oversight Committee

Awards
2017 UPMC Medical Education LEAP Award for Patient Safety and Quality Improvement: Fall Prevention on a General Rehab Unit. Presented to Stephen Schaaf, MD and Emily Robbins, DO on November 9, 2017

Spinal Cord Injury Resident of the Year 2016-2017 UPMC Department of Physical Medicine and Rehabilitation. Presented June 11, 2017

TEACHING AND LECTURES
Sexuality after spinal cord injury: Spinal Cord Injury Rotation Learning Module. Robbins EA. Spring 2017

Resident Grand Rounds, Department of Physical Medicine and Rehabilitation, UPMC:
Stem cell therapy for spinal cord injury. February 1, 2017

Quality Improvement: Robbins EA, Schaaf S. Fall intervention in a rehabilitation population. UPMC St. Margaret's Hospital, January 12, 2017

Patient Safety Case Conference: Roscher M, Robbins EA, Stepanczuk B. Safety concerns in the acute inpatient rehabilitation discharge of opiate addicts. October 26, 2016

Patient Safety Case Conference: Robbins EA, Matsumoto M, Stepanczuk B. The VIP patient. June 22, 2016

Resident/Faculty Journal Club, January 13, 2016: Duffell LD, Brown GL and Mirbagheri MM. Facilitatory effects of anti-spastic medication on robotic locomotor training in people with chronic incomplete spinal cord injury. Journal of Neruoengineering and Rehabilitation. 2015. 12(29):1-10

Resident Journal Club, September 22, 2015: Silwa JA, Shahpar S, Huang ME, Spill G, Semik P. Cancer Rehabilitation: Do functional gains relate to 60 percent rule classification or to the presence of metastasis? PM R. 2016 Feb; 8(2):131-7

Patient Safety Case Conference: Robbins EA, Matsumoto M, Stepanczuk B, Camiolo C. Falls in the outpatient clinic. November 4, 2015

CURRENT ACADEMIC PROJECTS
"Does the frequency of UTIs following outpatient urodynamic studies in patients with SCI warrant antimicrobial prophylaxis." A retrospective study with ongoing data collection
Mentor: Dr. Amanda Harrington

"A retrospective chart review to determine whether infections following traumatic spinal cord injury (tSCI) are associated with changes in motor scores during acute inpatient rehabilitation."
Mentor: Dr. Argyrios Stampas

Argyrios Stampas, MD
University of Texas Health Sciences Center - Houston

(no CV uploaded)

The Role of Meditation in Management of Neuropathic Pain after Spinal Cord Injury: A case Report. Askari S Introduction: NP is a common complication after spinal cord injury. NP can significantly impair function, reduce quality of life (QOL) and be very challenging to manage. Treatment options would include both pharmacologic and non-pharmacologic approaches. A case presented here is an individual with traumatic SCI who developed severe NP following his injury and responded well to a method of meditation called Vipssanna. Timeline: This 41 year-old male sustained a T12-L1 fracture in 2009, which resulted in incomplete paraplegia (L2 AIS C). He was able to ambulate with a 4 wheeled walker short distances at discharge from acute rehabilitation hospital and has never lived without NP since. His NP severity was 10/10 on Visual Analogue Scale (VAS) at the beginning of his injury. Therapeutic: He started on pregabalin for burning sensation in his legs with no significant benefit and was not interested in continuing oral medication considering it's side effects. This patient completed an intense free 10 days course of Vipassana meditation (which means to see things as they really are, is one of India's most ancient techniques of meditation) in Toronto, ON in 2015. He has practiced an hour of meditation twice daily since 2015 and has another 3 days course in 2018 as a refresher. His goals were to achieve pain control in order to maximize his functional abilities and improve quality of life. Results: He will be defensing his PhD thesis in Oct 2018 at Queens University and has a successful community reintegration following his SCI despite NP, which is still present, but with less severity, VAS 5/10. He also incorporates physical activity in his daily program for at least an hour on most days. Discussion: Despite the potential benefits of Meditation (M) for pain, its use as an adjunct therapy in treating neuropathic pain (NP) appears to be underexplored in SCI population. Given the side effects of medications, cost and challenges with NP management an alternative non-pharmacologic management such as M might be warranted. KEYWORDS: Neuropathic pain; spinal cord injury; meditation Learning Objectives: - Review a case of traumatic SCI who experiences significant NP since 2009 and ability to manage NP with practicing meditation into his daily program over the past 3 years - Discuss what is currently known about management of NP following SCI - Discuss how a free intensive 10 days Vipassana meditation can make a difference in a QOL in an individual with SCI Bibliography: SD Guy, et al. The CanPain SCI Clinical Practice Guidelines for Rehabilitation Management of Neuropathic Pain after Spinal Cord: Recommendations for treatment . Spinal Cord (2016) 54, S14–S23 Lara Hilton et al. Mindfulness Meditation for Chronic Pain: Systematic Review and Meta-analysis. Ann Behav Med. 2017; 51(2): 199–213. Jacob JA. As Opioid Prescribing Guidelines Tighten, Mindfulness Meditation Holds Promise for Pain Relief. JAMA. 2016 Jun 14;315(22):2385-7

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Sussan Askari, MD, FRCPC
Queens University

CV:
Curriculum Vitae

SUSSAN ASKARI
752 King Street West, Kingston, ON, K7L 4X3

E - Mail: askaris@providencecare.ca

POST GRADUATE TRAINING:

Dalhousie University, Halifax, Canada

• Clinical fellowship in spinal cord injury Aug. 2012-Jul. 2013

• Resident, PMR Mar.2007-Mar. 2012

• Chief Resident, PMR, Dalhousie University Jul. 2010- Jul 2011

Shiraz University of Medical Sciences, Shiraz, Iran Oct. 1995 - Sep. 1998

• Resident, PMR

MEDICAL EDUCATION:

Shiraz University of Medical Sciences, Shiraz, Iran Jan. 1985 - Nov. 1991

• Doctor of Medicine (program starting post high school)
• Rotating Intern-ship: May. 1989 - Nov. 1991 (eighteen months)

PROFESSIONAL EXPERIENCE:

• Assistant Professor, Spinal Cord Injury Director, Queen's University, Department of PMR, Providence Care Hospital, Kingston, On Dec. 2013- Present

• Program Director, Queen's University, Department of PMR Jan. 2016- Present

• Physiatrist, Queen Elizabeth Hospital, Charlottetown, PE, Canada Aug. 2013- Sep 2013

PUBLICATION:

• Ethans K, Deng G, Townson A, Jacquemin G, Smith K, O'Connell C, Askari S, Ho C. Canadian Practice Patterns of Venous Thromboembolism Prophylaxis for Adults with Spinal Cord Injury. J Pediatr Neurol Disord 2016, 2:1.

• Askari S, Kirby RL, Parker Kim, Thompson K, O'Neill J. Wheelchair Propulsion Test: Development and Measurement Properties of a New Test for Manual Wheelchair Users. Arch Phys Med Rehabil. 2013, 94(9): 1690-1698.

• Short C, Askari S. Can Botulinum Toxin Improve Gait in Persons with Multiple Sclerosis? AB: A case Series AB. Multiple Sclerosis. 2010, 16(8): 1020.

ACADEMIC PRESENTATION:

• Askari S, Trier J, Online Case-Based Modules to improve knowledge retention, resident engagement, and satisfaction with academic half days (AHD) in a small residency training program May 2017
• Trier J, Askari S, Showing versus Knowing: Entrustable Professional Activities in Physical Medicine and Rehabilitation. CAPMR, Poster presentation May 2017

• Trier J, Askari S, Designing Competency at Queen's University: The PM&R Experience. CAPMR,Posterpresentation May 2017

• Mascaro C, Gregory T, Trier J, Askari S, Taming The Dragon: Do Template-Based Clinic Notes Incorporate More Relevant Information Than Standard Narrative Notes? CAPMR Poster presentation May 2017

• Askari S, Catherine Donnelly, Jeanette Van Esbroeck, Nancy Dalgarno. Supporting Community Integration in Hospital Neurorehabilitation Services. CAPMR, Poster presentation

May. 2016

• Askari S, Secondary Complications after Spinal Cord Injury, After and Beyond Neurotrauma, Kingston Oct. 2014

• Kirby R L, Askari S, Smith C, The Wheelchair Skill Test Work shop, RESNA, Indianapolis
Jun. 2014

• Askari S, O'Neill J, Kirby R L, Construct Validity of the Wheelchair Propulsion Test: Propulsion Over Carpet vs Tile Surfaces. Submitted for RESNA, Baltimore Jun. 2012

• Parker K, Askari S, Kirby R L. Concurrent Validity of the Wheelchair Propulsion Test: Comparison of the Speed and Cadence Variables to those Derived from an Instrumented Wheel (SMARTWHEEL). RESNA, Baltimore Jun. 2012

• Askari S, Kirby R L, Wheelchair Propulasion Test (WPT): Development and pilot work FICCDAT: RESNA, Toronto Jun. 2011

• Askari S, Kirby R L. Wheel chair propulsion test (WPT): Reliability of speed, push frequency and push effectiveness. CAPMR , Victoria , Poster Jun. 2011

• Askari S, Kirby L. Nominated PMR Resident, Wheel chair propulsion test (WPT): Reliability of speed, push frequency and push effectiveness. Oral prestation, Dalhousie University, Department of Medicine Resident Research Day May 2011

RESEARCH In Progress:

• Mascaro C, J, Gregory T, Trier J, Askari S. Do template-based clinic notes incorporate more relevant information than standard notes?
Sep 2016-present

• Askari S, Trier J, Egan R, Maness I, Using Case based e-Learning Module in Physical Medicine and Rehabilitation Academic Half Day Jun 2016- present

• Scott S, Askari S, Delores M, Quantitative Assessment of Arm Movement in Spinal Cord Injury Patients Using KINARM May 2015- present

• Askari S, Donnelly C, Dalgarno Nancy. Supporting community integration in neurorehabilitation services Mar. 2014-present

Grant:

Maudsley Fund, $6430.00 2016
Askari S, Trier J, Egan R, Maness I, Using Case based e-Learning Module in Physical Medicine and Rehabilitation Academic Half Day

PGME, $500.00 2016
Askari S, Trier J, Egan R, Maness I, Using Case based e-Learning Module in Physical Medicine and Rehabilitation Academic Half Day

DDIF, $20,000.00 2014
Askari S, Donnelly C, Dalgarno Nancy. Supporting community integration in neurorehabilitation services

A novel numerical finite-element model for dynamic simulation of spinal cord compression with different clinical patterns of thoracolumbar burst fractures

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Lucien Diotalevi, MSc
Hopital Du Sacre-Coeur De Montreal

(no CV uploaded)

Nicolas Bailly, PhD
Hopital Du Sacre-Coeur De Montreal

(no CV uploaded)

Eric Wagnac, PhD
Ecole De Technologie Superieure

(no CV uploaded)

Jean-Marc Mac-Thiong, MD, PhD
Hopital Du Sacre-Coeur De Montreal

CV:
•Associate Professor, Department of Surgery, University of Montreal, Canada
•Head of Medtronic Research Chair in Spinal Trauma, University of Montreal, Canada
•Orthopedic surgeon and researcher, CHU Sainte-Justine, Canada
•Orthopedic surgeon and researcher, Hopital du Sacre-Coeur de Montreal, Canada
•Orthopedic surgeon, Montreal Shriners Hospital, Canada
•Research program director, Division of orthopedic surgery, Department of Surgery, University of Montreal, Canada

Peer-reviewed publications on spinal cord injury
• Goulet J, Richard-Denis A, Thompson C, Mac-Thiong J-M. Relationships between Specific Functional Abilities and Health-Related Quality of Life in Chronic Spinal Cord Injury. Accepted in Am J Phys Med Rehabil
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Quality of life in the sub acute period following a cervical traumatic spinal cord injury based on the initial severity of the injury: a prospective study. Accepted in Spinal Cord
• Richard-Denis A, Nguyen B-H, Mac-Thiong J-M. The impact of early spasticity on the intensive functional rehabilitation phase and community reintegration following traumatic spinal cord injury. Accepted in J Spinal Cord Med
• Richard-Denis A, Beauséjour M, Thompson C, Nguyen BH, Mac-Thiong J-M. Early predictors of global functional outcome after traumatic spinal cord injury: a systematic review. Accepted in J Neurotrauma
• Facchinello Y, Richard-Denis A, Beauséjour M, Thompson C, Mac-Thiong J-M. The use of classification tree analysis to assess the influence of surgical timing on neurological recovery following traumatic complete cervical spinal cord injury. Spinal Cord 2018 Feb 26 [Epub ahead of print] (Featured paper)
• Facchinello Y, Beauséjour M, Richard-Denis A, Thompson C, Mac-Thiong J-M. The use of regression tree analysis for predicting the functional outcome following traumatic spinal cord injury. J Neurotrauma 2017 Oct 25 [Epub ahead of print]
• Cheng CL, Noonan VK, Shurgold J, Chen J, Rivers CS, Hamedani HK, Humphreys S, Bailey C, Attabib N, Mac-Thiong J-M, Goytan M, Paquet J, Fox R, Ahn H, Kwon BK, Fourney DR, RHSCIR network. Geomapping of traumatic spinal cord injury in Canada and factors related to triage pattern. J Neurotrauma 2017 Mar 22 [Epub ahead of print]

• Richard-Denis A, Erhmann-Feldman D, Thompson C, Mac-Thiong J-M. Prediction of functional recovery six months following traumatic spinal cord injury during acute care hospitalization. J Spinal Cord Med 2017 Feb 15 [Epub ahead of print]
• Fradet L, Cliche F, Petit Y, Mac-Thiong J-M, Arnoux P-J. Strain rate dependent behavior of the porcine spinal cord under transverse dynamic compression. Proc Inst Mech Eng H 2016 Jun 23 [Epub ahead of print]
• Richard-Denis A, Feldman DE, Thompson C, Parent S, Mac-Thiong J-M. The impact of acute management on the occurrence of medical complications during the specialized spinal cord injury acute hospitalization following motor-complete cervical spinal cord injury. J Spinal Cord Med 2017 Jul 19 [Epub ahead of print]
• Richard-Denis A, Feldman D, Thompson C, Albert M, Mac-Thiong J-M. The impact of a specialized cord injury center as compared with non-specialized centers on the acute respiratory management of patients with complete tetraplegia: an observational study. Spinal Cord 2018;56:142-150
• Thompson C, Feldman DE, Mac-Thiong J-M. Surgical management of patients following traumatic spinal cord injury: identifying barriers to early surgery in a specialized spinal cord injury center. J Spinal Cord Med 2018;41:142-148
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Reply to Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress by Gefen and Santamaria. Int Wound J 2017;14:885
• Squair JW, Bélanger LM, Tsang A, Ritchie L, Mac-Thiong J-M, Parent S, Christie S, Bailey C, Dhall S, Street J, Ailon T, Paquette S, Boyd M, Dea N, Fisher CG, Dvorak MF, West CR, Kwon BK. Spinal cord perfusion pressure predicts neurological recovery in acute spinal cord injury. Neurology 2017;89:1660-1667
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Determining complete functional independence in patients with a traumatic cervical spinal cord injury: proposal of a new 2-level scale based on the Spinal Cord Independence Measure. Int J Phys Med Rehabil 2017;5:4
• Facchinello Y, Wagnac É, Ung B, Pradhan P, Peyrache L-M, Mac-Thiong J-M. The development of an instrumented spinal cord surrogate using optical fibers: a feasibility study. Med Eng Phys 2017;48:212-216
• Kaminski L, Cordemans V, Cernat E, M'Bra KI, Mac-Thiong J-M. Functional outcome prediction after traumatic spinal cord injury based on acute clinical factors. J Neurotrauma 2017;34:2027-2033
• Streijger F, Skinnider M, Rogalski JC, Balshaw R, Shannon CP, Prudova A, Bélanger LM, Ritchie L, Tsang A, Christie S, Parent S, Mac-Thiong J-M, Bailey C, Urquhart J, Ailon T, Paquette SJ, Boyd MC, Street J, Fisher CG, Dvorak MF, Borchers CH, Foster LJ, Kwon BK. A targeted proteomis Analysis of cerebrospinal fluid after acute human spinal cord injury. J Neurotrauma 2017;34:2054-2068
• Richard-Denis A, Thompson C, Mac-Thiong J-M. Effectiveness of a multi-layer foam dressing in preventing sacral pressure ulcers for the early acute care of patients with a traumatic spinal cord injury: Comparison with the use of a gel mattress. Int Wound J 2017;14:874-881
• Richard-Denis A, Ehrmann Feldman D, Thompson C, Bourassa-Moreau E, Mac-Thiong J-M. Costs and length of stay for the acute care of patients with motor-complete spinal cord injury following cervical trauma: the impact of early transfer to specialized acute SCI center. Am J Phys Med Rehabil 2017;96:449-456 (CME article)
• Wu Y, et al. Parallel metabolomic profiling of cerebrospinal fluid and serum for identifying biomarkers of injury severity after acute human spinal cord injury. Sci Rep 2016;6:38718
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Do patients with complete spinal cord injury benefit from early surgical decompression? Analysis of neurological improvement in a prospective cohort study. J Neurotrauma 2016;33:301-6
• Richard-Denis A, et al., Mac-Thiong J-M. Does the acute care spinal cord injury settings predict the occurrence of pressure ulcers at arrival to intensive rehabilitation centers? Am J Phys Med Rehabil 2016;95:300-8
• Thompson C, et al., Mac-Thiong J-M. The changing demographics of traumatic spinal cord injury: an 11-year study of 831 patients. J Spinal Cord Med 2015;38:214-23
• Berube M, et al., Mac-Thiong J-M. Development of theory-based knowledge translation interventions to facilitate the implementation of evidence-based guidelines on the early management of adults with traumatic spinal cord injury. J Eval Clin Pract 2015;21:1157-68
• Petit Y, et al., Mac-Thiong JM. Simulation of high energy vertebral fractures on complete porcine specimens. Conf Proc IEEE Eng Med Biol Soc 2015;2015:3901-4
• Dvorak MF, et al. Minimizing errors in acute traumatic spinal cord injury trials by acknowledging the heterogeneity of spinal cord anatomy and injury severity: an observational Canadian cohort analysis. J Neurotrauma 2014;31:1540-47

• Boisclair D, Mac-Thiong J-M, et al. Compressive loading of the spine may affect the spinal canal encroachment of burst fractures. J Spinal Disord Tech 2013;26:342-6
• Bourassa-Moreau É, Mac-Thiong J-M, et al. Non-neurological outcomes following complete traumatic spinal cord injury: The impact of surgical timing. J Neurotrauma 2013;30:1596-601
• Bourassa-Moreau É, et al., Mac-Thiong J-M. Complications in acute phase hospitalization of traumatic spinal cord injury: does surgical timing matter? J Trauma Acute Care Surg 2013;74:849-54

Julien Goulet, MD
Universite De Montreal

(no CV uploaded)

Yvan Petit, PhD
Ecole De Technologie Superieure

(no CV uploaded)

Human Rights, Science and Spinal Cord injury: Attitudes of Health Professionals and Scientists

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Anne Bryden, MA, OTR/L
Case Western Reserve University | Institute for Functional Restoration

CV:
B. Positions and Honors

Director of Clinical Trials and Research May 2017 - Present
Institute for Functional Restoration / Case Western Reserve University
Cleveland, Ohio 44106

Research Manager March 2011 – May 2017
Case Western Reserve University / The Cleveland FES Center
Cleveland, Ohio 44106

Clinical Rehabilitation Specialist July 2004 – February 2011
Case Western Reserve University / The Cleveland FES Center
Cleveland, Ohio 44106

Research Health Science Specialist February 1993 – July 2004
Department of Veterans Affairs / The Cleveland FES Center
Cleveland, Ohio 44106

Occupational Therapist July 1991 - February 1993
Saint Vincent Charity Hospital & Health Center
Cleveland, Ohio 44115

Graduate Student Appreciation Award
Case Western Reserve University College of Arts and Sciences – May 2018

Medicine, Society and Culture Travel Award
Case Western Reserve University Department of Bioethics – May 2017

Academy of Spinal Cord Injury Professionals Therapy Leadership Council
Distinguished Clinical Award – September 2015

Neilsen Foundation Allied Health Professional Award of ASIA
May 2015

Case Western Reserve University Weatherhead School of Management
Women in Leadership Certificate – June 2012

Case Western Reserve University
Women Staff Leadership Development Initiative – Class of 2011-2012

Professional Memberships
American Academy of Spinal Cord Injury Professionals
American Spinal Injury Association
International Spinal Cord Society
American Occupational Therapy Association
American Sociological Association

C. Contributions to Science

1. Assessment of Functional Outcomes Following Innovative Interventions to Restore Function after Spinal Cord Injury (SCI)
Historical Background I have more than twenty years of experience measuring the impact of innovative interventions such as functional electrical stimulation (FES) neuroprosthetic systems and tendon transfer surgery in people with tetraplegia. These interventions impact multiple domains such as physiological functioning, activity performance and community participation requiring specialized knowledge in measuring their effects. Central Findings Neuroprosthetic systems and tendon transfers provide people with SCI more independence in performing activities of daily living in both their personal environments and out in the community. Participant satisfaction levels after these interventions are high. Application of Findings Neuroprosthetics and tendon transfer procedures provide function that is not otherwise attainable for this highly disabled population. Careful assessment of outcomes is critical to detect improvements and justify wider implementation of these interventions. Role I lead the functional assessment program for upper extremity neuroprosthetics and tendon transfers at The Cleveland FES Center. It is my responsibility to choose and implement the appropriate functional measures to detect outcomes.

Bryden AM, Bezruczko N. An Activity of Daily Living Measure for Spinal Cord Injury. Journal of Applied Measurement 12(3):279-297, 2011
Bryden AM, Kilgore KL, Keith MW, Peckham PH. Assessing Activity of Daily Living Performance after Implantation of an Upper Extremity Neuroprosthesis. Topics in Spinal Cord Injury Rehabilitation 14(3):37-53, 2008.
Bryden AM, Kilgore KL, Kirsch RF, Memberg WD, Peckham PH, Keith MW. An Implanted Neuroprosthesis for High Tetraplegia. Topics in Spinal Cord Injury Rehabilitation 2005;10(3)38-52.
Bryden AM, Wuolle KS, Murray PK and Peckham PH. The Utilization and Perceived Outcomes of Upper Extremity Surgical Reconstruction in Persons with Tetraplegia at Model Spinal Cord Injury Systems. 2004 Spinal Cord 42:169-176.
Wuolle KS, Bryden AM, Peckham PH, Murray PK and Keith MW. Satisfaction with Upper Extremity Surgery in Individuals with Tetraplegia. Arch Phys Med Rehabil 2003 84(8):1145-9.
Peckham PH, Kilgore KL, Keith MW, Bryden AM, Bhadra N, Montague FW. An Advanced Neuroprosthesis for Restoration of Hand and Upper Arm Control Using an Implantable Controller. J Hand Surg [Am] 2002 Mar;27(2):265-76
Bryden AM, Memberg WD and Crago PE. Functional and Physiological Evaluation of Electrically Stimulated Elbow Extension in Persons with C5 / C6 Tetraplegia. Arch Phys Med Rehabil 2000;81:80-88.
Wuolle KS, Van Doren CL, Bryden AM, Peckham PH, Keith MW, Kilgore KL and Grill JH. Satisfaction and USAge of a Hand Neuroprosthesis. Arch Phys Med Rehabil 1999;80:206-13.
Kilgore KL, Peckham HP, Keith MW, Thrope GB, Wuolle KS, Bryden AM, and Hart RL. “An Implanted Upper Extremity Neuroprosthesis: Follow up of Five Patients”. J Bone Joint Surg 1997; 79A: 533-41

2. Establishing Clinical Assessment Standards for Upper Limb Management in Tetraplegia
Historical Background In my experience leading the measurement of functional outcomes of neuroprosthetic systems and other interventions, I have collaborated with other national and international experts in SCI rehabilitation. These collaborations have allowed me to contribute to the development of national and international clinical standards for upper limb management in tetraplegia. Central Findings I have contributed to book chapters and journal articles focused on assessment and treatment of upper limb dysfunction, including the International SCI Upper Extremity Basic Data Set. I am currently developing a manualized assessment of lower motor neuron damage that can be implemented by therapy clinicians, and have been invited to teach the process at two rehabilitation centers in Canada. Application of Findings Standardized assessments contribute to a shared language across clinicians and improve the overall assessment and care of people with SCI. The ability to detect lower motor neuron damage in people with SCI allows more targeted and appropriate intervention and identifies potential risks for additional dysfunction from problems such as contracture. Role I lead the effort to improve and refine existing outcome measures for tetraplegia. I also lead the effort to make lower motor neuron testing a standard of care by educating clinicians and participating in national and international work groups focused on rehabilitation outcomes measurement.

Bryden AM, Kilgore KL, Nemunaitis GA. Advanced Assessment of the Upper Limb in Tetraplegia: A Three Tiered Approach to Characterizing Paralysis. Topics in Spinal Cord Injury Rehabilitation 2018;24(3)206-216.
Bryden AM, Hoyen HA, Keith MW, Mejia M, Kilgore KL, Nemunaitis GA. Upper Extremity Assessment in

Tetraplegia: The Importance of Differentiating between Upper and Lower Motor Neuron Paralysis. Arch Phys Med Rehabil. 97(6 Suppl 2):S97-104, 2016.
Bryden AM, Kilgore KL, Lind BB and Yu DT. Triceps Denervation as a Predictor of Elbow Flexion Contractures in C5 and C6 Tetraplegia. Arch Phys Med Rehabil 2004;85(11)1880-1885.
Mulcahey MJ, Betz RR, Bryden A, Calhoun C, LaVelle W, Schmidt-Read M, Stiefbold G. Orthotics. In: Harvinder Singh Chhabra (ed). ISCoS Textbook on Comprehensive Management of Spinal Cord Injury. Wolters Kluwer:New Delhi, Chapter 36, pp. 558-579.
Bryden AM, Peljovich AE, Hoyen HA, Nemunaitis G, Kilgore KL, Keith MW. Surgical Restoration of Arm and Hand Function in People with Tetraplegia. Topics In Spinal Cord Injury Rehabilitation 18(1):43-49, 2012.
Biering-Sorensen F, Bryden AM, Curt A, Friden J, Harvey LA, Mulcahey MJ, Popovic MR, Prochazka A, Sinnott KA, Snoek G. International Spinal Cord Injury Upper Extremity Basic Data Set. Spinal Cord, Advance Online:1-6, 2014.
Bryden AM, Sinnott KA, Mulcahey MJ. Innovative Strategies for Improving Upper Extremity Function in Tetraplegia and Considerations in Measuring Functional Outcomes. Topics in Spinal Cord Injury Rehabilitation 2005;10(4)75-93.
Dunn JA, Sinnott KA, Bryden AM, Connolly SJ, Rothwell AG. Measurement Issues Related to Upper Limb Interventions in Persons Who Have Tetraplegia. Hand Clin 24:161–168, 2008.
Peljovich AE, Bryden AM, Malone K, Hoyen HA, Hernandez-Gonzalez E, Keith MW. Rehabilitation of the Hand and Upper Extremity in Tetraplegia. In: Skirven TM, Osterman AL, Fedorczyk JM, Amadio PC, eds. Rehabilitation of the Hand and Upper Extremity. 6th ed. Philadelphia, PA:Elsevier Mosby; 2011.

3. Investigation of Human Rights, Disability and Technology
Historical Background As an occupational therapist and sociologist I am interested in the utility of human rights discourse to frame the barriers and limitations experienced by people with disabilities in attaining services and technology to improve quality of life. An important element is identifying economic, social and cultural rights for people with disabilities, rights that are frequently overlooked in mainstream discussions of human rights. Another element concerns the perspectives of health professionals with whom people with disabilities interact. Health professionals rarely speak the language of human rights, yet often express frustration at the socio-structural limitations in providing quality care and the barriers experienced by their patients. I am currently conducting qualitative research supported by the Science and Human Rights Coalition of the American Association for the Advancement of Science investigating perspectives of health professionals specializing in SCI medicine regarding the barriers faced by the people they treat and whether invoking international human rights law can have a positive impact on their quality of life. I am also conducting longitudinal interviews with people living with SCI about the barriers experienced while navigating both health and social resources following their injury. Central Findings Initial results indicate 1) significant knowledge about and concern for social barriers experienced by people with SCI, 2) reduced knowledge about human rights discourse and potential utility in realizing economic, social and cultural rights for people with SCI, and 3) strong interest in learning more about international human rights law as a tool for improving access to services and technology by people with SCI. Early interviews with people living with SCI indicate significant difficulty in finding clear cut information about resources for living independently in the community, including in-home attendant care, returning to work, and access to research and technology that can provide greater independence. Application of Findings Documenting how people with disability navigate resources (including gaps and barriers) and measuring the human rights perspectives of health professionals can better inform how international human rights law may influence increased realization of the resources needed by people with disabilities for societal integration. Role I am the lead investigator for both projects, including conducting the interviews and analysis.

Human Rights, Technology, and Disabilities. Anne Bryden and Brian Gran. In preparation for submission to Human Rights Quarterly. Targeted for submission July 2018.

Human Rights and Access to Technology by People with Spinal Cord Injury. Panel session, Anne M. Bryden, Brian Gran, Kimberly D. Anderson-Erisman, Jennifer French and Megan Moynahan. 2018 Annual Meeting of The American Spinal Injury Association. Rochester, MN. 5/2/2018.

Implanted Neuroprosthetics, Innovative Upper Limb Evaluation and the Human Rights of People with Tetraplegia to Benefit from Technology. Invited lecture at the Shirley Ryan Ability Lab. Chicago, IL. 10/9/2017. (http://planitpurple.northwestern.edu/event/521839)

Human Rights, Technology, and Disabilities. Disability and Social Life session. Anne M. Bryden. 2017 Annual Meeting of the American Sociological Association. Montreal, Quebec, Canada. 8/14/2017.

Brian Gran, PhD, JD
Case Western Reserve University

(no CV uploaded)

Kim Anderson, PhD
Case Western Reserve University | Institute for Functional Restoration

(no CV uploaded)

Knowledge to Action: Identification and Treatment of Vestibular Pathology in Acute Spinal Cord Injury through Knowledge Translation Framework

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Katherine Ackerman, PT, DPT, ATP
Kessler Institute for Rehabilitation

CV:
OMB No. 0925-0001 and 0925-0002 (Rev. 10/15 Approved Through 10/31/2018)
BIOGRAPHICAL SKETCH
Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.
NAME: Katherine Ackerman, PT, DPT, ATP
eRA COMMONS USER NAME (credential, e.g., agency login):
POSITION TITLE:
Clinical Specialist Physical Therapist, Spinal Cord Injury Unit, Kessler Institute for Rehabilitation

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)
INSTITUTION AND LOCATION DEGREE
(if applicable)
Completion Date
MM/YYYY
FIELD OF STUDY

Northeastern University, Boston, MA BS- Rehabilitation Science 05/2011 Physical Therapy

Northeastern University, Boston, MA

DPT- Doctorate of Physical Therapy
05/2012
Physical Therapy

NOTE: The Biographical Sketch may not exceed five pages. Follow instructions below.
A. Personal Statement
My primary focus throughout my career as a physical therapist has been in rehabilitation therapy, specifically in the acute inpatient rehabilitation setting. Although I have worked with all diagnoses within the hospital, a majority of my career has been devoted to working with individuals with spinal cord injuries. As a clinical specialist therapist, I serve as a leader for multiple programs on our spinal cord unit, am involved in research and provide ongoing mentorship to staff, neurologic residents and students. I have been fortunate enough to have the opportunity to present posters at American Spinal Injury Association Conference 2016 and 2017, Academy of Spinal Cord Injury Professionals 2015 and participate in an invite-only Knowledge Translation Summit at APTA Combined Sections Meeting in 2017. I continue to strive to improve my skills and knowledge and promote improved care of individuals following spinal cord injury through direct care to individuals, education, training and ongoing research.
B. Positions and Honors
Positions and Employment (Since 2012)
2012 – Present: Kessler Institute for Rehabilitation, West Orange, NJ

Professional Memberships
2012-Present: Member of American Physical Therapy Association , Neurology section member
2017 – 2018: American Spinal Injury Association member

Certification:
a. New Jersey State Licensure, Physical Therapy, 2012-Present

b. Assistive Technology Professional, RESNA, 2017-Present

Clinical License: New Jersey, License number: 40QA01465900
C. Contribution to Science
• Co-author of “Evaluate, Adapt, and Succeed in Seating and Positioning” for Rehab Management. Printed in March 2018.
• Co-Investigator of “Implementation of a Vestibular Screening Process to Screen for Benign Paroxysmal Positional Vertigo in an Inpatient Rehabilitation Facility” IRB #E-1003-18 (Ongoing).
• Presented 2 posters with abstracts published at American Spinal Injury Association (ASIA) Scientific Meeting 2017 in Albuquerque, NM.
• “Man’s Best Friend: Incorporating Assistance Canines into Acute Inpatient Rehabilitation with Individuals with Spinal Cord Injury”
• “Better Together? Functional Electrical Stimulation at the Trunk while Standing with Body Weight Support for Individuals with Incomplete Spinal Cord Injury”
• Selected by American Physical Therapy Association (APTA) to participate in invite only Knowledge Translation Summit for “Implementation of a Vestibular Screening Tool in Individuals with Acute to Subacute Traumatic Spinal Cord Injury” in San Antonio, TX (2016-2017).
• Accepted for poster presentation at APTA Combined Sections Meeting 2018 in New Orleans, LA (unable to attend).
• Presented poster with abstracts published at American Spinal Injury Association (ASIA) Scientific Meeting 2016 in Philadelphia, PA.
• “Can Behavior Management Techniques from Brain Injury Research be Applied to Individuals with Spinal Cord Injury and Co-occurring Traumatic Brain Injury?: A Case Study and Literature Review”
• Presented poster with abstracts published at Academy of Spinal Cord Injury Professionals (ASCIP) Meeting 2015 in New Orleans, LA.
• “Activity Based Therapy Principle with Harness Training during Inpatient Rehabilitation”
D. Additional Information: Research Support and/or Scholastic Performance
No financial support provided.

Research Support (Active):
Not Applicable

Allison Miller, PT, DPT, NCS
University of Delaware

CV:
BIOGRAPHICAL SKETCH
Provide the following information for the senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.
NAME: Miller, Allison Elizabeth
eRA COMMONS USER NAME (credential, e.g., agency login): N/A at this time
POSITION TITLE: PhD Student and Research Assistant
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)
INSTITUTION AND LOCATION DEGREE
(if applicable)
Completion Date
MM/YYYY
FIELD OF STUDY

University of Connecticut, Storrs, CT
University of Connecticut, Storrs, CT BS
DPT 05/2010
05/2013 Kinesiology
Physical Therapy
Kessler Institute for Rehabilitation Residency in Neurologic Physical Therapy 07/2016 Neurology

A. Personal Statement

After completing my Bachelors of Science in Kinesiology, I decided to pursue a Doctorate in Physical Therapy (DPT) at the University of Connecticut. It was here that my interest in research began, working under the mentorship of Dr. Richard Bohannon on developing a systematic review whose aim was to synthesize the literature in the area of physical therapist interventions to improve range of motion. Upon completion of my DPT training, I accepted a position at the Kessler Institute for Rehabilitation which provided me the opportunity to work with patients with various neurological conditions, including spinal cord injury, brain injury, stroke, and degenerative diseases. I was ultimately accepted into the Kessler Institute for Rehabilitation Residency in Neurologic Physical Therapy, where I accrued additional experience in the area of research training, including assisting with intervention implementation in a study that aimed to assess the impact of spatial neglect on movement patterns in individuals with stroke and traumatic brain injury. During this time, I also joined the Guideline Development Group for the Clinical Practice Guideline, entitled "Specific Training Parameters for Walking Recovery in Adults with Chronic Stroke, Spinal Cord Injury, and Traumatic Brain Injury". My involvement in this project has enhanced my abilities in the areas of critical appraisal and data management, with the results of the CPG due to be published in the fall of 2018. After receiving my Neurologic Clinical Specialist certification through the American Board of Physical Therapy Specialties, I continued to pursue opportunities related to research development, including becoming a primary investigator on a knowledge translation project at Kessler whose aim is to implement recommendations from a recent clinical practice guideline into the clinical setting in the area of screening for vestibular disorders in inpatients with acquired brain injury. Concurrently, I've also contributed to the methodology and manuscript writing of a TBI Model Systems project whose aim was to utilize variables within this database to predict the need for supervision at one-year post TBI, with the goal of publishing this manuscript in the winter of 2018. Having solidified my interest in pursuing a career in rehabilitation research, I have enrolled in the University of Delaware Biomechanics and Movement Sciences PhD program, under the mentorship of Dr. Darcy Reisman, and plan to begin my PhD training on August 28, 2018. After accruing nearly five years of clinical experience in conjunction with basic research training, I am confident that I will be a successful and productive PhD trainee, which will further set me up for success to continue with post-doctoral training. During my years as a treating clinician and through my experience in further investigating literature related to recovery of walking function, I have realized that a gap exists in understanding how motor learning principles relate to recovery of walking function after neurologic injury. Through my work in the guideline development group, it is also clear to me that careful and thoughtful development of rehabilitation clinical trials is critical to advance post-stroke walking recovery. Thus, my research will focus on how principles of motor learning impact processes related to recovery of walking capacity following stroke and the development of rehabilitation clinical trials to address this question. Pursuing this research path will aide in better understanding how clinicians may address recovery of walking function goals following stroke and better understand which patient characteristics respond to particular interventions.

B. Positions and Honors

Employment:

2013-2015 Staff Physical Therapist: Kessler Institute for Rehabilitation
2015-2016 Neurologic Physical Therapy Resident at the Kessler Institute for Rehabilitation
2015-2016 Proficient Physical Therapist: Kessler Institute for Rehabilitation
Spring 2016 Teaching Assistant: Rutgers University, Neurologic Examination and Treatment
2016-2017 Senior Physical Therapist: Kessler Institute for Rehabilitation
2017-2018 Clinical Specialist Physical Therapist: Kessler Institute for Rehabilitation
August 2018- PhD Student and Research Assistant: University of Delaware

Honors:

April 2017 Service Award: Kessler Institute for Rehabilitation
April 2018 Service Award: Kessler Institute for Rehabilitation
February 2018 Employee of the Month: Kessler Institute for Rehabilitation
February 2018 Academy of Neurologic Physical Therapy Early Career Professional Award

2018-2023 Unidel Distinguished Graduate Scholars Award

Professional Memberships and Certifications:

2015 - Member: American Physical Therapy Association, Research and Neurology Sections
June 2017 - Neurologic Clinical Specialist: American Board of Physical Therapy Specialties

C. Contributions to Science

Publications:

Hornby, TG; Reisman, DS; Ward, I; Scheets, P; Miller, A; Haddad, D. Clinical Practice Guideline: Specific Training Parameters for Walking Recovery in Adults with Chronic Stroke, Spinal Cord Injury, and Traumatic Brain Injury. In progress

Ward, I; Lequerica, A; Resnick, A; Miller, A; Donnelly, E; Mamone, J; Migliaccio, S; Collins, JH; King, M. Predicting the Need for Supervision at One-year Post Traumatic Brain Injury: A Traumatic Brain Injury Model Systems Study. In progress

Presentation:

October 27, 2015. Brain Injury Case Presentation. Seton Hall University. East Orange, NJ.

November 18, 2015. Motor Learning Case Presentation. Rutgers University. Newark, NJ.

December 1, 2015. Spinal Cord Injury Case Presentation. Seton Hall University. East Orange, NJ.

February 24, 2016. Prognostic Indicators for Anoxic Brain Injury. Neurologic Physical Therapy Professional Education Consortium (presented in webinar format).

March 30, 2016. Cerebellar Dysfunction: A Patient Case. Neurologic Physical Therapy Professional Education Consortium (presented in webinar format).

April 12, 2016. Seton Hall University CILEHS Symposium. Expert panel member. East Orange, NJ.

June 2-3, 2017. Brain Injury Rehabilitation: Select Medical divisional presentation. West Gables, Florida.

July 18, 2017. Implementation of a Comprehensive Interdisciplinary Behavior Management Program in an Inpatient Rehabilitation Facility to Enhance Patient Outcomes and Staff Safety. Arlington, VA.

February 22, 2018. Clinical Practice Guidelines for Improving Locomotor Function Following Acute-Onset Neurological Injury. APTA Combined Sections Meetings. New Orleans, LA.

D. Research Support

Irene Ward, PT, DPT, NCS
Kessler Institute for Rehabilitation

CV:

BIOGRAPHICAL SKETCH
Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.
NAME: Ward, Irene
eRA COMMONS USER NAME (credential, e.g., agency login):
POSITION TITLE: Brain Injury Clinical Research Coordinator
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)
INSTITUTION AND LOCATION DEGREE
(if applicable) Completion Date
MM/YYYY FIELD OF STUDY
Rutgers University, New Brunswick, NJ BS 01/1995 Biological Sciences
Temple University, Philadelphia, PA MPT 05/2001 Physical Therapy
Temple University, Philadelphia, PA DPT 08/2003 Physical Therapy
A. Personal Statement
I have the expertise, training and resources to successfully carry out my responsibilities as a Brain Injury Clinical Research Coordinator. I am a board certified neurologic physical therapist with 17 years of combined experience as a clinician, researcher, and clinical administrator. I have a successful record of administering projects (e.g., recruiting, staffing, data collection and dissemination), collaborating with other researchers, and producing several reports that were presented at national conferences. Additionally, I have worked on several projects through the Academy of Neurologic Physical Therapy. Most notably, I served as a guideline developer for a clinical practice guideline on locomotor retraining for individuals with chronic stroke, spinal cord injury and traumatic brain injury.

B. Positions and Honors
Positions and Employment
2001-2002 Staff Physical Therapist, Outpatient Unit, New York University Langone Medical Center, The Rusk Institute of Rehabilitation Medicine, New York, NY
2002-2005 Senior Physical Therapist, Adult Rehabilitation Unit New York University Langone Medical Center, The Rusk Institute of Rehabilitation Medicine, New York, NY
2009-2011 Clinical Instructor, Department of Rehabilitation Medicine, New York University School of Medicine, New York, NY
2005-2011 Clinical Specialist, Adult Inpatient Unit, New York University Langone Medical Center, The Rusk Institute of Rehabilitation Medicine, New York, NY
2011- Brain Injury Clinical Research Coordinator, Kessler Institute for Rehabilitation, West Orange, NJ
2012- Clinical Assistant Professor, Department of Physical Medicine and Rehabilitation, Rutgers-New Jersey Medical School

Other Experience and Professional Memberships
1998- Neurology Section Member, American Physical Therapy Association
2006- Board Certified Neurologic Clinical Specialist through the American Board of Physical Therapy Specialist
2011-2013 Neurology Section, American Physical Therapy Association, Member, Traumatic Brain Injury EDGE Taskforce
2012- Neurology Section, American Physical Therapy Association, Co-leader and developer of the Regional Acute Stroke Course
2013- Neurology Section, American Physical Therapy Association, Evidence Based Document Development Taskforce
2014- Neurology Section, American Physical Therapy Association, Member, Evidence Based Document Advisory Committee, (Co-chair as of 12/2016)
2014- Kessler Institute, Member, Research Review Committee
2015- Neurology Section, American Physical Therapy Association, Development Team Member, Clinical Practice Guideline on Specific Training Parameters for Walking Recovery in Adults with Chronic Stroke, Spinal Cord Injury and Traumatic Brain Injury.

Honors
2003 Certificate of Appreciation for Special Educational Contributions, NYU Medical Center, New York, NY

2004 Excellence Award, NYU Medical Center, New York, NY
2005 Team Excellence Award, NYU Medical Center, New York, NY
2006 Award for Education, Physical Therapy Department, NYU Medical Center, New York, NY
2006 Team Excellence Award, NYU Medical Center, New York, NY
2007 Directors Award, Physical Therapy Department, NYU Medical Center, New York, NY
2011 Excellence Award, NYU Medical Center, New York, NY
2016 Distinguished Service Award, Kessler Institute for Rehabilitation, West Orange, NJ

C. Contribution to Science
1. Improving Mobility in Individuals with Brain Injury. My research interest is in investigating mobility issues in individuals with brain injury and how that impacts their disability. We found that individuals with brain injury are taking fewer steps in the community compared to published normative data. In this project, I administered the gait speed and endurance measures as well as collected data from the activity monitor. Using our local TBI Model Systems database, we examined the impact of mobility on community participation. We also found that individuals dependent on someone's assistance with walking were less likely to leave their homes and engage in community-based activities. They also reported higher rates of disability and this may have contributed to their self-reported lower levels of life satisfaction.

a. Hampton S, Ward I, Donovan J, Jasey N, Kirshblum s, Oh-Park M. Monitoring community ambulation for individuals with neurologic disorders in a spasticity management clinic: feasibility study. [abstract]. Association of Academic Physiatrists Annual Conference 2016.
b. Ward I, Donnelly E, Lequerica A, Jasey N, Chiaravalloti N. Effect of Mobility on Community Participation at 1 year Post-Injury in Individuals with Traumatic Brain Injury (TBI). [abstract]. American Physical Therapy Association Combined Sections Meeting 2016.
2. Facilitating Clinician Use of Optimal Outcome Measures. Another line of my work is to help clinicians and researchers in choosing appropriate measures. I was appointed to a national task force through the Neurology Section of the American Physical Therapy Association. We were responsible for formulating recommendations on the use of outcome measures in brain injury rehabilitation across the continuum of clinical settings and research. This process required a systematic appraisal of outcomes literature across the ICF domains of body function, activity and participation.
a. Yorke A, Ward I, Vora S, Combs S, Johnson TK. Measurement characteristics and clinical utility of the dizziness handicap inventory among individuals with vestibular disorders. Archives of Physical Medicine and Rehabilitation. 2013;94:2313-4.
b. Ward I, Roth H, Kahn J, Tseng E, Tappan R. Measurement characteristics and clinical utility of the High-level Mobility Assessment Tool among individuals with traumatic brain injury. Archives of Physical Medicine and Rehabilitation. 2014;95:2229-30.
c. McCulloch K, DeJoya A, Donnelly E, Hays K, Johnson TK, Nrider C, Roth H, Saliga S, Ward I. Outcome measures for persons with moderate to severe traumatic brain injury: recommendations from the American Physical Therapy Association Academy of Neurologic Physical Therapy TBI EDGE Task Force. JNPT. 2016;40:269-280.

3. Development and Implementation of Projects that Raise Awareness in Brain Injury. Since joining the Kessler Institute for Rehabilitation as the Brain Injury Clinical Research Coordinator, I have assisted in the development and implementation of numerous clinical research projects on brain injury, with staff within the Rehabilitation Hospital and within the Kessler Foundation. We are raising awareness of brain injury and investigating rehabilitation outcomes in brain injury. We found spatial neglect has an adverse impact and that cranioplasty may improve the rate of recovery in individuals with decompressive craniectomy due to brain injury. Patients with TBI were found to have unusually high levels of ammonia which may impede cognitive and motor recovery. Lastly, we identified a need to increase the level of concussion knowledge in parents of high school student athletes. We are working towards publication in each project and anticipate that it will have an impact on the clinical care of individuals with brain injury.
a. Bapineedu R, Frisina P, Lercher K, Ward I. Hyperammonemia in Patients with Brain Injury [abstract]. Journal of Head Trauma Rehabilitation. 2012:September-October;E8-E9.
b. Lin E, Jasey N, Ward I, Lequerica A, Chiaravalloti N. Understanding the Level of Concussion Knowledge in High School Sports in New Jersey [abstract]. Journal of Head Trauma Rehabilitation. 2013:September-October;E61.
c. Chen P, Ward I, Khan U, Yan L, Kimberly Hreha. Spatial neglect hinders success of inpatient rehabilitation

in individuals with traumatic brain injury: a retrospective study. Neurorehabilitation and Neural Repair. 2016;30:451-460.
d. Jasey N, Ward I, Lequerica A, Chiaravalloti N. The therapeutic value of cranioplasty in individuals with brain injury [abstract]. American Journal of Physical Medicine and Rehabilitation. 2015
e. Greiss C, Yonclas P, Jasey N, Lequerica A, Ward I, Chiaravalloti N, Felix G, Dabaghian L, Livingston D. Presence of a dedicated trauma center physiatrist improves functional outcomes following traumatic brain injury. J Trauma Acute Care Surg. 2015;80(1):70-75.
4. Use of Animal Models to Improve Knowledge of Motor Function. Research in my earlier career used animal models to investigate impaired extremity strength and function following repetitive use injury. I performed histological work on the samples. Gorzelany was my name before changed to Ward.
a. Barbe MF, Barr AE, Gorzelany I, et al. Chronic repetitive reaching and grasping results in decreased motor performance and widespread tissue response in a rat model of MSD. J Orthop Res. 2003;21:167-176.

b. Barr AE, Safadi FF, Gorzelany I, et al. Repetitive, negligible force reaching in rats induces pathological overloading of upper extremity bones. J Bone Miner Res. 2003;18:2023-2032.

D. Research Support
Ongoing Research Support
MR130466 D Krch and K Nolan (PI) 9/30/2014 - 8/31/2018
Department of Defense
“Improving Balance in TBI using a Low-Cost Customized Virtual Reality Rehabilitation Tool”
This double blind randomized clinical trial will evaluate the efficacy of a virtual reality based treatment for balance dysfunction after TBI.
Role: Co-Investigator

[No Grant Number] Hornby (PI) 6/1/2015-7/1/2018
American Physical Therapy Association
“Clinical Practice Guideline: Specific Training Parameters for Walking Recovery in Adults with Chronic Stroke, Spinal Cord Injury and Traumatic Brain Injury”
The goal of the proposed Clinical Practice Guideline (CPG) is to provide concise recommendations, supported by a systematic summary of the available literature, of the efficacy of specific interventions to improve walking ability in patients at least 6 months following stroke, motor incomplete spinal cord injury (SCI) and traumatic brain injury (TBI).
Role: Methodologist, Core member of the work group.

[

25OH Vitamin D levels and Leg Lean Mass Are Positively Associated with Bone Geometry at the Knee in Men with Chronic SCI

Wednesday, April 03, 2019 05:50 PM - 06:50 PM

Ricardo Battaglino, PhD
Uc Denver

CV:

Morse LR, Sudhakar S, Tun C, Lazzari A, Garshick E, Zafonte R, Battaglino RA. (2013) Sclerostin: A candidate biomarker of SCI-induced osteoporosis. Osteoporos Int. 24(3): 961-968.

Saltzman JW, Battaglino R, Salles L, Jha P, Sudhakar S, Garshick E, Stott HL, Zafonte R, Morse LR. (2013). B-cell maturation antigen, a proliferation-inducing ligand, and B-cell activation factor are candidate mediators of spinal cord injury-induced autoimmunity. J. Neurotruama 30(6): 434-440.

Lucisano MP, Nelson-Filho P, Morse L, Battaglino R, Watanabe PC, da Silva RA, da Silva LA. Radiodensitometric and DXA analyses for the measurement of bone mineral density after systemic alendronate therapy. Braz Oral Res. 2013 May-Jun;27(3):252-7. PMID: 23739782

Zamarioli A, Battaglino RA, Morse LR, Sudhakar S, Maranho DA, Okubo R, Volpon JB, Shimano AC. Standing frame and electrical stimulation therapies partially preserve bone strength in a rodent model of acute spinal cord injury. Am J Phys Med Rehabil. 2013 May;92(5):402-10 PMID: 23478455

Doherty AL, Battaglino RA, Donovan J, Gagnon D, Lazzari AA, Garshick E, Zafonte R, Morse LR. Adiponectin is a candidate biomarker of lower extremity bone density in men with chronic spinal cord injury. J Bone Miner Res. 2013 Jun 20. PMID: 23787489

Choi E, Carruthers K, Zhang L, Thomas N, Battaglino RA, Morse LR, Widrick JJ. Concurrent muscle and bone deterioration in a murine model of cancer cachexia. Physiol Rep. 2013 Nov;1(6): PMID: 24400146

Saltzman JW, Battaglino R, Stott H, Morse LR. Neurotoxic or Neuroprotective? Current Controversies in SCI-Induced Autoimmunity. Curr Phys Med Rehabil Reports. 2013 Sep;1(3). PMID: 24416711

Liang Ye, Leslie R Morse, Ricardo A Battaglino. Snx10: a newly identified locus associated with human osteopetrosis. IBMS BoneKEy (2013) 10, Article number: 421

Tan C, Battaglino R, Doherty A, Gupta R, Lazzari A, Garshick E, Zafonte R, Morse LR. (2014) Adiponectin is Associated with Bone Strength and Fracture History in Paralyzed Men with Spinal Cord Injury. Osteoporos Int. 2014 Nov;25(11):2599-607.

Ye L, Morse LR, Zhang L, Sasaki H, Mills J, Odgren P, Sibbel G, Zamarioli A, Battaglino RA. Osteopetrorickets due to Snx10 deficiency in mice results from both failed osteoclast activity and loss of gastric acid-dependent calcium absorption. PLoS Genet. 2015 Mar 26;11(3):e1005057.

Xu Y; Morse LR; Bezerra da Silva R; Wang D, Battaglino RA. A Short Report: PAMM, a Novel Antioxidant Protein, Induced by Oxidative Stress. Redox Biol. 2015 Dec;6:446-453. PMID: 26402163.

Guo F, He H, Fu ZC, Huang S, Chen T, Papasian CJ, Morse LR, Xu Y, Battaglino RA, Yang XF, Jiang Z, Xin HB, Fu M. Adipocyte-derived PAMM suppresses macrophage inflammation by inhibiting MAPK signalling. Biochem J. 2015 Dec 15;472(3):309-18. doi: 10.1042/BJ20150019. Epub 2015 Oct 5. PMID: 26438880

Sasaki H, Hirai K, Men Martins C, Furusho H, Battaglino R, Hashimoto K. Interrelationship between Periapical Lesion and Systemic Metabolic Disorders. Curr Pharm Des. Curr Pharm Des. 2016 Feb[Epub ahead of print]. PMID:

26881444

Morse LR, Nguyen N, Battaglino RA, Guarino AJ, Gagnon D, Zafonte R, Garshick E. Wheelchair use and Lipophilic Statin Medications May Influence Bone Loss in Chronic Spinal Cord Injury: Findings from the FRASCI Study. Osteoporos Int. 2016 Jul 13. [Epub ahead of print]. PMID: 27412619

Park AJ, Battaglino RA, Nguyen N, Morse LR. Associations between lean mass and leptin in men with chronic spinal cord injury: results from the FRASCI-muscle study. Accepted, PLOS One. 2018

Morse LR, Coker J, Battaglino R. Statins and Bone Health: A Mini Review. Actual. Osteol 14(1) :31:35, 2018

Nguyen Nguyen, MPH
Craig Hospital

(no CV uploaded)

Karen Troy, PhD
Wpi

(no CV uploaded)

Leslie Morse, DO
Craig Hospital

(no CV uploaded)

Effectiveness of a Powered Exoskeleton Developed in Taiwan for Walking Training in Spinal Cord Injury - a Preliminary Report

Thursday, April 04, 2019 03:45 PM - 04:45 PM

Yun-An Tsai, MD
Taipei Veterans General Hospital

CV:

Functional improvement in chronic human spinal cord injury: Four years after acidic fibroblast growth factor.
Ko CC, Tu TH, Wu JC, Huang WC, Tsai YA, Huang SF, Huang HC, Cheng H.
Sci Rep. 2018 Aug 23;8(1):12691.

Cognitive and motor dual task gait training improve dual task gait performance after stroke - A randomized controlled pilot trial.
Liu YC, Yang YR, Tsai YA, Wang RY.
Sci Rep. 2017 Jun 22;7(1):4070.

Treatment of Spinocerebellar Ataxia With Mesenchymal Stem Cells: A Phase I/IIa Clinical Study.
Tsai YA, Liu RS, Lirng JF, Yang BH, Chang CH, Wang YC, Wu YS, Ho JH, Lee OK, Soong BW.
Cell Transplant. 2017 Mar 13;26(3):503-512.

The effects of anodal transcranial direct current stimulation and patterned electrical stimulation on spinal inhibitory interneurons and motor function in patients with spinal cord injury.
Yamaguchi T, Fujiwara T, Tsai YA, Tang SC, Kawakami M, Mizuno K, Kodama M, Masakado Y, Liu M.
Exp Brain Res. 2016 Jun;234(6):1469-78

The influence of shoulder pain on functional limitation, perceived health, and depressive mood in patients with traumatic paraplegia.
Wang JC, Chan RC, Tsai YA, Huang WC, Cheng H, Wu HL, Huang SF.
J Spinal Cord Med. 2015 Sep;38(5):587-92

Long-term sacral magnetic stimulation for refractory stress urinary incontinence.
Tsai PY, Wang CP, Hsieh CY, Tsai YA, Yeh SC, Chuang TY.
Arch Phys Med Rehabil. 2014 Dec;95(12):2231-8.

Repairing the ventral root is sufficient for simultaneous motor and sensory recovery in multiple complete cervical root transection injuries.
Lin YL, Chang KT, Lin CT, Tsai MJ, Tsai YA, Lee YY, Chien SC, Huang WC, Shih YH, Cheng H, Huang MC.
Life Sci. 2014 Jul 25;109(1):44-9.

Quantitative measures of functional outcomes and quality of life in patients with C5 palsy.
Chang PY, Chan RC, Tsai YA, Huang WC, Cheng H, Wang JC, Huang SF.
J Chin Med Assoc. 2013 Jul;76(7):378-84.

Ting-Yu Tu, PT
Taipei Veterans General Hospital

(no CV uploaded)

Yu-Chen Lan, PT, MS
Taipei Veterans General Hospital

(no CV uploaded)

Tzu-Ching Chuang, OT
Taipei Veterans General Hospital

(no CV uploaded)

Ting-Yun Wang, PT, PhD
Free Bionics Inc.

(no CV uploaded)

Shih-Fong Huang, MD
Taipei Veterans General Hospital

(no CV uploaded)

Virtual Reality in Rehab for those with Spinal Cord Injury

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

James Gardner, OTR
University of Utah Hospital

CV:
Presentations, Invited Lectures
I have had the honor of presenting around the country, promoting improved assistive technology access in hospitals and teaching professionals new ways to utilize technology for people with disabilities. Presentations have covered technology access for people throughout the recovery spectrum: from communication in acute stages, to high level access solutions in the hospital and at home and work, to the utilization of wearable technologies for those with disabilities.
2013 Utah Occupational Therapy Association
-Accessing Technology Across the Disability Spectrum
2013 American Occupational Therapy Association
-"Continue to Shopping Cart": an occupation-based intervention utilizing an online shopping simulation
2014 International Technology and Persons with Disability Conference CSUN
-The ACT Program: A Pilot Program for Bringing AAC to Acute Hospital Floors
2014 American Spinal Cord Injury Professionals Conference
-Assistive Communication Team Pilot Program: Bringing AAC to Acute Floors
2014 Rehab Engineering Society of North America
-Addressing the More Challenging Needs: Hands and Eyes-on With the Latest Accessibility Hardware and Software for Computer, Phones and Homes
2015 Rehab Engineering Society of North America
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2015 American Spinal Cord Injury Professionals Conference
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2015 Association of Academic Physiatrists
-Affective Assistive Technology Delivery Across the Recovery Spectrum
2015 Assistive Technology Industry Association
-Understanding Wearables: Harnessing the Power of Wearable Technologies for Those with High Level Disabilities
2016 Rehab Engineering Society of North America
-Addressing the More Challenging Needs: Accessibility Options for High Level Users
2016 Assistive Technology Industry Association
-Addressing the More Challenging Needs: Accessibility Options for High Level Users
2016 American Spinal Cord Injury Professionals Conference
-The Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People with Spinal Cord Injury
2017 Rehab Engineering Society of North America
-Customizable Computer Control Schemes in Adaptive Recreation: From Screen to Sail and Snow
-The Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People of All Levels of Functioning "
2017 American Spinal Cord Injury Association Conference
-Hands on with Hands-free Technology Access, Solutions for those with High-level Injuries

2018 American Occupational Therapy Association
-Brain Gym: Creating a Wellness-Based Assistive Technology Community Access Program for People of All Levels of Functioning
-The ACT Program: An Interdisciplinary Program for Bringing Early Communication and Occupational Engagement to Acute Hospital Floors

2018 Rehab Engineering Society of North America
-Continuous Cloud-based Power Wheelchair Monitoring of Mobility and Seating
-Hands-free Technology Access from A to T: A Comprehensive Discussion of High-Level, High-Efficiency, Hands-free Access

A Neuroprosthesis for Hand Grasp and Postural Control after Cervical Spinal Cord Injury: An Update

Wednesday, April 03, 2019 08:00 AM - 09:30 AM

Anne Bryden, MA, OTR/L
Case Western Reserve University | Institute for Functional Restoration

CV:
B. Positions and Honors

Director of Clinical Trials and Research May 2017 - Present
Institute for Functional Restoration / Case Western Reserve University
Cleveland, Ohio 44106

Research Manager March 2011 – May 2017
Case Western Reserve University / The Cleveland FES Center
Cleveland, Ohio 44106

Clinical Rehabilitation Specialist July 2004 – February 2011
Case Western Reserve University / The Cleveland FES Center
Cleveland, Ohio 44106

Research Health Science Specialist February 1993 – July 2004
Department of Veterans Affairs / The Cleveland FES Center
Cleveland, Ohio 44106

Occupational Therapist July 1991 - February 1993
Saint Vincent Charity Hospital & Health Center
Cleveland, Ohio 44115

Graduate Student Appreciation Award
Case Western Reserve University College of Arts and Sciences – May 2018

Medicine, Society and Culture Travel Award
Case Western Reserve University Department of Bioethics – May 2017

Academy of Spinal Cord Injury Professionals Therapy Leadership Council
Distinguished Clinical Award – September 2015

Neilsen Foundation Allied Health Professional Award of ASIA
May 2015

Case Western Reserve University Weatherhead School of Management
Women in Leadership Certificate – June 2012

Case Western Reserve University
Women Staff Leadership Development Initiative – Class of 2011-2012

Professional Memberships
American Academy of Spinal Cord Injury Professionals
American Spinal Injury Association
International Spinal Cord Society
American Occupational Therapy Association
American Sociological Association

C. Contributions to Science

1. Assessment of Functional Outcomes Following Innovative Interventions to Restore Function after Spinal Cord Injury (SCI)

Historical Background I have more than twenty years of experience measuring the impact of innovative interventions such as functional electrical stimulation (FES) neuroprosthetic systems and tendon transfer surgery in people with tetraplegia. These interventions impact multiple domains such as physiological functioning, activity performance and community participation requiring specialized knowledge in measuring their effects. Central Findings Neuroprosthetic systems and tendon transfers provide people with SCI more independence in performing activities of daily living in both their personal environments and out in the community. Participant satisfaction levels after these interventions are high. Application of Findings Neuroprosthetics and tendon transfer procedures provide function that is not otherwise attainable for this highly disabled population. Careful assessment of outcomes is critical to detect improvements and justify wider implementation of these interventions. Role I lead the functional assessment program for upper extremity neuroprosthetics and tendon transfers at The Cleveland FES Center. It is my responsibility to choose and implement the appropriate functional measures to detect outcomes.

Bryden AM, Bezruczko N. An Activity of Daily Living Measure for Spinal Cord Injury. Journal of Applied Measurement 12(3):279-297, 2011

Bryden AM, Kilgore KL, Keith MW, Peckham PH. Assessing Activity of Daily Living Performance after Implantation of an Upper Extremity Neuroprosthesis. Topics in Spinal Cord Injury Rehabilitation 14(3):37-53, 2008.

Bryden AM, Kilgore KL, Kirsch RF, Memberg WD, Peckham PH, Keith MW. An Implanted Neuroprosthesis for High Tetraplegia. Topics in Spinal Cord Injury Rehabilitation 2005;10(3)38-52.

Bryden AM, Wuolle KS, Murray PK and Peckham PH. The Utilization and Perceived Outcomes of Upper Extremity Surgical Reconstruction in Persons with Tetraplegia at Model Spinal Cord Injury Systems. 2004 Spinal Cord 42:169-176.

Wuolle KS, Bryden AM, Peckham PH, Murray PK and Keith MW. Satisfaction with Upper Extremity Surgery in Individuals with Tetraplegia. Arch Phys Med Rehabil 2003 84(8):1145-9.

Peckham PH, Kilgore KL, Keith MW, Bryden AM, Bhadra N, Montague FW. An Advanced Neuroprosthesis for Restoration of Hand and Upper Arm Control Using an Implantable Controller. J Hand Surg [Am] 2002 Mar;27(2):265-76

Bryden AM, Memberg WD and Crago PE. Functional and Physiological Evaluation of Electrically Stimulated Elbow Extension in Persons with C5 / C6 Tetraplegia. Arch Phys Med Rehabil 2000;81:80-88.

Wuolle KS, Van Doren CL, Bryden AM, Peckham PH, Keith MW, Kilgore KL and Grill JH. Satisfaction and USAge of a Hand Neuroprosthesis. Arch Phys Med Rehabil 1999;80:206-13.

Kilgore KL, Peckham HP, Keith MW, Thrope GB, Wuolle KS, Bryden AM, and Hart RL. “An Implanted Upper Extremity Neuroprosthesis: Follow up of Five Patients”. J Bone Joint Surg 1997; 79A: 533-41

2. Establishing Clinical Assessment Standards for Upper Limb Management in Tetraplegia

Historical Background In my experience leading the measurement of functional outcomes of neuroprosthetic systems and other interventions, I have collaborated with other national and international experts in SCI rehabilitation. These collaborations have allowed me to contribute to the development of national and international clinical standards for upper limb management in tetraplegia. Central Findings I have contributed to book chapters and journal articles focused on assessment and treatment of upper limb dysfunction, including the International SCI Upper Extremity Basic Data Set. I am currently developing a manualized assessment of lower motor neuron damage that can be implemented by therapy clinicians, and have been invited to teach the process at two rehabilitation centers in Canada. Application of Findings Standardized assessments contribute to a shared language across clinicians and improve the overall assessment and care of people with SCI. The ability to detect lower motor neuron damage in people with SCI allows more targeted and appropriate intervention and identifies potential risks for additional dysfunction from problems such as contracture. Role I lead the effort to improve and refine existing outcome measures for tetraplegia. I also lead the effort to make lower motor neuron testing a standard of care by educating clinicians and participating in national and international work groups focused on rehabilitation outcomes measurement.

Bryden AM, Kilgore KL, Nemunaitis GA. Advanced Assessment of the Upper Limb in Tetraplegia: A Three Tiered Approach to Characterizing Paralysis. Topics in Spinal Cord Injury Rehabilitation 2018;24(3)206-216.

Bryden AM, Hoyen HA, Keith MW, Mejia M, Kilgore KL, Nemunaitis GA. Upper Extremity Assessment in Tetraplegia: The Importance of Differentiating between Upper and Lower Motor Neuron Paralysis. Arch Phys Med Rehabil. 97(6 Suppl 2):S97-104, 2016.
Bryden AM, Kilgore KL, Lind BB and Yu DT. Triceps Denervation as a Predictor of Elbow Flexion Contractures in C5 and C6 Tetraplegia. Arch Phys Med Rehabil 2004;85(11)1880-1885.
Mulcahey MJ, Betz RR, Bryden A, Calhoun C, LaVelle W, Schmidt-Read M, Stiefbold G. Orthotics. In: Harvinder Singh Chhabra (ed). ISCoS Textbook on Comprehensive Management of Spinal Cord Injury. Wolters Kluwer:New Delhi, Chapter 36, pp. 558-579.
Bryden AM, Peljovich AE, Hoyen HA, Nemunaitis G, Kilgore KL, Keith MW. Surgical Restoration of Arm and Hand Function in People with Tetraplegia. Topics In Spinal Cord Injury Rehabilitation 18(1):43-49, 2012.
Biering-Sorensen F, Bryden AM, Curt A, Friden J, Harvey LA, Mulcahey MJ, Popovic MR, Prochazka A, Sinnott KA, Snoek G. International Spinal Cord Injury Upper Extremity Basic Data Set. Spinal Cord, Advance Online:1-6, 2014.
Bryden AM, Sinnott KA, Mulcahey MJ. Innovative Strategies for Improving Upper Extremity Function in Tetraplegia and Considerations in Measuring Functional Outcomes. Topics in Spinal Cord Injury Rehabilitation 2005;10(4)75-93.
Dunn JA, Sinnott KA, Bryden AM, Connolly SJ, Rothwell AG. Measurement Issues Related to Upper Limb Interventions in Persons Who Have Tetraplegia. Hand Clin 24:161–168, 2008.
Peljovich AE, Bryden AM, Malone K, Hoyen HA, Hernandez-Gonzalez E, Keith MW. Rehabilitation of the Hand and Upper Extremity in Tetraplegia. In: Skirven TM, Osterman AL, Fedorczyk JM, Amadio PC, eds. Rehabilitation of the Hand and Upper Extremity. 6th ed. Philadelphia, PA:Elsevier Mosby; 2011.

3. Investigation of Human Rights, Disability and Technology
Historical Background As an occupational therapist and sociologist I am interested in the utility of human rights discourse to frame the barriers and limitations experienced by people with disabilities in attaining services and technology to improve quality of life. An important element is identifying economic, social and cultural rights for people with disabilities, rights that are frequently overlooked in mainstream discussions of human rights. Another element concerns the perspectives of health professionals with whom people with disabilities interact. Health professionals rarely speak the language of human rights, yet often express frustration at the socio-structural limitations in providing quality care and the barriers experienced by their patients. I am currently conducting qualitative research supported by the Science and Human Rights Coalition of the American Association for the Advancement of Science investigating perspectives of health professionals specializing in SCI medicine regarding the barriers faced by the people they treat and whether invoking international human rights law can have a positive impact on their quality of life. I am also conducting longitudinal interviews with people living with SCI about the barriers experienced while navigating both health and social resources following their injury. Central Findings Initial results indicate 1) significant knowledge about and concern for social barriers experienced by people with SCI, 2) reduced knowledge about human rights discourse and potential utility in realizing economic, social and cultural rights for people with SCI, and 3) strong interest in learning more about international human rights law as a tool for improving access to services and technology by people with SCI. Early interviews with people living with SCI indicate significant difficulty in finding clear cut information about resources for living independently in the community, including in-home attendant care, returning to work, and access to research and technology that can provide greater independence. Application of Findings Documenting how people with disability navigate resources (including gaps and barriers) and measuring the human rights perspectives of health professionals can better inform how international human rights law may influence increased realization of the resources needed by people with disabilities for societal integration. Role I am the lead investigator for both projects, including conducting the interviews and analysis.

Human Rights, Technology, and Disabilities. Anne Bryden and Brian Gran. In preparation for submission to Human Rights Quarterly. Targeted for submission July 2018.

Human Rights and Access to Technology by People with Spinal Cord Injury. Panel session, Anne M. Bryden, Brian Gran, Kimberly D. Anderson-Erisman, Jennifer French and Megan Moynahan. 2018 Annual Meeting of The American Spinal Injury Association. Rochester, MN. 5/2/2018.

Implanted Neuroprosthetics, Innovative Upper Limb Evaluation and the Human Rights of People with Tetraplegia to Benefit from Technology. Invited lecture at the Shirley Ryan Ability Lab. Chicago, IL.

10/9/2017. (http://planitpurple.northwestern.edu/event/521839)

Human Rights, Technology, and Disabilities. Disability and Social Life session. Anne M. Bryden. 2017 Annual Meeting of the American Sociological Association. Montreal, Quebec, Canada. 8/14/2017.

Kevin Kilgore, PhD
Metrohealth Medical Center | Case Western Reserve University | Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Harry Hoyen, MD
Metrohealth Medical Center | Case Western Reserve University

(no CV uploaded)

Michael Keith, MD
Metrohealth Medical Center | Case Western Reserve University

(no CV uploaded)

Kyle Chepla, MD
Metrohealth Medical Center | Case Western Reserve University | Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Lisa Lombardo, MPT
Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Ronald Hart, MS
Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Michael Miller, MS
Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Ronald Triolo, PhD
Case Western Reserve University | Louis Stokes Cleveland Va Medical Center | Metrohealth Medical Center

(no CV uploaded)

Gilles Pinault, MD
Louis Stokes Cleveland Va Medical Center

(no CV uploaded)

Gregory Nemunaitis, MD
Metrohealth Medical Center | Case Western Reserve University

(no CV uploaded)

P. Hunter Peckham, PhD
Case Western Reserve University | Institute for Functional Restoration | Metrohealth Medical Center

(no CV uploaded)

Testing Robustness of Promising FDA Approved Neuro-Protective Drug Candidates in a Cervical Hemi-Contusion Model of Rats

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Ward Plunet, PhD
Icord, Ubc

(no CV uploaded)

Jie Liu, MD
Icord, Ubc

(no CV uploaded)

Nicole Janzen, BSc
Icord, Ubc

(no CV uploaded)

Adrienne Behrens, BSc
Icord, Ubc

(no CV uploaded)

Suhana Kamakari, BSc
Icord, Ubc

(no CV uploaded)

Yuan Jiang, BSc
Icord, Ubc

(no CV uploaded)

Peggy Assinck, PhD
Icord, Ubc

(no CV uploaded)

Kathleen Kolehmainen, BSc
Icord, Ubc

(no CV uploaded)

Oscar Seira, PhD
Icord, Ubc

(no CV uploaded)

Lowell McPhail, PhD
Icord, Ubc

(no CV uploaded)

Wolfram Tetzlaff, Dr. med. PhD
Icord, Ubc

CV:

BIOSKETCH
Name Position Title
Wolfram TETZLAFF Professor, M.D., Ph.D.
John and Penny Ryan BC-Leadership Chair in for Spinal Cord Research

Education/Training.
Institution and Location Degree
(if applicable) Year(s)
(MM/YY) Field of Study
University of Essen MD 1973-1979 Medicine
University of Bochum Dr. med. (thesis) 1979-1981 Neuroanatomy
Max-Planck-Institute for Psychiatry Post doc 1982-1985 Neuroscience
University of Calgary Ph.D. 1986-1989 Neuroscience
PERSONAL STATEMENT: I am a full professor in the Department of Zoology and I was able to buy out my teaching duties due to my role as Director of ICORD the International Collaboration on Repair Discoveries at the University of British Columbia. As such, I am supported by two high level administrators (Dr. McPhail and Cheryl Niamath) and thus my role as Director takes only about 30% of my time. This leaves me with about 9 months of time for spinal cord injury research including the role of endogenous stem cells and demyelination & remyelination. I supervise 7 graduate students, one PDF and 4 technical stuff and serve on about a dozen of graduate student committees. In addition, I perform reviewing for journals and granting agencies and serve on several granting committees (study sections) and perform numerous career assessments for promotion and tenure.
A. APPOINTMENTS
1989-1992 Assistant Prof., University of Calgary, Dept. of Anatomy
1992-1995 Associate Prof., University of Ottawa, Dept. of Physiology
1995-2000 Assoc. Prof., University of British Columbia, Dept. of Zoology
1995 Cross-appointed to the Department of Surgery - Neurosurgery
2000-present Professor, UBC, Zoology & Surgery
2000-present Member of the Brain Research Center UBC
2002-2012 Associate Director (Discovery Science) of ICORD (International Collaboration On Repair Discoveries); Member of the Executive of ICORD
2012-2013 Acting Director of ICORD
2013-present Director of ICORD

B. AWARDS
1981 Summa cum laude for Dr. med. Thesis
1984-86 Fellowship from Deutsche Forschungsgemeinschaft
1986-89 Fellowship form Alberta Heritage Foundation for Medical Research
1990-92 Faculty Scholarships from the Alberta Heritage Foundation for Medical Research
1991-1995 Medical Research Council of Canada Scholarship
1995-2013 Edie Ehlers-Rick Hansen - Man in Motion Chair in Spinal Cord Research (1995-present).
2015-present John and Penny Ryan BC-Leadership Chair in for Spinal Cord Research

C. OTHER SCHOLARLY NATIONAL/INTERNATIONAL ACTIVITIES

Panel Memberships/Committees:
Past: Member of the Health Professional Awards Committee; Medical Research Council Neuroscience B Grant Review Committee; Member of the National Neurotrauma Review Panel;
Panel member for Ontario Neurotrauma Foundation; Member of B.C. Provincial Neurotrauma Panel; Christopher Reeve Foundation grant review panel, Michael Smith Foundation Studentship panel
Member of the COBRE advisory panel for the Louisville KY; Faculty of the Reeves-Irvine Course in Spinal Cord Regeneration; Member of the Christopher Reeve Foundation Scientific Advisory Committee.
CIHR grant review panel "Regenerative Medicine and Nanoscience"; Adhoc Member of the IIRA – DoD – Spinal Cord Injury Review panel;
Present: Faculty of the European Summer School in Spinal Cord Injury; CIHR reviewer project scheme; Editorial Board: Neurorehabilitation and Neural Repair 2001-present
Journal reviews: Ad hoc reviewer of Nature Medicine, Nature Neuroscience, Cell Stem Cells, J. Neuroscience, Science, Neuroscience, J.Comp. Neurology, PNAS, Ann of Neurology, Neuroscience Research, Glia, PLOSOne and others. Grant reviews: for Deutsche Forschingsgemeinschaft, CIHR, Wings for Life, ISRT, ...

E. Peer reviewed PUBLICATIONS from recent 4 years:
(185 total peer reviewed articles: collectively cited over ~11,000 times (without self-citations) - h index 54 – Thompson Reuters Source Web of Knowledge, All databases. Google 16,000 h=62)
154. Anenberg E, Arstikaitis P, Niitsu Y, Harrison TC, Boyd JD, Hilton BJ, et al. Ministrokes in channelrhodopsin-2 transgenic mice reveal widespread deficits in motor output despite maintenance of cortical neuronal excitability. Journal of Neuroscience 2014 34:1094-104. PubMed PMID: 24453302.
155. Kozlowski P, Rosicka P, Liu J, Yung AC, Tetzlaff W. In vivo longitudinal Myelin Water Imaging in rat spinal cord following dorsal column transection injury. Magn Reson Imaging. 2014 Apr;32(3):250-8. PubMed PMID: 24462106. Pubmed Central PMCID: 5462368.
156. Lam CJ, Assinck P, Liu J, Tetzlaff W, Oxland TR. Impact depth and the interaction with impact speed affect the severity of contusion spinal cord injury in rats. J Neurotrauma. 2014 Dec 15;31(24):1985-97. PubMed PMID: 24945364. Pubmed Central PMCID: 4245874.
157. Plemel JR, Keough MB, Duncan GJ, Sparling JS, Yong VW, Stys PK, et al. Remyelination after spinal cord injury: is it a target for repair? Progress in Neurobiology. 2014 Jun;117:54-72. PubMed PMID: 24582777.
158. Streijger F, Lee JH, Duncan GJ, Ng MT, Assinck P, Bhatnagar T, Tetzlaff W. Combinatorial treatment of acute spinal cord injury with ghrelin, ibuprofen, C16, and ketogenic diet does not result in improved histologic or functional outcome. Journal of Neuroscience Research. 2014 Jul;92(7):870-83. PubMed PMID: 24658967.
159. Gordon T, Tetzlaff W. Regeneration-associated genes decline in chronically injured rat sciatic motoneurons. Eur J Neurosci. 2015 Nov;42(10):2783-91. PubMed PMID: 26369395.
160. Gordon T, You S, Cassar SL, Tetzlaff W. Reduced expression of regeneration associated genes in chronically axotomized facial motoneurons. Experimental Neurology. 2015 Feb;264:26-32. PubMed PMID: 25446720.
161. Kwon BK, Streijger F, Hill CE, Anderson AJ, Bacon M, Beattie MS, et al. Large animal and primate models of spinal cord injury for the testing of novel therapies. Experimental Neurology. 2015 Jul;269:154-68. PubMed PMID: 25902036.
162. Sparling JS, Bretzner F, Biernaskie J, Assinck P, Jiang Y, Arisato H, Tetzlaff W. Schwann cells generated from neonatal skin-derived precursors or neonatal peripheral nerve improve functional recovery after acute transplantation into the partially injured cervical spinal cord of the rat. Journal of Neuroscience : 2015 Apr 29;35(17):6714-30. PubMed PMID: 25926450.
163. Wu X, Liu J, Tanadini LG, Lammertse DP, Blight AR, Kramer JL, et al. Challenges for defining minimal clinically important difference (MCID) after spinal cord injury. Spinal cord. 2015 Feb;53(2):84-91. PubMed PMID: 25510192.
164. Bhatnagar T, Liu J, Yung A, Cripton P, Kozlowski P, Tetzlaff W, Oxland, T. Relating Histopathology and Mechanical Strain in Experimental Contusion Spinal Cord Injury in a Rat Model. Journal of Neurotrauma. 2016 Vol 33(18):1685-95. PubMed PMID: 26729511. Pubmed Central PMCID: 5035832.
165. Bhatnagar T, Liu J, Yung A, Cripton P, Kozlowski P, Tetzlaff W, et al. Quantifying the internal deformation of the rodent spinal cord during acute spinal cord injury - the validation of a method. Computer methods in biomechanics and biomedical engineering. 2016;19(4):386-95. PubMed PMID: 25894327.
167. Chen K, Liu J, Assinck P, Bhatnagar T, Streijger F, Zhu Q, Tetzlaff W, Oxland T. Differential

Histopathological and Behavioral Outcomes Eight Weeks after Rat Spinal Cord Injury by Contusion, Dislocation, and Distraction Mechanisms. J Neurotrauma. 2016 Sep 15;33(18):1667-84. PubMed PMID: 26671448. Pubmed Central PMCID: 5035937.
168. Geoffroy CG, Hilton BJ, Tetzlaff W, Zheng B. Evidence for an Age-Dependent Decline in Axon Regeneration in the Adult Mammalian Central Nervous System. Cell Reports. 2016 Apr 12;15(2):238-46. PubMed PMID: 27050519. Pubmed Central PMCID: 5050004.
169. Hilton BJ, Anenberg E, Harrison TC, Boyd JD, Murphy TH, Tetzlaff W. Re-Establishment of Cortical Motor Output Maps and Spontaneous Functional Recovery via Spared Dorsolaterally Projecting Corticospinal Neurons after Dorsal Column Spinal Cord Injury in Adult Mice. Journal of Neuroscience : the official journal of the Society for Neuroscience. 2016 Apr 6;36(14):4080-92. PubMed PMID: 27053214.
170. Zhang S, Kojic L, Tsang M, Grewal P, Liu J, Namjoshi D, et al. Distinct roles for metalloproteinases during traumatic brain injury. Neurochem Int. 2016 Jun;96:46-55. PubMed PMID: 26939762.
171. Assinck P, Duncan GJ, Hilton BJ, Plemel JR, Tetzlaff W. Cell transplantation therapy for spinal cord injury. Nat Neuroscience 2017 Apr 25;20(5):637-47. PubMed PMID: 28440805.
172. Assinck P, Duncan GJ, Plemel JR, Lee MJ, Stratton JA, Manesh SB, Tetzlaff W. Myelinogenic Plasticity of Oligodendrocyte Precursor Cells following Spinal Cord Contusion Injury. Journal of Neuroscience 2017 Sep 6;37(36):8635-54. PubMed PMID: 28760862.
173. Chen HS, Holmes N, Liu J, Tetzlaff W, Kozlowski P. Validating myelin water imaging with transmission electron microscopy in a rat spinal cord injury model. NeuroImage. 2017 Jun;153:122-30. PubMed PMID: 28377211.
174. Duncan GJ, Plemel JR, Assinck P, Manesh SB, Muir FGW, Hirata R, et al. Myelin regulatory factor drives remyelination in multiple sclerosis. Acta Neuropathologica. 2017 Sep;134(3):403-22. PubMed PMID: 28631093.
175. Hilton BJ, Moulson AJ, Tetzlaff W. Neuroprotection and secondary damage following spinal cord injury: concepts and methods. Neurosci Lett. 2017 Jun 23;652:3-10. PubMed PMID: 27939975.
176. Mattucci S, Liu J, Fijal P, Tetzlaff W, Oxland TR. Repeatability of a Dislocation Spinal Cord Injury Model in a Rat-A High-Speed Biomechanical Analysis. Journal of biomechanical engineering. 2017 Oct 1;139(10). PubMed PMID: 28696485.
177. Squair JW, West CR, Popok D, Assinck P, Liu J, Tetzlaff W, et al. High Thoracic Contusion Model for the Investigation of Cardiovascular Function after Spinal Cord Injury. Journal of Neurotrauma. 2017 Feb;34(3):671-84. PubMed PMID: 27456150.
180. Lucas E, Whyte T, Liu J, Russell CM, Tetzlaff W, Cripton PA. High-Speed Fluoroscopy Used to Measure Dynamic Spinal Cord Deformation in an In Vivo Rat Model. Journal of Neurotrauma. 2018 May 22. PubMed PMID: 29786472.
181. Lucas E, Whyte T, Liu J, Tetzlaff W, Cripton PA. Radiography used to measure internal spinal cord deformation in an in vivo rat model. Journal of Biomechanics. 2018 Apr 11;71:286-90. PubMed PMID: 29477261.
182. Mattucci S, Speidel J, Liu J, Kwon BK, Tetzlaff W, Oxland TR. Basic biomechanics of spinal cord injury - How injuries happen in people and how animal models have informed our understanding. Clinical Biomechanics. 2018 Apr 9. PubMed PMID: 29685426.
184. May Z, Kumar R, Fuehrmann T, Tam R, Vulic K, Forero J, et al. Adult skin-derived precursor Schwann cell grafts form growths in the injured spinal cord of Fischer rats. Biomedical Materials. 2018 Feb 20;13(3):034101. PubMed PMID: 29068322.
185. Squair JW, Liu J, Tetzlaff W, Krassioukov AV, West CR. Spinal cord injury-induced cardiomyocyte atrophy and impaired cardiac function are severity dependent. Experimental Physiology. 2018 Feb 1;103(2):179-89. PubMed PMID: 29235182.
186. GJ Duncan, S.B. Manesh, BJ Hilton, P. Assinck, J. Liu, A. Moulson, JR. Plemel and W. Tetzlaff Locomotor recovery following contusive spinal cord injury does not require oligodendrocyte remyelination Nature Communications (August 2018).

Selected CHAPTPERS&Reviews:

C37. Priestley JV, Michael-Titus AT, Tetzlaff W. (2012). Limiting spinal cord injury by pharmacological intervention. Handb Clin Neurol. 109:463-84.
C38. Kwon BK, Soril LJ, Bacon M, Beattie MS, Blesch A, Bresnahan JC, Bunge MB, Dunlop SA, Fehlings MG, Ferguson AR, Hill CE, Karimi-Abdolrezaee S, Lu P, McDonald JW, Müller HW, Oudega M, Rosenzweig ES, Reier PJ, Silver J, Sykova E, Xu XM, Guest JD, Tetzlaff W. Demonstrating efficacy in preclinical studies of cellular therapies for spinal cord injury - How much is enough? Exp Neurol. 2013 May

29;248C:30-44.
C39. Plemel JR, Keough MB, Duncan GJ, Sparling JS, Yong VW, Stys PK, Tetzlaff W. Remyelination after spinal cord injury: is it a target for repair? Prog Neurobiol. 2014 Jun;117:54-72.
C40. Streijger F, Plunet W, Tetzlaff W (2016) Ketogenic diet for traumatic brain and spinal cord injury: In Masino S. et al. ed.
R41 Hilton BJ, Tetzlaff W. A brainstem bypass for spinal cord injury. Nature Neuroscience. 2018 Apr;21(4):457-8. PubMed PMID: 29556026.

F. CURRENT GRANT SUPPORT
Canadian Institutes for Health Research “role of endogenous remyelination after chronic spinal cord injury” $880,000 total Oct 2018-23
Wings for Life “Role of remyelination in SCI” 200,000 Euros total, July 2018-2020
NSERC of Canada “Plasticity after spinal cord injury” 200,000 Can$ total July 2018-2023
Craig H Neilsen Foundation “Metabolic treatment for spinal cord injury”
545,000 USD direct, 7/2016-6/2019 4/2016-3/2019
MS-Society of Canada Targeting oligodendrocyte maturation for the study of axonal degeneration Can$ 340,000 total 4/2016-3/2019
Canadian Institutes for Health Research “Role of endogenous stem/progenitor cells after spinal cord injury and cellular transplantation, $787,500 total over 5 years 10/2013-9/2018
Rick Hansen Institute A Canada-China collaboration to establish a primate model for cervical spinal cord hemi-contusion in China. $100,000K total 1/2015-12/2016
Conquer Paralysis Now Out of the Box program “Nutritional treatment of spinal cord injury” US$50,000
COMPLETED SUPPORT in the past 5 years:
Canadian Intitutes for Health Research, Canadian Stem Cell Network, International Spinal Resarch Trust, Wings for Life, MS Society of Canada.

G. GRADUATE STUDENTS AND POST-DOCTORAL FELLOWS
Current trainees in the laboratory
2 PhD Students, 3 Master’s students who intent to transfer to a PhD program
2 PDFs
Past trainees
PDF 4; PhD – students completed under my supervision 23; Master’s completed 6

Developing a framework for Spinal Cord Injury (SCI) Peer Support

Tuesday, April 02, 2019 01:15 PM - 02:15 PM

Jo Nunnerley, PhD
Burwood Academy/University of Otago

CV:
Personal details
Dr Joanne Nunnerley

Present position
1. Academy Director & Knowledge Translation Specialist
2. Post-Doctoral Fellow
3. Physiotherapist

Organisation/Employer
1. Burwood Academy of Independent Living (BAIL)
2. University of Otago, Christchurch
3. Canterbury District Health Board (CDHB)

Contact Address
BAIL, Burwood Hospital
Private Bag 4708
Christchurch 8140
New Zealand
Work telephone 0211872651
Mobile 0211872651
Email jo.nunnerley@burwood.org.nz

Academic qualifications
2016 PhD, University of Otago, New Zealand
2009 MHealSc (Rehabilitation), University of Otago, New Zealand
2004 PG Cert Rehabilitation, University of Otago, New Zealand
1996 BSc(Hons), Physiotherapy, Keele University, England

Professional positions held
2016 – Present: Academy Director – Burwood Academy of Independent Living
2015 – Present: Post-Doctoral Fellow Department of Orthopaedic Surgery and Musculoskeletal Medicine, University of Otago, Christchurch
2015 – Present: Knowledge Translation Specialist – Burwood Academy of Independent Living
2015 – 2016: Implementation Coordinator New Zealand SCI Registry
2014 – 2015: Vocational Physiotherapist Work Rehab
2009 – 2014: Clinical Researcher – Burwood Academy of Independent Living
2001 – Present: Physiotherapist Burwood Spinal Unit. CDHB [Casual]
2004 – 2007: Clinical Research Assistant – WHO SCI ICF Core Sets development (qualitative) Burwood Academy of Independent Living

Present research/professional speciality
I have an active Knowledge Translation role, maintaining both clinical and academic positions to facilitate the translation of research into practice. I focus on building research capacity in consumers and clinicians, and establishing collaborative research relationships. Through strong links with the CDHB I work with clinicians to assist them interpret research findings and implement them into their practice. For example we recently completed a literature search, and led a best practice working group at Burwood Hospital to ensure that research findings were incorporated into the project to develop a new Adult Rehabilitation Pathway within the hospital.

My research interests align with my clinical expertise in Spinal Cord Injury, particularly rehabilitation outcomes. I have a strong interest in person-centred outcomes and participation/ community reintegration, with particular interest in return to work.

Professional distinctions and memberships

2011 – 2014: PhD Scholarship University of Otago
2010: Jean Irwin Research Award, NZ Society of Physiotherapy
2007: Rehabilitation Disability & Rehabilitation Theme Grant

Other:
2016 – Current: Knowledge into Practice Learning Network Core Group member - training and development portfolio
2016 – Present: New Zealand Rehabilitation Association – 2017 Conference Committee, Chair of Scientific committee
2015 – Present: Allied Health Representative- Canterbury District Health Board Research Committee
2015 – Present: New Zealand Rehabilitation Association – Member of Executive Council
2012 – 2013: Regional Consultants- International Perspectives of Spinal Cord Injury. Chapter 6: Environmental Barriers and Facilitators. WHO
2012 – 2015: New Zealand Physiotherapy Society – Canterbury branch – President (2012-2015)
2014 – 2015: International Spinal Cord Society (ISCoS) Melbourne 2018 – Conference organising committee

2010 – 2012: Australia New Zealand Spinal Cord Society Executive Committee – Secretary

Research publications and dissemination
Peer-reviewed journal articles last 5 years
1. Calder, A., Nunnerley, J., Mulligan, H., Ahmad Ali, N., Kensington, G., McVicar, T., van Schaik, O. (2017). Perceptions of persons with spinal cord Injury of undertaking a physical activity programme as part of the SCIPA 'Full-On' randomised controlled trial. Manuscript submitted
2. Dunn, J. A., Nicholls, J. M., Snell, D. L., & Nunnerley, J. (2017). New Zealand wheelchair users' preparedness for emergencies. Australasian Journal of Disaster & Trauma Studies, 21(1), 3-18.
3. Galea, M. P., Panisset, M. G., El-Ansary, D., Dunlop, S., Marshall, R., Clark, J. M., & Churilov, L.& *SCIPA Switch-On Trial Collaborators Hurley,M., Nunn, A.,Alexander,J., Buchanan,J., Nolan,S., Atresh,S., Pick, V., Acland, R., Nunnerley, J.(2017) A Randomized Controlled Trial Investigating the Efficacy and Safety of Functional Electrical Stimulation–Assisted Cycling and Passive Cycling Initiated Early After Traumatic Spinal Cord Injury Neurorehabilitation and Neural Repair, 0(0), 1545968317697035. doi: doi:10.1177/1545968317697035
4. Nunnerley, J, Gupta, S, Snell, D, & King, M. (2016). Training wheelchair navigation in immersive virtual environments for patients with spinal cord injury – end-user input to design an effective system. Disability and Rehabilitation: Assistive Technology, 1-7. doi: 10.1080/17483107.2016.1176259
5. Nunnerley, J., Dunn, J., McPherson, K., Hooper, G., & Woodfield, T. (2015). Participation and quality of life outcomes among individuals with earthquake-related physical disability: A systematic review. Journal of Rehabilitation Medicine. doi: 10.2340/16501977-1965
6. Nunnerley, J., Dunn, J., McPherson, K., Hooper, G., & Woodfield, T. (2015). Return to work for severely injured survivors of the Christchurch earthquake: Influences in the first 2 years. Disability & Rehabilitation. Advance online publication. doi: 10.3109/09638288.2015.1070299
7. Nunnerley, J.L., Hay-Smith E.J.C., Dean, S.G. 2013 Leaving a spinal unit and returning to the wider community: an interpretative phenomenological analysis. Disability & Rehabilitation.35(14): 1164 – 117
8. Hay-Smith,E.J., Dickson, B., Nunnerley, J.L., & Sinnott, K.A. (2013). "The final piece of the puzzle to fit in": An interpretative phenomenological analysis of the return to employment in New Zealand after spinal cord injury. Disability and Rehabilitation, 35(17), 1436-1446.

Full information available from https://www.otago.ac.nz/christchurch/departments/orthomsm/people/jo-nunnerley.html

Rachelle Martin, PhD
Burwood Academy/ University of Otago

CV:
n/a

John Burke, PhD
Burwood Academy Trust

(no CV uploaded)

Zahra Shahtahmasebi, Bsc Science
Burwood Academy

(no CV uploaded)

Snell Deborah, PhD
University of Otago

(no CV uploaded)

Jennifer Dunn, PhD
University of Otago

(no CV uploaded)

Locomotor recovery following moderate or severe contusive spinal cord injury does not require oligodendrocyte remyelination

Wednesday, April 03, 2019 04:20 PM - 05:20 PM

Gregory Duncan, PhD
Icord, University of British Columbia

(no CV uploaded)

Sohrab Manesh, BSc
Icord, University of British Columbia

(no CV uploaded)

Brett Hilton, PhD
Icord, University of British Columbia

(no CV uploaded)

Peggy Assinck, PhD
Icord, University of British Columbia

(no CV uploaded)

Jie Liu, MD
Icord, University of British Columbia

(no CV uploaded)

Aaron Moulson, MSc
Icord, University of British Columbia

(no CV uploaded)

Jason Plemel, PhD
University of Alberta

(no CV uploaded)

Wolfram Tetzlaff, MD, PhD
Icord, University of British Columbia

CV:

BIOSKETCH
Name Position Title
Wolfram TETZLAFF Professor, M.D., Ph.D.
John and Penny Ryan BC-Leadership Chair in for Spinal Cord Research

Education/Training.
Institution and Location Degree
(if applicable) Year(s)
(MM/YY) Field of Study
University of Essen MD 1973-1979 Medicine
University of Bochum Dr. med. (thesis) 1979-1981 Neuroanatomy
Max-Planck-Institute for Psychiatry Post doc 1982-1985 Neuroscience
University of Calgary Ph.D. 1986-1989 Neuroscience
PERSONAL STATEMENT: I am a full professor in the Department of Zoology and I was able to buy out my teaching duties due to my role as Director of ICORD the International Collaboration on Repair Discoveries at the University of British Columbia. As such, I am supported by two high level administrators (Dr. McPhail and Cheryl Niamath) and thus my role as Director takes only about 30% of my time. This leaves me with about 9 months of time for spinal cord injury research including the role of endogenous stem cells and demyelination & remyelination. I supervise 7 graduate students, one PDF and 4 technical stuff and serve on about a dozen of graduate student committees. In addition, I perform reviewing for journals and granting agencies and serve on several granting committees (study sections) and perform numerous career assessments for promotion and tenure.
A. APPOINTMENTS
1989-1992 Assistant Prof., University of Calgary, Dept. of Anatomy
1992-1995 Associate Prof., University of Ottawa, Dept. of Physiology
1995-2000 Assoc. Prof., University of British Columbia, Dept. of Zoology
1995 Cross-appointed to the Department of Surgery - Neurosurgery
2000-present Professor, UBC, Zoology & Surgery
2000-present Member of the Brain Research Center UBC
2002-2012 Associate Director (Discovery Science) of ICORD (International Collaboration On Repair Discoveries); Member of the Executive of ICORD
2012-2013 Acting Director of ICORD
2013-present Director of ICORD

B. AWARDS
1981 Summa cum laude for Dr. med. Thesis
1984-86 Fellowship from Deutsche Forschungsgemeinschaft
1986-89 Fellowship form Alberta Heritage Foundation for Medical Research
1990-92 Faculty Scholarships from the Alberta Heritage Foundation for Medical Research
1991-1995 Medical Research Council of Canada Scholarship
1995-2013 Edie Ehlers-Rick Hansen - Man in Motion Chair in Spinal Cord Research (1995-present).
2015-present John and Penny Ryan BC-Leadership Chair in for Spinal Cord Research

C. OTHER SCHOLARLY NATIONAL/INTERNATIONAL ACTIVITIES
Panel Memberships/Committees:
Past: Member of the Health Professional Awards Committee; Medical Research Council Neuroscience B Grant Review Committee; Member of the National Neurotrauma Review Panel;
Panel member for Ontario Neurotrauma Foundation; Member of B.C. Provincial Neurotrauma Panel; Christopher Reeve Foundation grant review panel, Michael Smith Foundation Studentship panel
Member of the COBRE advisory panel for the Louisville KY; Faculty of the Reeves-Irvine Course in Spinal Cord Regeneration; Member of the Christopher Reeve Foundation Scientific Advisory Committee.
CIHR grant review panel “Regenerative Medicine and Nanoscience”; Adhoc Member of the IIRA – DoD – Spinal Cord Injury Review panel;
Present: Faculty of the European Summer School in Spinal Cord Injury; CIHR reviewer project scheme;
Editorial Board: Neurorehabilitation and Neural Repair 2001-present
Journal reviews: Ad hoc reviewer of Nature Medicine, Nature Neuroscience, Cell Stem Cells, J. Neuroscience, Science, Neuroscience, J.Comp. Neurology, PNAS, Ann of Neurology, Neuroscience Research, Glia, PLOSOne and others. Grant reviews: for Deutsche Forschingsgemeinschaft, CIHR, Wings for Life, ISRT, ...

E. Peer reviewed PUBLICATIONS from recent 4 years:
(185 total peer reviewed articles: collectively cited over ~11,000 times (without self-citations) - h index 54

– Thompson Reuters Source Web of Knowledge, All databases. Google 16,000 h=62)
154. Anenberg E, Arstikaitis P, Niitsu Y, Harrison TC, Boyd JD, Hilton BJ, et al. Ministrokes in channelrhodopsin-2 transgenic mice reveal widespread deficits in motor output despite maintenance of cortical neuronal excitability. Journal of Neuroscience 2014 34:1094-104. PubMed PMID: 24453302.
155. Kozlowski P, Rosicka P, Liu J, Yung AC, Tetzlaff W. In vivo longitudinal Myelin Water Imaging in rat spinal cord following dorsal column transection injury. Magn Reson Imaging. 2014 Apr;32(3):250-8. PubMed PMID: 24462106. Pubmed Central PMCID: 5462368.
156. Lam CJ, Assinck P, Liu J, Tetzlaff W, Oxland TR. Impact depth and the interaction with impact speed affect the severity of contusion spinal cord injury in rats. J Neurotrauma. 2014 Dec 15;31(24):1985-97. PubMed PMID: 24945364. Pubmed Central PMCID: 4245874.
157. Plemel JR, Keough MB, Duncan GJ, Sparling JS, Yong VW, Stys PK, et al. Remyelination after spinal cord injury: is it a target for repair? Progress in Neurobiology. 2014 Jun;117:54-72. PubMed PMID: 24582777.
158. Streijger F, Lee JH, Duncan GJ, Ng MT, Assinck P, Bhatnagar T, Tetzlaff W. Combinatorial treatment of acute spinal cord injury with ghrelin, ibuprofen, C16, and ketogenic diet does not result in improved histologic or functional outcome. Journal of Neuroscience Research. 2014 Jul;92(7):870-83. PubMed PMID: 24658967.
159. Gordon T, Tetzlaff W. Regeneration-associated genes decline in chronically injured rat sciatic motoneurons. Eur J Neurosci. 2015 Nov;42(10):2783-91. PubMed PMID: 26369395.
160. Gordon T, You S, Cassar SL, Tetzlaff W. Reduced expression of regeneration associated genes in chronically axotomized facial motoneurons. Experimental Neurology. 2015 Feb;264:26-32. PubMed PMID: 25446720.
161. Kwon BK, Streijger F, Hill CE, Anderson AJ, Bacon M, Beattie MS, et al. Large animal and primate models of spinal cord injury for the testing of novel therapies. Experimental Neurology. 2015 Jul;269:154-68. PubMed PMID: 25902036.
162. Sparling JS, Bretzner F, Biernaskie J, Assinck P, Jiang Y, Arisato H, Tetzlaff W. Schwann cells generated from neonatal skin-derived precursors or neonatal peripheral nerve improve functional recovery after acute transplantation into the partially injured cervical spinal cord of the rat. Journal of Neuroscience : 2015 Apr 29;35(17):6714-30. PubMed PMID: 25926450.
163. Wu X, Liu J, Tanadini LG, Lammertse DP, Blight AR, Kramer JL, et al. Challenges for defining minimal clinically important difference (MCID) after spinal cord injury. Spinal cord. 2015 Feb;53(2):84-91. PubMed PMID: 25510192.
164. Bhatnagar T, Liu J, Yung A, Cripton P, Kozlowski P, Tetzlaff W, Oxland, T. Relating Histopathology and Mechanical Strain in Experimental Contusion Spinal Cord Injury in a Rat Model. Journal of Neurotrauma. 2016 Vol 33(18):1685-95. PubMed PMID: 26729511. Pubmed Central PMCID: 5035832.
165. Bhatnagar T, Liu J, Yung A, Cripton P, Kozlowski P, Tetzlaff W, et al. Quantifying the internal deformation of the rodent spinal cord during acute spinal cord injury - the validation of a method. Computer methods in biomechanics and biomedical engineering. 2016;19(4):386-95. PubMed PMID: 25894327.
167. Chen K, Liu J, Assinck P, Bhatnagar T, Streijger F, Zhu Q, Tetzlaff W, Oxland T. Differential Histopathological and Behavioral Outcomes Eight Weeks after Rat Spinal Cord Injury by Contusion, Dislocation, and Distraction Mechanisms. J Neurotrauma. 2016 Sep 15;33(18):1667-84. PubMed PMID: 26671448. Pubmed Central PMCID: 5035937.
168. Geoffroy CG, Hilton BJ, Tetzlaff W, Zheng B. Evidence for an Age-Dependent Decline in Axon Regeneration in the Adult Mammalian Central Nervous System. Cell Reports. 2016 Apr 12;15(2):238-46. PubMed PMID: 27050519. Pubmed Central PMCID: 5050004.
169. Hilton BJ, Anenberg E, Harrison TC, Boyd JD, Murphy TH, Tetzlaff W. Re-Establishment of Cortical Motor Output Maps and Spontaneous Functional Recovery via Spared Dorsolaterally Projecting Corticospinal Neurons after Dorsal Column Spinal Cord Injury in Adult Mice. Journal of Neuroscience : the official journal of the Society for Neuroscience. 2016 Apr 6;36(14):4080-92. PubMed PMID: 27053214.
170. Zhang S, Kojic L, Tsang M, Grewal P, Liu J, Namjoshi D, et al. Distinct roles for metalloproteinases during traumatic brain injury. Neurochem Int. 2016 Jun;96:46-55. PubMed PMID: 26939762.
171. Assinck P, Duncan GJ, Hilton BJ, Plemel JR, Tetzlaff W. Cell transplantation therapy for spinal cord injury. Nat Neuroscience 2017 Apr 25;20(5):637-47. PubMed PMID: 28440805.
172. Assinck P, Duncan GJ, Plemel JR, Lee MJ, Stratton JA, Manesh SB, Tetzlaff W. Myelinogenic Plasticity of Oligodendrocyte Precursor Cells following Spinal Cord Contusion Injury. Journal of Neuroscience 2017 Sep 6;37(36):8635-54. PubMed PMID: 28760862.
173. Chen HS, Holmes N, Liu J, Tetzlaff W, Kozlowski P. Validating myelin water imaging with transmission

electron microscopy in a rat spinal cord injury model. NeuroImage. 2017 Jun;153:122-30. PubMed PMID: 28377211.
174. Duncan GJ, Plemel JR, Assinck P, Manesh SB, Muir FGW, Hirata R, et al. Myelin regulatory factor drives remyelination in multiple sclerosis. Acta Neuropathologica. 2017 Sep;134(3):403-22. PubMed PMID: 28631093.
175. Hilton BJ, Moulson AJ, Tetzlaff W. Neuroprotection and secondary damage following spinal cord injury: concepts and methods. Neurosci Lett. 2017 Jun 23;652:3-10. PubMed PMID: 27939975.
176. Mattucci S, Liu J, Fijal P, Tetzlaff W, Oxland TR. Repeatability of a Dislocation Spinal Cord Injury Model in a Rat-A High-Speed Biomechanical Analysis. Journal of biomechanical engineering. 2017 Oct 1;139(10). PubMed PMID: 28696485.
177. Squair JW, West CR, Popok D, Assinck P, Liu J, Tetzlaff W, et al. High Thoracic Contusion Model for the Investigation of Cardiovascular Function after Spinal Cord Injury. Journal of Neurotrauma. 2017 Feb;34(3):671-84. PubMed PMID: 27456150.
180. Lucas E, Whyte T, Liu J, Russell CM, Tetzlaff W, Cripton PA. High-Speed Fluoroscopy Used to Measure Dynamic Spinal Cord Deformation in an In Vivo Rat Model. Journal of Neurotrauma. 2018 May 22. PubMed PMID: 29786472.
181. Lucas E, Whyte T, Liu J, Tetzlaff W, Cripton PA. Radiography used to measure internal spinal cord deformation in an in vivo rat model. Journal of Biomechanics. 2018 Apr 11;71:286-90. PubMed PMID: 29477261.
182. Mattucci S, Speidel J, Liu J, Kwon BK, Tetzlaff W, Oxland TR. Basic biomechanics of spinal cord injury - How injuries happen in people and how animal models have informed our understanding. Clinical Biomechanics. 2018 Apr 9. PubMed PMID: 29685426.
184. May Z, Kumar R, Fuehrmann T, Tam R, Vulic K, Forero J, et al. Adult skin-derived precursor Schwann cell grafts form growths in the injured spinal cord of Fischer rats. Biomedical Materials. 2018 Feb 20;13(3):034101. PubMed PMID: 29068322.
185. Squair JW, Liu J, Tetzlaff W, Krassioukov AV, West CR. Spinal cord injury-induced cardiomyocyte atrophy and impaired cardiac function are severity dependent. Experimental Physiology. 2018 Feb 1;103(2):179-89. PubMed PMID: 29235182.
186. GJ Duncan, S.B. Manesh, BJ Hilton, P. Assinck, J. Liu, A. Moulson, JR. Plemel and W. Tetzlaff Locomotor recovery following contusive spinal cord injury does not require oligodendrocyte remyelination Nature Communications 9:3066 (August 2018).

Selected CHAPTPERS&Reviews:
C37. Priestley JV, Michael-Titus AT, Tetzlaff W. (2012). Limiting spinal cord injury by pharmacological intervention. Handb Clin Neurol. 109:463-84.
C38. Kwon BK, Soril LJ, Bacon M, Beattie MS, Blesch A, Bresnahan JC, Bunge MB, Dunlop SA, Fehlings MG, Ferguson AR, Hill CE, Karimi-Abdolrezaee S, Lu P, McDonald JW, Müller HW, Oudega M, Rosenzweig ES, Reier PJ, Silver J, Sykova E, Xu XM, Guest JD, Tetzlaff W. Demonstrating efficacy in preclinical studies of cellular therapies for spinal cord injury - How much is enough? Exp Neurol. 2013 May 29;248C:30-44.
C39. Plemel JR, Keough MB, Duncan GJ, Sparling JS, Yong VW, Stys PK, Tetzlaff W. Remyelination after spinal cord injury: is it a target for repair? Prog Neurobiol. 2014 Jun;117:54-72.
C40. Streijger F, Plunet W, Tetzlaff W (2016) Ketogenic diet for traumatic brain and spinal cord injury: In Masino S. et al. ed.
R41 Hilton BJ, Tetzlaff W. A brainstem bypass for spinal cord injury. Nature Neuroscience. 2018 Apr;21(4):457-8. PubMed PMID: 29556026.

F. CURRENT GRANT SUPPORT
Canadian Institutes for Health Research “role of endogenous remyelination after chronic spinal cord injury” $880,000 total Oct 2018-23
Wings for Life “Role of remyelination in SCI” 200,000 Euros total, July 2018-2020
NSERC of Canada “Plasticity after spinal cord injury” 200,000 Can$ total July 2018-2023
Craig H Neilsen Foundation “Metabolic treatment for spinal cord injury”
545,000 USD direct, 7/2016-6/2019 4/2016-3/2019
MS-Society of Canada Targeting oligodendrocyte maturation for the study of axonal degeneration Can$ 340,000 total 4/2016-3/2019
Canadian Institutes for Health Research “Role of endogenous stem/progenitor cells after spinal cord injury

and cellular transplantation, $787,500 total over 5 years 10/2013-9/2018
Rick Hansen Institute A Canada-China collaboration to establish a primate model for cervical spinal cord hemi-contusion in China. $100,000K total 1/2015-12/2016
Conquer Paralysis Now Out of the Box program “Nutritional treatment of spinal cord injury” US$50,000
COMPLETED SUPPORT in the past 5 years:
Canadian Intitutes for Health Research, Canadian Stem Cell Network, International Spinal Resarch Trust, Wings for Life, MS Society of Canada.

G. GRADUATE STUDENTS AND POST-DOCTORAL FELLOWS
Current trainees in the laboratory
2 PhD Students, 3 Master’s students who intent to transfer to a PhD program
2 PDFs
Past trainees
PDF 4; PhD – students completed under my supervision 23; Master’s completed 6

EFFECTS OF SPINAL ELECTRO-MAGNETIC STIMULATION ON NEUROPHYSICIOLOGICAL RESPONSES IN PEOPLE WITH SCI COMPARED TO HEALTHY CONTROLS

Wednesday, April 03, 2019 02:30 PM - 03:30 PM

Sue Ann Sisto, PT, MA, Ph.D., FACRM
Stony Brook University and University at Buffalo

CV:
BIOGRAPHICAL SKETCH

NAME: SUE ANN SISTO, P.T., M.A., Ph.D, FACRM
POSITION TITLE: Professor and Research Director

EDUCATION/TRAINING

St Louis University, St. Louis, Missouri
BS 05/1979 Physical Therapy
New York University, NY, NY
MA 05/1985 Physical Therapy & Pathokinesiology
New York University, NY, NY
PhD 05/1996 Pathokinesiology
NIH, NJ Cooperative Chronic Fatigue Syndrome (CFS), Newark, NJ Post Doc 05/1996-05/2007 Activity in CFS

Personal Statement - I have been a physical therapist working in rehabilitation for 37 years. I have spent the last 15 years conducting rehabilitation research. I have served on several advisory boards for grants such as RERCs, NIDRR model systems, NIH multi-center trials, NIH DSMB and NSF. I am a grant reviewer for Shriners Hospital for Children, PVA, DOD, and NIH (MRS study section). My research has spanned 2 decades with the primary focus on physical functioning in SCI with grants in obesity, body composition, wheelchair propoulsion, locomotor traning and neurommodulation.

January 2018- Present Chair of Rehabilitation Science Buffalo University at Buffalo (PT, OT, Ph.D. programs)

October 2014-Chair, Ph.D. in Health and Rehabilitation Sciences Stony Brook Stony Brook Univ. 2018

March 2013- 2018 Health and Rehab SciencesProgram Director, Ph.D. Program Stony Brook Stony Brook Univ.

September 2012- Present Scientist, NeuroRecovery Network University at Buffalo

September 2007- Professor and Research Director, Division of Rehabilitation Stony Brook Univ. 2018 Sciences, School of Health Technology and Management Stony Brook, NY

September 2007-12 Co- Director, NeuroRecovery Network Stony Brook Univ. Program Co-Director, Health and Rehabilitation Stony Brook, NY Science Ph.D. Program

February 1997 – Director of the Human Performance Laboratory Kessler Medical and August 2007 Research Department (HPMAL) Rehabilitation Research and Education Center, (KMRREC), now referred to as Kessler Foundation

September 1991-February 1997 Associate Director of Physical Therapy Research Kessler Institute for Clinical Team Leader of New Jersey Chronic Rehabilitation Research Fatigue Syndrome for Treadmill Exercise Test and West Orange, NJ Fatigue study, Research Assistant for Long-Term Orthotic Device Utilization Grant

(NIDRR) and Oxygen Consumption (KIR) and Functional Capacity for the Traumatic Amputee (East Orange Veterans Administration, East Orange, NJ).

August 1988- Associate Director of Physical Therapy Kessler Institute for September 1991 Re, habilitation, West Orange, NJ

February 1986-Assistant Director of Out-Patient Physical Therapy Kessler Institute for August 1988 Rehabilitation, West Orange, NJ

March 1983-February 1986 Assistant Director of In-Patient Physical Therapy Kessler Institute for Rehabilitation, West Orange, NJ

May 1981-March 1983 Supervisor of Prosthetics and Orthotics Kessler Institute for Rehabilitation, West Orange, NJ

July 1979-Staff Physical Therapist Kessler Institute for
January 1980 Rehabilitation, West Orange, NJ

Selected Honors and Awards
Recipient of the Mary E. Switzer Fellowship, NIDRR
NIDRR Research
Full-time Doctoral Clinical Traineeship awarded to NYU PT Department
American Physical Therapy Association Foundation Doctoral Research Award
Best Mentor Award, UMDNJ/NJMS Department of PM&R
Empire Innovation Program Distinguished Faculty Award, Stony Brook University
Fellow of the American Congress of Rehabilitation Medicine (FACRM)

Selected Appointments/Elected Positions
Member, ASIA Research and Awards Committee (now Research Committee only)
Chair, Gait and Clinical Movement Analysis Society Awards Committee
Invited Speaker, Research Summit On Wheeled Mobility and Accessible Transportation
National Institutes of Health Review Panel, Musculoskeletal Rehabilitation Sciences
Elected to the Board of Governors of American Congress of Rehabilitation Medicine
NIH/National Center for Medical Rehabilitation Research Musculoskeletal Rehabilitation Advisory Panel
State of the Science on Wheelchair Propulsion, Rancho Los Amigos, Downey, CA
Co-Chair of the ACRM Communications Committee
Member of the International Core Data Set in Spinal Cord Injury Committee, ACRM liaison Member of Nomination Committee of APTA Section on Research
Membership and Program Committees of ACRM
Scientific Review Committee of the Foundation for Physical Therapy
Invited Member of the Mobility Rehab. Engineering Rehab Ctr, State of Science Conf.
Member of Steering Committee of the Northern New Jersey Model System Spinal Cord Injury System (NNJMSCIS)
Elected Vice President of American Physical Therapy Association, Neurology Section, Spinal Cord Injury Special Interest Group
Brain Canada Review Panel, Montreal Canada
MSK NIH Review Panel, Seattle, WA
Extramural RADAR Concept Development Committee for NIH/NCI Repository for Algorithm Development for Ambulatory Research (RADAR)
SNRP Grant Reviews, NIH Bethesda, MD
Scientific Advisory Committee, NIH Grant entitled “Clinical Trial to Evaluate the Effects of an Activity-Based Therapeutic Exercise Program for Individuals with Spinal Cord Injury (PI-Mike Jones, Ph.D.)
Data Safety and Monitoring Board for NIH Multi-Site Clinical Trial

Selected publications (in addition to 5 listed above):
1. Forrest GF, Hutchinson K, Lorenz DJ, Buehner JJ, Vanhiel LR, Sisto, SA, Basso DM. (2014). Are the 10 meter and 6 minute walk tests redundant in patients with spinal cord injury? PLoS One, 1;9 (5):e94108.

2. Jones, M, Cifu, D, Backus, D, Sisto, SA. (2013).Instilling a research culture in an applied clinical setting, Archives of Physical Medicine and Rehabilitation, 94:S49-54.
3. Biering-Sørensen F, Burns AS, Curt A, Harvey LA, Jane Mulcahey M, Nance PW, Sherwood AM, Sisto, SA. (2012). International spinal cord injury musculoskeletal basic data set, Spinal Cord.50(11):797-802.
4. Sisto, SA, Lorenz, L., Hutchinson, K, Wenzel, L, Hillyer, J, Harkema, SJ, Krassioukov, A. (2012). Cardiovascular parameters from 213 patients with incomplete spinal cord injury from seven NeuroRecovery Network centers in the USA, Archives of Physical Medicine and Rehabilitation, 93(9): 1578-87.
5. Harkema, SJ, Behrman, A, Schmidt, M, Ardolino, E, Sisto, SA. (2012). Locomotor training: As a treatment and in the progression of neurological rehabilitation, Archives of Physical Medicine and Rehabilitation 93(9):1588-97.
6. Morrison, S, Pomeranz, JL, Yu, N, Schmidt Read, M, Wescott, C, Sisto, SA, Behrman, AL (2012). Life care planning outcomes for two individuals with motor incomplete spinal cord injury pre and post locomotor training: A Case Series. Journal of Neurological Physical Therapy, 36(3):144-53.
7. Forrest, GF, Lorenz, DJ, Karen Hutchinson, K, VanHiel, L, Basso, DM, Datta, S, Sisto, SA, Harkema, SJ, (2012). Ambulation and balance outcomes measure different aspects of recovery in individuals with chronic incomplete spinal cord injury. Archives of Physical Medicine and Rehabilitation, 93(9): 1553-64.
8. Harkema SJ, Schmidt-Read M, Behrman AL, Bratta A, Sisto SA, Edgerton VR. (2012). Establishing the NeuroRecovery Network: Multisite rehabilitation centers that provide activity-based therapies and assessments for neurologic disorders. Archives of Physical Medicine and Rehabilitation, 93(9):1498-507.
9. Kwarciak AM, Yarossi M, Ramanujam A, Dyson-Hudson T, Sisto SA. (2009) Evaluation of wheelchair tire rolling resistance using dynamometer-based coast-down tests. Journal of Rehabilitation Research and Development, 46(7):931-8.
10. Sullivan S, Sisto SA, Langrana N. (2009) Comparison of kinematics, kinetics, and EMG throughout wheelchair propulsion in able-bodied and persons with paraplegia: An integrative approach, Journal of Biomechanical Engineering.
11. Forrest GF, Sisto SA, Asselin P, Mores J, Bond Q, LaFountain MF, Harkema S. (2008) Locomotor training with incremental changes in velocity: Muscle and metabolic responses. Topics in Spinal Cord Injury Rehabilitation, 14:1, 16-22, Summer.
12. Sisto SA, Forrest GF, Faghri P. (2008) Technology for mobility and quality of life in spinal cord injury: Analyzing a series of options available, IEEE Engineering in Medicine and Biology Magazine, March/April, pp.56-68.
13. Dyson-Hudson TA, Sisto SA, Bond EQ, Emmons R, Kirshblum S. (2007) Comparison of self-report pain changes as a result of arm-crank ergometry in chronic complete SCI, Archives of Physical Medicine and Rehab, Brief Report, December 88 (12).
14. Koontz AM, Yang Y, Price R, Tolerico ML, DiGiovine CP, Sisto SA, Cooper RA, Boninger ML. (2007) Multi-site comparison of wheelchair propulsion in persons with paraplegia, Journal of Rehabilitation Research and Development, 44(3): 449:458.
15. Sisto SA, Dyson-Hudson T. (2007) Use of Dynamometry for the Measurement of Strength in SCI, Journal of Rehabilitation Research and Development, 44(1):123:136.

Other selected publications
1. Editorial Commentary of Epidural Stimulation form Harkema et al., Lancet, 2011; http://news.todayinot.com/article/20110718/TODAYINPT0105/110718005&SearchID=73448537530396.
2. Encyclopedia of Clinical Neuropsychology, (2011) contributed to sensory motor scales entries, released as online publication, Springer Link. http://www.springer.com/psychology/neuropsychology/book/978-0-387-79947-6.
3. Engsberg, J. R., Tucker, C., Ounpuu, S., Wren, T. A., Sisto, S. A., & Kaufman, K. R. (2009). Gait and clinical movement analysis research priorities: 2007 update from the research committee of the Gait and Clinical Movement Analysis Society. Gait & Posture, 29(2), 169-171. doi: S0966-6362(08)00390-[pii]10.1016/j.gaitpost.2008.11.015.
4. Clinical Research Agenda Review Panel (multiple authors, including Sisto, SA). (2000). Clinical research agenda for physical therapy, 80(5):499-513.
5. Sisto, S.A., (2000). Use of Virtual Reality in therapy for Upper Extremity Hemiparesis in Stroke. Focus on Physiatry, Vol. 5(1).
Monographs: Lacker, H. M., Chaudhry, H., Choi, T. H., Kriegsmann, J. J., Boda, W., Tapp, W. N., & Sisto, S. A. (1993). A simple mathematical model of the complete walking cycle with applications to the physically disabled: Symmetric and asymmetric steady periodic solutions. NJIT, Center for Applied Mathematics and

Statistics.

Public Speaking or Presentations
1. Sisto, S.A., Petrosyan, H.A., Zou, C., Leone, Tesfa, A., Fahmy, M., Zaidi, M., Arvanian, V.L., Spinal electromagnetic stimulation results in frequency dependent depression in healthy adults. (November, 2018), Society for Neuroscience, San Diego, CA.
2. Arvanian, V.L., Petrosyan, H.A., Tesfa, A., Fahmy, M., Zou, C., Sisto, S.A., Combined administration of electro-magnetic stimulation (EMS) at spinal level and leg muscles to modulate neurophysiological properties at spino-muscular circuitry in healthy and SCI humans, (November, 2018), Society for Neuroscience, San Diego, CA.
3. Arvanian, V.L., Petrosyan, H.A., Harb, M., Zaidi, M., Zou, C., Liang, L., Kaufman, M.A., Sisto, S. A., Non-invasive electromagnetic stimulation of neuromuscular circuitry: Translating from animal models to human. (November, 2017) Society for Neuroscience, Washington DC.
4. Sisto, S.A., Qureshi, F., Hegemiller, K., Concepcion, L. Zou, C. Respiratory and Functional Outcomes after Locomotor Training (LT) in SCI (October, 2016).American Congress of Rehabilitation Medicine, Atlanta, GA
5. Qureshi, F., Kung, P., Jin Cho, H., Phagu, N., Sisto, S.A., Collins, W.F. Using serial cystometry to evaluate effectiveness of treadmill training on recovery of lower urinary tract function in a rat contusion model of SCI. (November, 2016) Society for Neuroscience, San Diego, CA
6. Alessi, V. Petrosyan, H. Sniffen, J, Sisto:. M., S.A. Kaufman. A., Arvanian, V.L. Transcranial magnetic stimulation (TMS) evoked responses from hind limb muscles are diminished in spinal cord injured animals and partially recovered following improved plasticity induced by repetitive electromagnetic stimulation at spinal levels, (November, 2016), Society for Neuroscience, San Diego, CA
7. Wang, C., Shah, P, Sisto, SA, Vasudevan, E. How Does Movement of the Arms Influence the Legs During Walking in Young, Neurologically-Intact Adults? (November, 2016)Society for Neuroscience, San Diego, CA
8. Zangle, A., Ovechkin, A., Brooks, M., Sisto, S.A., Respiratory Changes after Locomotor Training in SCI, (November 2016) ACRM Symposium, Chicago, IL
9. Sisto, S.A., Ovechkin, A., FES as a Rehab Tool for NDD, Stroke and SCI, Functional electrical stimulation, (November 2016) Instructional Course, CRM, Chicago IL
10. Neuroplasticity: Leveraging Principles of plasticity to optimize neurorehabiitation, (Nov. 2016) TMS for SCI, Instructional Course, ACRM, Chicago IL
11. Fitzgibbon, S., Sexton, T., Sisto, S.A. (October 2015). Changes in Lower Extremity Kinematics with Forefoot Wedges at the Shoe Pedal Interface in Competitive Cyclists: A Pilot Study. Combined Sections Meeting of the American Physical Therapy Association, Anaheim, CA.
12. Sisto, S.A. (October, 2015). Reliability of the International Musculoskeletal Basic Data Set. American Congress of Rehabilitation Medicine, Dallas, TX.
13. Qureshi, F., Kung, P., Sisto, SA, Collins, WF, III (October, 2015). Serial Cystometry Measurements: A Novel Method for Evaluation of Lower Urinary Tract Function in Adult Female Sprague-Dawley Rats. Society for Neuroscience, Chicago, IL.
14. Safety of Titanium Rods used for Spinal Stabilization during Repetitive Magnetic Stimulation. Society for Neuroscience, Chicago, IL.
15. Kung, P., Qureshi, F., Sisto, S.A. (April 2015) Effect of Locomotor Training on Health Outcome Measures after Spinal Cord Injury. Undergraduate Research and Creativity (URECA), Stony Brook University, Stony Brook, NY
16. Block, P., Squllace, M., Hochman, L., Santasier, A., Sisto, S.A., Milazzo, M., Burke, C., Cesiro, J. (April 2015) EmpowerSCI: Progress and Impact, Converging Science Conference Proceedings, Stony Brook University, Stony Brook, NY.
17. Baunsgaard, C.B., Chhabra, H.S., Harvey, L., Savic, G., Sisto, S.A., Biering-Sørensen, F. SCI MS Data Set Reliability Group: Qureshi, F., Sachdev, G., Saif, M., Sharawat, R., Yeomans, J. (May, 2015). Reliability of the International Spinal Cord Injury Musculoskeletal Basic Data Set. ISCOS/ASIA Montreal CA.
18. Qureshi, F., Boyce, V., Collins, W.F., Mendell, L, Sisto, S.A. (2013) Recovery Of Micturition and Locomotion Function after SCI-Translational Animal and Human Models. Translational Science Abstracts. Clinical and Translational Science, 6:2, 103–164. doi: 10.1111/cts.12047.
19. Qureshi, F., Sisto, S.A., Collins, W.F. (April, 2013). Recovery of locomotion and micturition function following SCI: Translational Animal and Human Models. Converging Science Conference, Stony Brook University, Stony Brook, NY.

20. Backus, D, Chae, J, Lehmann, C, Rimmer, JH, Sullivan, KJ, Sisto, SA, Affordable Care Act: A Road Map to Transformation in Rehabilitation Policy, Research and Practice (November, 2013). American Congress of Rehabilitation Medicine, Orlando, FL
21. Sisto, SA, Lorenz, D, Harkema, SJ. Respiratory changes after Locomotor Training in incomplete Spinal Cord Injury. Proceedings from American Congress of Rehabilitation Medicine, Orlando, FL, November, 2013.
22. Martino, S.A., Sisto, S.A., Britelli, J., Gouzman M. Development and validation of a wireless activity and heart -rate sensor for children who are overweight. International Conference on Ambulatory Monitoring of Physical Activity and Movement, Amherst, MA, June, 2013.
23. Martino, S.A., Morelli, P.J., Sisto, S.A., Britelli, J., Das, S. Gouzman, M.,Gavrilov, D.N.,Kuzminsky, V. Development and validation of a wireless activity and heart -rate sensor in over and normal weight children. Converging Science Conference, Stony Brook University, Stony Brook, NY, April, 2013.
24. Sisto, S.A., Lorenz, D., Hutchinson, K,. Wenzel, L., Forrest, G.F., Harkema, S.J., Krassioukov, A., Cardiovascular Parameters after Locomotor Training in Incomplete Spinal Cord Injury. Proceedings from the American Congress of Rehabilitation Medicine, Vancouver, BC, Canada, October, 2012.
25. Faghri, P., Sisto, SA, Forrest, GF. Health promotion and disease prevention across the lifespan in spinal cord injury: from pediatrics to geriatrics. Proceedings from American Congress of Rehabilitation Medicine, Vancouver BC, CA, October, 2012.
26. Morrison, S., Pomeranz, J.L., Yu, N., Schmidt-Read, M, Wescott, C., Sisto, S.A., Behrman, A.L. Life Care Planning Outcomes Pre and Post Locomotor Training Intervention. Proceedings from the Academy of Spinal Cord Injury Professionals, September 3, 2012.
27. Sisto, S.A., Lorenz, D., Hutchinson, K,. Wenzel, L., Forrest, G.F., Harkema, S.J., Krassioukov, A., Cardiovascular Parameters in Incomplete Spinal Cord Injury. Proceedings from the Academy of Spinal Cord Injury Professionals, September 3, 2012.
28. Fitzgibbons, S. and Sisto, S.A. The Effect of Forefoot Wedges on Kinematics of the Lower Extremity in Competitive Cyclists, American Physical Therapy Association National Conference, Tampa, FL, June, 2012.
29. Sisto, S.A.,(facilitator, McConlogue-Ferro, A., Agnes DeTurk, W., Johnson, L.M., Montgomery, C.A., McGlynn-DeLuca, B., Cappelletti, Corinne. Cartwheels and the Art of Moving: Physical Therapy, Feldenkrais, Somatic and Dance Perspectives. Wang Center, Stony Brook University, April 17, 2012.
30. Sullivan, K., Sisto, S.A., Schmidt, M., Hershberg, J., Knowledge to Action: Evidence, Collaboration, Improved Patient Outcomes in Neurorehabilitation. APTA, Combined Sections Meeting, Chicago, IL, February, 2012.

Current and Past Research Support
1. 65343 Sisto (PI) Harkema, SJ and Lorenz, DL (CoIs). Craig H. Neilsen Foundation. Health Outcomes after Locomotor Training across the NeuroRecovery Network. The goals of this grant is to determine autonomic, respiratory and cardiometabolic changes after Locomotor Training.
2. Effects of Spinal Electromagnetic Stimulation and Locomotor Training on Motor Recovery and Walking in Incomplete SCI Projects to Accelerate Research Translation (PART) and Innovative, Developmental or Exploratory Activities (IDEA) in Spinal Cord Injury, Sisto PI. The New York State Spinal Cord Injury Research Program, Award #: C32097GG, $989,199, Award period: January 1, 2017, December 31, 2019.
3. Institutional Support for Spinal Cord Injury Research, Sisto PI, Collins Co-PI, Department of Health, Spinal Cord Injury Research Board, Award #: C030175, $211,920, Award period: 1/28/2015 – 8/31/2015.
4. Core Facilities to Support Collaborative Spinal Cord Injury Research, Sisto PI, Collins Co-PI, Department of Health, Spinal Cord Injury Research Board, Award #: C030082, Grant total: $339,111, Award period: 10/1/2014 – 2/28/2015.
5. Health Outcomes after Locomotor Training across 6 NeuroRecovery Network, Sisto PI, Craig H. Neilsen Foundation, Award #: 284755, Grant Total: $298,465, Award period: 2014-2018.
6. Advanced Rehabilitation Research and Training Center (ARRTC) on Neuromusculoskeletal Rehabilitation Post-Doctoral Training Grant, NIDRR, $748,975, 2007-2012.
7. NeuroRecovery Network, Co-PI, Christopher Reeve Foundation, $450,000, 2007-2010, U10/CCU220379.
9. Biomechanical Predictors of Pain and Injury during Manual Wheelchair Propulsion in Tetraplegia, New Jersey Commission on Spinal Cord Research, 2005-07, $398,924
10. Body Weight Support for Recovery of Walking after Stroke, Rippel Foundation, $103,050, 2004.

Chuancai Zou, MS, ME
Stony Brook University

(no CV uploaded)

Wei Hou, Ph.D.
Stony Brook University

(no CV uploaded)

Yong Zhang, MS, Applied Math and Statistics
Stony Brook University

(no CV uploaded)

Hayk Petrosyan, Ph.D.
Northport Veterans Affairs Medical Center

(no CV uploaded)

Cynthia Leone, DPT, NCS
Stony Brook University

(no CV uploaded)

Victor Arvanian, Ph.D.
Northport Veterans Affairs Medical Center

(no CV uploaded)