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 University of Illinois at Urbana-Champaign
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Education

PhD Rehabilitation Science and Technology University of Pittsburgh Human Engineering Research Laboratories	2010
M.S. Physical Therapy Duquesne University	2004
B.S. Health Sciences Duquesne University	2003

Professional Experience

Work

Assistant Professor: Department of Kinesiology and Community Health, University of Illinois, Champaign-Urbana, IL
August 2013- Present

Visiting Assistant Professor: Department of Kinesiology and Community Health & Disability Resources and Educational Services, University of Illinois, Champaign-Urbana, IL.
November 2011- August 2013

Staff Physical Therapist: Carle Foundation Hospital, Urbana, IL
October 2011 – June 2014

Assistant Professor: Department of Rehabilitation Science and Technology
 University of Pittsburgh, Pittsburgh PA.
September 2010-May 2011.

Physical Therapist, Seating and Mobility Specialist: The Center for Assistive Technology
 University of Pittsburgh Medical Center, Pittsburgh, PA.
July 2008 – May 2011.

Staff Physical Therapist: University of Pittsburgh Medical Center: Shadyside Hospital,
 Pittsburgh, PA.
August 2004-May 2011

*Graduate***Research Associate/Doctoral Candidate**

University of Pittsburgh (Human Engineering Research Laboratories), Pittsburgh, PA.

August 2009-August 2010

(Research mentor: Dr. Michael Boninger)

NSF Integrative Graduate Education and Research Training (IGERT) Fellow

Human Engineering Research Laboratories, Pittsburgh, PA

Clinical research on preservation of upper limb function in acute spinal cord injury

August 2006- August 2009

(Research mentor: Dr. Michael Boninger)

Academic Honors

NSF IGERT Pre-Doctoral Fellow	Human Engineering Research Laboratories University of Pittsburgh	2006-2009
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Grants

Rice, L.A., Sosnoff, J.J. *Management of Fall Risk in Non-Community Ambulators Affected by Multiple Sclerosis* National Multiple Sclerosis Society. April 1, 2014-March 31, 2015. \$43,986.80. Role: Principal Investigator

Rice, IM, **Rice, L.A.,** Sosnoff, J.J., Hedrick, B. *Impact of wheelchair propulsion and transfer training on reducing shoulder pain and increasing community participation in pediatric manual wheelchair users with physical disabilities.* University of Illinois, Center for Health Aging and Disability. June 1, 2014 – December 31, 2015. \$19,730. Role: Co-Investigator

Sosnoff, J.J., **Rice, L.A.** Chodzko-Zajko, W., von Koch, L., Holmqvist, L.W.: *A Trans-Atlantic Examination of Falls in Non-ambulatory Individuals with Multiple Sclerosis.* Inspire: Illinois-Sweden Program For Educational and Research Exchange. December 9, 2013 – March 31, 2014. Role: Co-Investigator.

Boninger, ML *University of Pittsburgh Model Center on Spinal Cord Injury* National Institute on Disability and Rehabilitation Research, October 1, 2011-October 31, 2014. \$2,285,000
Role: Consultant

Rice, IM, Motl, RW, **Rice, LA;** *Promoting Physical Activity Through a Manual Wheelchair Propulsion Activity Intervention in Persons with Multiple Sclerosis* National Multiple Sclerosis Society. October 1, 2012 – September 30, 2013. \$109,680. Role: Co-Investigator

Publications

Publications in Review

Sung, JH, **Rice, LA**, Motl, R, Sosnoff, JJ. (XXXX) *Effect of a 2-minute bout of body weight support treadmill training on the ankle spasticity in persons with multiple sclerosis*. In Review: *International Journal of Physical Medicine and Rehabilitation*.

Rice, IM, **Rice, LA**, Motl R. (XXXX) *Promoting Physical Activity Through a Manual Wheelchair Propulsion Activity Intervention in Persons with Multiple Sclerosis*. In Review: *Arch Phys Med Rehabil*.

In Press

Rice, LA, Ousley, C., Sosnoff, J.J. (XXXX) *A Systematic Review of Risk Factors Associated with Accidental Falls, Outcome Measures and Interventions to Manage Fall Risk in Non-Ambulatory Adults*. In Review: *Disability and Rehabilitation*.

Learmonth YC, Rice IM, Ostler, TA, **Rice LA**, Motl R. (2014) *Perspectives on physical activity among persons with multiple sclerosis who are wheelchair users: Informing the design of future interventions*. In Press: *Psychology and Health*.

Refereed Journal Publications

Rice, L. A., Smith, I., Kelleher, A. R., Greenwald, K., & Boninger, M. L. (2014). Impact of a wheelchair education protocol based on practice guidelines for preservation of upper-limb function: a randomized trial. *Arch Phys Med Rehabil*, 95(1), 10-19 e11.

Rice, I. M., Wong, A. W., Salentine, B. A., & **Rice, L. A.** (2013). Differences in participation based on self-esteem in power and manual wheelchair users on a university campus: a pilot study. *Disabil Rehabil Assist Technol*. Early Online: 1-6.

Yang, T.D., Hutchinson, S., **Rice, L.A.**, Watkin, K., and Jan, Y.K. (2013). Development of a scalable monitoring system for wheelchair tilt-in-space usage. *Int J Phys Med Rehabil*, 1(4).

Tsai, C. Y., **Rice, L. A.**, Hoelmer, C., Boninger, M. L., & Koontz, A. M. (2013). Basic Psychometric Properties of the Transfer Assessment Instrument (Version 3.0). *Arch Phys Med Rehabil*. 94(12).

Jan YK, Liao F, **Rice LA**, and Woods JA (2013). *Using reactive hyperemia to assess the efficacy of local cooling on reducing skin ischemia under surface pressure in people with spinal cord injury: a preliminary report*. [Arch Phys Med Rehabil](#). 94(10):1982-9.

Rice, L.A., I. Smith, A. Kelleher, K. Greenwald, C. Hoelmer, M.L. Boninger. (2013) *Impact of the Clinical Practice Guideline for Preservation of Upper Limb Function on Transfer Skills of Persons with Acute Spinal Cord Injury*. [Arch Phys Med Rehabil](#). 94(7):1230-46.

Jan, Y. K., Liao, F., Jones, M. A., **Rice, L. A.**, & Tisdell, T. (2013). Effect of durations of wheelchair tilt-in-space and recline on skin perfusion over the ischial tuberosity in people with spinal cord injury. *Arch Phys Med Rehabil*, 94(4), 667-672.

McClure, L. A., Boninger, M. L., Oyster, M. L., Roach, M. J., Nagy, J., & Nemunaitis, G. (2011). Emergency evacuation readiness of full-time wheelchair users with spinal cord injury. *Arch Phys Med Rehabil*, 92(3), 491-498.

McClure, L. A., Boninger, M. L., Ozawa, H., & Koontz, A. (2011). Reliability and validity analysis of the transfer assessment instrument. *Arch Phys Med Rehabil*, 92(3), 499-508.

McClure, L. A., Boninger, M. L., Oyster, M. L., Williams, S., Houlihan, B., Lieberman, J. A., & Cooper, R. A. (2009). Wheelchair repairs, breakdown, and adverse consequences for people with traumatic spinal cord injury. *Arch Phys Med Rehabil*, 90(12), 2034-2038.

Book Chapters

Cooper, R.A., Cooper, R., Boninger, M.L., Bobish, T., **McClure, L.A.**, Kelleher, A., Pelleshi, T.L. (2014). Therapeutic Technology (Part II). In: M. Selzer, S. Clarke, L. Cohen, G. Kwakkel, R. Miller (Eds). *Textbook of Neural Repair and Rehabilitation, 2nd Edition*. New York: Cambridge University Press.

Cooper, R.A., McCue, M., Schein, R.M., Cooper, R. Spornier, M.L., Dodson, M.B., Reinsfelder, A.M., Yeager, A.F., Jinks, A., LoPresti, E., **McClure, L.A.**, Wang, H., Collinger, J.L., Hiremath, S., Ding, D., Lewis, A. (2012). Assistive Technology for People with Traumatic Brain Injuries (Chapter 71). In: N.D. Zasler, D.I. Katz, R. Z. Zafonte, (Eds). *Brain Injury Medicine, 2nd Edition* (1178-1201). New York: Demos Medical Publishing.

Boninger M, **McClure LA**, Cooper R, Schmeler M. (2010) Wheelchairs. In: Frontera W, Delisa J, Gans B, Walsh N, Robinson L, (Eds). *Physical Medicine and Rehabilitation Principles*. Vol 5. Philadelphia: Lippincott, Williams and Wilkins.

Invited Seminar Presentations

Rogers E, **Rice LA**, Wehrli L, Piltier J, Baldessari J, Severe E, Jennings J. *Therapy in the Era of Technology*. (2014, August 31-September 3) Presentation accepted for the Annual Meeting of the Academy of Spinal Cord Injury Professionals.

Rice, I.M., **Rice, L.A.** *Biomechanics and Training Concepts for Wheelchair Racing and Handcycling*. (2014, June 25) Presentation at the 37th Annual SCI Interdisciplinary Course.

Betz, K., Rice, I.M., Svirvev, J., Cahow, C., Rogers, E., Schmeler, M., Bieganek, J., **Rice, L.A.** (2013, September 2-4) *Paralyzed to Paralympics and Everything Between: Adaptive Sports and Recreation*. Presentation at the Annual Meeting of the Academy of Spinal Cord Injury Professionals; Las Vegas, NV.

McClure, LA. (2011, April 30) *Upper Limb Preservation*, Presented at the Jim Thorpe Neurological Conference, Oklahoma City, OK.

McClure, LA (2010 September 29-October 2) *Repetitive Motion Injuries and the Spinal Cord Injury Upper Extremity Protection Guidelines*, Presented at the Association of Rehabilitation Nurses 36th Annual Education Conference; Orlando, Fl.

Minkel, J, Hastings, J, **McClure, LA**, Bjerkefors, A. (2010 June 7-9) *Clinical Practice Guidelines: Transfer Training for Transferring in the Home and Beyond*, Presented at the Posture and Mobility Group Annual Meeting, Glasgow, Scotland.

McClure, LA (2009, September 15-17) *Implementation of Clinical Practice Guidelines Strategies*, Presented at the European Seating Symposium; Dublin, Ireland.

Proceedings

Chruzander, C., Johansson, S., Peterson, E.W., **Rice, L.A.**, Sosnoff, J.J., von Koch, L., Widen Holmqvist, L., Ytterberg, C. (2014, September 10-13) *Falls Among Non-Ambulatory Individuals with Multiple Sclerosis: An International Expert Panel Consensus Statement*. Accepted as a poster at the 2014 Joint ACTRIMS-ECTRIMS Meeting.

Rice LA, Smith I, Kelleher A, Greenwald K, Boninger, ML. (2014 August 31-September 3) *Improving Transfer Quality Among Persons Living with Tetraplegia*. Accepted for presentation at the Annual Meeting of the Academy of Spinal Cord Injury Professionals; St. Louis, MO.

Learmonth, Y.C., Rice, I.M., Ostler, T., **Rice, L.A.**, Motl, R.M. (2014, May 28-31) *Perspectives on physical activity among persons with multiple sclerosis who are wheelchair users: Informing the design of future interventions*. Abstract accepted at CMSC ACTRIMS Cooperative Annual Meeting.

Rice, LA, Goldberg, M. (2014, March 4-7) *How to Optimize Your Continuing Education: A Necessary Benefit to Improve Your Practice*, Presented at the International Seating Symposium, Vancouver, Canada.

Rice, LA, M.L. Boninger. (2013 September 2-4) *Comparison of Level of Injury on Community Participation and Satisfaction with Life in the First Year After Spinal Cord Injury*, Presented at the Annual Meeting of the Academy of Spinal Cord Injury Professionals; Las Vegas, NV.

Hogaboom, N.S., B.F. Fullerton., **L.A. Rice**, M.L. Oyster, M.L. Boninger. (2013 June 20-24) *Ultrasound changes, pain, and pathology in shoulder tendons after repeated wheelchair transfers*, Presented at RESNA International Conference on Technology and Disability, Bellevue, WA,

Jan YK, Crane BA, **Rice LA**, and Ennis WJ. (2013 June 20-24) *Muscle and skin perfusion over the ischial tuberosities in response to wheelchair tilt and recline in people with spinal cord injury* Presented at RESNA International Conference on Technology and Disability, Bellevue, WA.

Jan YK, Liao F, **Rice LA**, and Woods JA. (2013, May 6-8) *Using reactive hyperemia to assess the efficacy of local cooling on reducing skin ischemia under surface pressure in people with spinal cord injury* Presented at the American Spinal Injury Association Annual Conference, Chicago, IL.

Beauchamp, D.W, N.S. Hogaboom, B. Fullerton, **L.A. Rice**, M.L. Boninger. (2013 March 6-10) *Ultrasound Changes in Shoulder Tendons in Response to Repeated Transfers*. Presented at the Association of Academic Physiatrists Annual Conference. New Orleans, LA.

Rice, L.A. B. Hedrick. (2013, March 5-9) *Use of Environmental Control Units by Power Wheelchair Users in Higher Education* Presented at the International Seating Symposium, Nashville, TN.

Rice, LA, Boninger, ML, Smith, I. (2012, March 7-9) *Randomized Clinical Trial to Evaluate the Implementation of Clinical Practice Guidelines on Transfer Skills and Quality* Presented at the International Seating Symposium, Vancouver, Canada.

McClure, LA, Koontz AM (2011, March 3-5) *The Transfer Assessment Instrument for Measuring Transfer Performance* Presented at the International Seating Symposium Nashville, TN.

Koontz, AM, **McClure, LA** (2010, September 22-24) *Measuring Transfer Performance: Adherence with Evidence-Based Practices Concerning Preservation of Upper Limb Function in Patients with Spinal Cord Injury* Presented at Annual Meeting of the Academy of Spinal Cord Injury Professionals; Las Vegas, NV.

McClure, LA, M.L. Boninger. (2010, March 10-13) *Implementation of Clinical Practice Guidelines Strategies* Presented at the International Seating Symposium; Vancouver, Canada.

C. M. Heiner, **L.A. McClure**, Z. Talmadge, M.L. Boninger. (2009, June 23-27) *A Prototype Web Site for Clinical Education: Implementation of Guidelines for Preventing Upper Limb Pain in People with Spinal Cord Injury* Presented at the Rehabilitation Engineering and Assistive Technology Society of North America Conference, New Orleans, LA.

McClure, L.A., M.L. Boninger, M.L Oyster, J.A. Lieberman. (2009, June 23-27) *Prevalence and Impact of Wheelchair Breakdowns on Fulltime Wheelchair Users*, Presented at the Rehabilitation Engineering and Assistive Technology Society of North America Conference, New Orleans, LA.

McClure, LA, M.L. Boninger. (2009, March 11-14) *Implementation of Clinical Practice Guidelines Strategies* Presented at the International Seating Symposium; Orlando, FL.

Other Publication

Boninger, M.L, J. Carswell, **L.A. McClure**. (2008) Preservation of Upper Limb Function: What you should know. Consortium for Spinal Cord Medicine: Washington DC.

Teaching Experience

Supervisor: KIN 385: Experience in Kinesiology Research (Department of Kinesiology and Community Health, University of Illinois)
Spring 2014

Instructor: CHLH/REHB 330: Disability in American Society (Department of Kinesiology and Community Health, University of Illinois)
Fall 2013

Instructor: KIN/CHLH 199: Introduction to the Health Sciences (Department of Kinesiology and Community Health, University of Illinois)
Fall 2012, Fall 2013

Instructor: HRS 2705: Rehabilitation Engineering and Assistive Technology Practices (School of Health and Rehabilitation Science, University of Pittsburgh),
Spring 2011

Teaching Assistant – HRS 3701 Clinical Application of Seating (School of Health and Rehabilitation Science, University of Pittsburgh)
Spring 2009

Teaching Assistant – Introduction to Physical Therapy (Department of Physical Therapy, Duquesne University)
Spring 2003

Students Advised

Primary Advisor:

Zadok Isaacs (M.S., University of Illinois)

Dissertation/Thesis Committee:

Courtney Weisman (PhD, University of Illinois) “*Title TBA*”

Chung-Ying Tsai (PhD, University of Pittsburgh) “Biomchanical Validation of the Transfer Assessment Instrument (TAI) in Evaluating Different Independent Transfers in Wheelchair Users” *Fall 2014*

Jong Sung (M.S., University of Illinois) “Effect of a 2 Minute Bout of Body Weight Supported Treadmill Training on the Ankle Spasticity in Persons with Advanced Multiple Sclerosis” *Fall 2013*

Maria Luisa Toro Hernandez (M.S., University of Pittsburgh) “The Impact of Transfer Setup on the Performance of Independent Transfers” *Summer, 2011.*

Reviewing

Journal Manuscripts:

- American Journal of Physical Medicine and Rehabilitation
- Journal of Rehabilitation Research and Development
- Archives of Physical Medicine and Rehabilitation
- Spinal Cord
- BioMed Research International
- International Journal of Physical Medicine and Rehabilitation

Service

- Academy of Spinal Cord Injury Professionals Therapy Leadership Council Electronic Communications Representative, November 2012 – Present
- Provision of Wheeled Mobility Devices to Disability Resources and Educational Services students at the University of Illinois, Spring 2012- Present (3 hours per week)
- Member – SmartWheel Users Group, September 2012- present

Professional Affiliations

- Member Academy of Spinal Cord Injury Professionals, 2012 - present
- Member Aqua Therapy and Rehabilitation Institute, 2011- present
- Member, American Physical Therapy Association, 2003 – present
- Member, Rehabilitation Society of North America, 2007-2009

Certifications

- Licensed Physical Therapist in Illinois, 2011-present
- Certified Assistive Technology Provider (ATP), 2010- present
- Licensed Physical Therapist in Pennsylvania, 2004-present

Research Interests

- Preventing development of secondary impairments for persons with disabilities
- Provision of effective education for persons with disabilities
- Community Integration of Individuals with Disabilities
- Professional Education
- Development of Outcome Measures

Updated 12/18/14