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Education

- 2006-2012** Ph.D., Kinesiology, McMaster University, Hamilton, Canada
'Adapted Exercise Interventions for Persons with Progressive Multiple Sclerosis'
- 2002-2006** B.Sc., Biology, Queen's University, Kingston, Canada
- 2002-2006** B.P.H.E., Physical and Health Education, Queen's University, Kingston, Canada

Professional Positions

- 2013-Present** Assistant Professor
Department of Kinesiology and Community Health
University of Illinois at Urbana-Champaign, Urbana, IL
- 2011-2013** Postdoctoral Fellow
Department of Kinesiology and Community Health
University of Illinois at Urbana-Champaign, Urbana, IL
- 2005-2006** Research Assistant, Exercise and Pregnancy Research Laboratory
School of Physical and Health Education
Queen's University, Kingston, Canada

Grants & Fellowships

Externally Funded Grants

Co-principle Investigator (2012-2013). Development of Cardiorespiratory and Muscular Fitness Testing Protocols in Persons with Multiple Sclerosis with Severe Disability. National Multiple Sclerosis Society.

Internally Funded Grants

Principle Investigator (2013-2014). Home-Based Resistance Training in Advanced Multiple Sclerosis. Center for Health Aging and Disability Research Program, University of Illinois Urbana-Champaign.

Fellowships Awarded

Postdoctoral Fellowship (2012-2013, 2013-2014 – *fellowship declined*). Increasing Physical Activity Behaviour in Individuals with Multiple Sclerosis. Multiple Sclerosis Society of Canada.

Publications & Presentations

Book Chapters

Pilutti LA, Motl RW. *Benefits of Progressive Resistance Training in Multiple Sclerosis* in Resistance Training for the Prevention and Treatment of Chronic Disease. Ed. Joseph Ciccolo and William Kraemer. Taylor and Francis, in press.

Peer Reviewed Journal Articles (published or in press)

Sandroff BM, Pilutti LA, Dlugonski D, Motl RW. Physical activity and information processing speed in persons with multiple sclerosis: A prospective study. *Mental Health and Physical Activity*, in press.

Pilutti LA, Dlugonski D, Sandroff BM, Klaren R, Motl RW. Randomized controlled trial of a behavioral intervention targeting symptoms and physical activity in multiple sclerosis. *Multiple Sclerosis Journal*, in press.

Pilutti LA, Dlugonski D, Sandroff BM, Suh Y, Pula JH, Sosnoff JJ, Motl RW. Gait and six-minute walk performance in persons with multiple sclerosis. *Journal of the Neurological Sciences*, DOI: 10.1016/j.jns.2013.07.2511.

Klaren R, Motl RW, Dlugonski D, Sandroff BM, Pilutti LA. Objectively quantified physical activity in persons with multiple sclerosis. *Archives of Physical Medicine and Rehabilitation*, DOI:10.1016/j.apmr.2013.07.011.

Sandroff, BM, Pilutti LA, Dlugonski D, Learmonth YC, Suh Y, Balantrapu S, Pula JH, Motl RW. Comparing two conditions of administering the six-minute walk in persons with MS. *International Journal of MS Care*, in press.

Learmonth YC, Dlugonski D, Pilutti, LA, Sandroff BM, Klaren R, Motl RW. Psychometric properties of the fatigue severity scale and the modified fatigue impact scale. *Journal of the Neurological Sciences*, DOI: 10.1016/j.jns.2013.05.023.

Sandroff BM, Pilutti LA, Dlugonski D, Pula JH, Benedict R, Motl RW. Physical activity and cognitive processing speed in persons with multiple sclerosis. *Multiple Sclerosis and Related Disorders*, in press.

Pilutti LA, Greenlee TA, Nickrent M, Motl RW, Petruzzello SJ. Effects of exercise training on fatigue in multiple sclerosis: A meta-analysis. *Psychosomatic Medicine*, in press.

Motl RW, Pilutti LA, Sandroff BM. The importance of physical fitness in multiple sclerosis. *Journal of Novel Physiotherapies*, 2013;3:1000141.

Motl RW, Pilutti LA, Sandroff BM, Klaren R, Balantrapu S, McAuley E, Sosnoff JJ, Fernhall B. Rationale and design of a randomized controlled, clinical trial investigating a comprehensive exercise

stimulus for improving mobility disability outcomes in persons with multiple sclerosis. *Contemporary Clinical Trials*, 2013;35:151-158.

Learmonth YC, Dlugonski D, Pilutti, LA, Motl RW. The reliability, precision and clinically meaningful change of walking mobility assessments in multiple sclerosis. *Multiple Sclerosis Journal*, DOI: 10.1177/1352458513483890.

Sosnoff JJ, Balantrapu S, Pilutti LA, Sandroff BM, Morrison S, Motl RW. Cognitive processing speed is related to fall frequency in older adults with multiple sclerosis. *Archives of Physical Medicine and Rehabilitation*, 2013 DOI: 10.1016/j.apmr.2013.02.009.

Latimer-Chung AE, Pilutti LA, Hicks AL, Martin Ginis KA, Fenuta A, MacKibbon A, Motl RW. The effects of exercise training on fitness, mobility, fatigue, and quality of life among adults with multiple sclerosis: A systematic review. *Archives of Physical Medicine and Rehabilitation*, 2013 DOI: 10.1016/j.apmr.2013.04.020.

Latimer-Chung AE, Martin Ginis KA, Motl RW, Hicks AL, Pilutti LA, Brouwers M, Duggan M, Persad R, Smith K, Wheeler G. Development of evidence-informed physical activity guidelines for adults with multiple sclerosis. *Archives of Physical Medicine and Rehabilitation*, 2013 DOI: 10.1016/j.apmr.2013.05.015.

Pilutti LA, Sandroff BM, Dlugonski D, Balantrapu S, Suh Y, Pula JH, Sosnoff JJ, Motl RW. Further validation of Multiple Sclerosis Walking Scale-12 scores based on spatiotemporal gait parameters. *Archives of Physical Medicine and Rehabilitation*, 2013; 94:575-578.

Motl RW, Pilutti LA, Sandroff BM, Dlugonski D, Sosnoff JJ, Pula JH. Validation of accelerometry as a measure of walking behavior in multiple sclerosis. *Acta Neurologica Scandinavica*, DOI: 10.1111/ane.12036.

Pilutti LA, Hicks AL. Rehabilitation of ambulatory limitations. *Physical Medicine and Rehabilitation Clinics of North America*, in press.

Dlugonski D, Pilutti LA, Sandroff BM, Suh Y, Balantrapu S, Motl RW. Steps per day among persons with multiple sclerosis: Variation by demographic, clinical, and device characteristics. *Archives of Physical Medicine and Rehabilitation* 2013, 94:1534-1539.

Motl RW, Balantrapu S, Pilutti LA, Dlugonski D, Yoojin S, Sandroff B, Lane A, Fernhall B. Symptomatic correlates of six-minute walk performance in persons with multiple sclerosis. *European Journal of Physical Medicine and Rehabilitation* 2013;49:59-66.

Motl RW, Dlugonski D, Pilutti LA, Sandroff BM, McAuley E. Premorbid physical activity predicts disability progression in relapsing-remitting multiple sclerosis. *Journal of the Neurological Sciences*, 2012;323:123-127.

Pilutti LA, Dlugonski D, Pula JH, Motl RW. Weight status in persons with multiple sclerosis: Implications for mobility outcomes. *Journal of Obesity* 2012; DOI: 10.0055/2012/868256.

Motl RW, Pilutti LA. The benefits of exercise training in multiple sclerosis. *Nature Reviews Neurology* 2012;8:487-497.

Pilutti LA, McAuley E, Motl RW. Weight status and disability in multiple sclerosis: An examination of bi-directional associations over a 24-month period. *Multiple Sclerosis and Related Disorders* 2012;1:139-144.

Pilutti LA, Hicks AL. Role of exercise in multiple sclerosis: Potential of adapted exercise modalities. *Critical Reviews in Physical Medicine and Rehabilitation* 2011;23:175-194.

Pilutti LA, Lelli DA, Paulseth JE, Crome M, Jiang S, Rathbone MP, Hicks AL. Effects of 12 weeks of supported treadmill training on functional ability and quality of life in progressive multiple sclerosis: A pilot study. *Archives of Physical Medicine and Rehabilitation* 2011;92:31-36.

Rathbone M, Pilutti L, Caciagli F, Jiang S. Neurotrophic effects of extracellular guanosine. *Nucleotides, Nucleosides and Nucleic Acids* 2008;27:1-7.

Submitted Manuscripts

Pilutti LA, Dlugonski D, Sandroff BM, Klaren R, Motl RW. Lifestyle physical activity improves body composition in multiple sclerosis: A randomized controlled trial.

Learmonth YC, Sandroff, BM, Pilutti LA, Klaren R, Ensari I, Riskin, BJ, Holtzer R, Motl RW. The dual task cost of walking in multiple sclerosis using an alternate letter alphabet task.

Motl RW, Learmonth YC, Pilutti LA, Dlugonski D, Klaren R. Validity of minimal clinically important difference values for the Multiple Sclerosis Walking Scale-12?

Sandroff BM, Klaren R, Pilutti LA, Dlungonski D, Motl RW. A Randomized controlled trial of physical activity, cognition, and walking in multiple sclerosis.

Motl RW, Sandroff BM, Cadavid D, Pilutti LA, Pula JH. Cognitive processing speed and its influence on the validity of Multiple Sclerosis Walking Scale-12 scores.

Motl RW, Suarez G, Pilutti LA. Clinical importance of accelerometer output in persons with multiple sclerosis.

Published Abstracts

Pilutti LA. Adapted exercise interventions for persons with progressive multiple sclerosis. *Applied Physiology Nutrition and Metabolism*, 2013;38:357.

Pilutti LA, Sandroff BM, Dlugonski D, Blanatrapu S, Suh Y, Pula JH, Sosnoff JJ, Motl RW. Multiple Sclerosis Walking Scale-12 Scores and gait parameters. *International Journal of MS Care* 2012;14:S2

Pilutti LA, McAuley E, Motl RW. Weight status and disability in multiple sclerosis. *International Journal of MS Care* 2012;14:S2

Motl RW, Pilutti LA, Hicks AL, Martin Ginis KA, Fenuta A, Latimer-Chung AE. Exercise training and physical fitness in persons with multiple sclerosis: A systematic review. *International Journal of MS Care* 2012;14:S2.

Motl RW, Pilutti LA, Sandroff BM, Dlugonski D, Suh Y, Blanatrapu S, Pula JH. Validation of accelerometry as a measure of ambulation in multiple sclerosis. *International Journal of MS Care* 2012;14:S2.

Sandroff BM, Dlugonski D, Pilutti LA, Pula JH, Benedict RHB, Motl RW. An update on physical activity and cognition in persons with MS. *International Journal of MS Care* 2012;14:S2.

Motl RW, Balantrapu S, Pilutti LA, Dlugonski D, Yoojin S, Sandroff B, Lane A, Fernhall B. Symptomatic correlates of six-minute walk performance in persons with multiple sclerosis. *International Journal of MS Care* 2012;14:S2.

Motl RW, Suarez G, Pilutti LA. Clinical importance of accelerometer output in persons with multiple sclerosis. *International Journal of MS Care* 2012;14:S2.

Sandroff BM, Pilutti LA, Dlugonski D, Suh Y, Balantrapu S, Pula JH, Sosnoff JJ, Motl RW. Two conditions of administering the six-minute walk in persons with MS. *International Journal of MS Care* 2012;14:S2.

Matilla TA, Nickrent M, Pilutti LA, Motl RW, Petruzzello SJ. Chronic exercise training effects on fatigue in multiple sclerosis: A meta-analysis. *Medicine and Science in Sports and Exercise*, 44, S5.

Pilutti LA, Noseworthy M, Paulseth JE, Lelli DA, Jiang S, Rathbone MP, Hicks AL. Exercise reduces brain iron content in progressive multiple sclerosis: A pilot trial. *International Journal of MS Care* 2011;13:S133.

Pilutti LA, Paulseth JE, Lelli DA, Crome M, Hansebout C, Jiang S, Rathbone MP, Hicks AL. Body-weight supported treadmill training in progressive multiple sclerosis: Effects on physical function, fatigue, quality of life and brain-derived neurotrophic factor. *Multiple Sclerosis* 2010;16:1019.

Pilutti LA, Lelli DA, Paulseth JE, Jiang S, Rathbone MP, Hicks AL. The effects of treadmill training on functional ability, quality of life and fatigue in primary progressive multiple sclerosis. *Multiple Sclerosis* 2009;15:1396-1410.

Rodrigues L, Pilutti L, Hicks A. Twitch contractile properties in individuals with spinal cord injuries. *Applied Physiology Nutrition and Metabolism* 2007;33:S76.

Rodrigues L, Pilutti L, Hicks A. Force-frequency relationship and fatigue of paralyzed human tibialis anterior muscle. *Applied Physiology Nutrition and Metabolism* 2007;33:S75.

Rodrigues L, Pilutti L, Hicks A. Posttetanic potentiation in the paralyzed human tibialis anterior muscle. *Applied Physiology Nutrition and Metabolism* 2007;33:S76.

Submitted Abstracts

Pilutti LA, Dlugonski D, Klaren R, Motl RW. RCT of a behavioral intervention targeting physical activity and symptoms in MS.

Pilutti LA, Matilla TA, Motl RW, Nickrent M, Petruzzello SJ. Effects of exercise training on fatigue in multiple sclerosis: A meta-analysis.

Klaren R, Motl RW, Dlugonski D, Sandroff BM, Pilutti LA. Objectively quantified physical activity in persons with multiple sclerosis.

Sandroff BM, Pilutti LA, Dlugonski D, Motl RW. Physical activity and cognitive processing speed in multiple sclerosis.

Motl RW, Learmonth YC, Pilutti LA, Dlugonski D, Klaren R. Validity of MCID values for the multiple sclerosis walking scale-12.

Motl RW, Cadavid D, Sandroff BM, Pilutti LA, Pula JH, Benedict RHB. Cognitive processing speed and its influence on the validity of MSWS-12 scores.

Balantrapu S, Pilutti LA, Sandroff BM, Wajda DA, Sosnoff JJ, Motl RW. Postural sway and spatio-temporal parameters of gait in multiple sclerosis.

Learmonth YC, Dlugonski D, Pilutti LA, Sandroff BM, Motl RW. The reliability, precision and clinically meaningful change of walking assessments in MS.

Learmonth YC, Dlugonski D, Pilutti LA, Sandroff BM, Motl RW. Reliability, precision and clinically meaningful change of fatigue outcomes in MS.

Motl RW, Sosnoff JJ, Dlugonski D, Pilutti LA, Klaren R, Sandroff BM, Walking and cognition, but not symptoms, correlate with dual task cost of walking in MS.

Sosnoff JJ, Balantrapu S, Moon Y, Sandroff BM, Pilutti LA, Fanning J, Finlayson M, Morrison S, McAuley E, Motl RW. Home based exercise program and fall risk reduction in older adults with MS.

Sosnoff JJ, Balantrapu S, Sandroff BM, Pilutti LA, Morrison S, Motl RW. Recurrent falls in older adults with MS.

Presentations

Pilutti LA, Motl RW. Exercise and multiple sclerosis. Invited speaker: Physical Activity in the Primary & Secondary Prevention of Chronic Disease Symposium. Canadian Society for Exercise Physiology Annual Meeting, Regina, 11 October 2012.

Pilutti LA, Dlugonski D, Sandroff BM, Suh Y, Balantrapu S, Motl RW. Characterizing daily step counts in persons with multiple sclerosis. Platform presentation: Rehabilitation, Consortium of Multiple Sclerosis Centres, San Diego 1 June 2012. *Int J MS Care* 2012;14:S2.

Pilutti LA. Physical activity and multiple sclerosis: Promoting Health and Wellness. MS Wellness Summit 2012, National Multiple Sclerosis Society. Springfield, IL, 21 April 2012.

Pilutti LA, Paulseth JE, Lelli DA, Jiang S, Rathbone MP, Hicks, AL. Supported treadmill walking for patients with progressive multiple sclerosis. Rehabilitation Research Colloquium, Queen's University, 20 May 2011.

Pilutti LA. Exercise therapy for people with multiple sclerosis. 'May at Mac' Department of Kinesiology recruitment presentation. McMaster University, 7 May 2011.

Pilutti LA, Lelli DA, Paulseth JE, Crome M, Jiang S, Rathbone MP, Hicks AL. Effects of 12 weeks of supported treadmill training on functional ability and quality of life in progressive multiple sclerosis. Department of Kinesiology, Seminar series. McMaster University, 4 December 2008.

Awards & Scholarships

2011-2012	Du Pré Grant, Multiple Sclerosis International Federation
2008-2011	Frederick Banting and Charles Best Canada Graduate Scholarship Doctoral Research Award, Canadian Institutes of Health Research
2010	Young Investigator Travel Award, America's Committee on Treatment and Research in Multiple Sclerosis (ACTRIMS), San Antonio, TX
2009	Young Investigator Travel Award, ACTRIMS, Atlanta, GA
2008	World Congress Meeting on Multiple Sclerosis, Travel Scholarship Multiple Sclerosis Society of Canada, Montreal, Canada
2007-2008	The Canada Life Assurance Company Scholarship McMaster University, Hamilton, Canada
2007-2008	Graduate and Entrance Scholarship, Ph.D. Program McMaster University, Hamilton, Canada
2006-2007	Graduate and Entrance Scholarship, M.Sc. Program McMaster University, Hamilton, Canada

Professional Memberships, Certifications & Service

2013-Present	Member, Consortium of Multiple Sclerosis Centers
2012-Present	Neurostatus Certification Level C
2010-Present	Certified Exercise Physiologist, Canadian Society for Exercise Physiology
2010-Present	Member, Ontario Society for Health and Fitness
2008-Present	Member, Canadian Society for Exercise Physiology
2011-2012	Content Expert & Consensus Panel Member

- Physical Activity Guidelines for Canadians with Multiple Sclerosis
 Funded by: Canadian Institutes of Health Research
2009-2011 Synapse Mentorship Program, Youth Connections
 Canadian Institutes of Health Research
2008-2010 Student Relations Committee, McMaster University, Hamilton, Canada
2006-2010 McMaster Athletic Council Executive, McMaster University, Hamilton, Canada
 Positions held: President (2008-2010), Outreach Coordinator (2006-2008)
2007-2008 Kinesiology Graduate Body, Secretary, McMaster University, Hamilton, Canada

Teaching & Training Experience

- 2013-2014** Instructor, Kinesiology and Community Health, University of Illinois at Urbana-Champaign, Urbana, IL
Courses:
- Kinesiology 122 Physical Activity & Health
- 2006-2011** Teaching Assistant, Kinesiology, McMaster University, Hamilton, Canada
Courses:
- KIN 4MM3 Advanced Exercise Testing and Prescription
 - KIN 4SS3 Human Aging: Biological and Lifestyle Influences
 - KIN 3B03 Physical Activity for Challenged Populations
 - KIN 3F03 Management Concepts and Programme Design
 - KIN 2H03 History and Philosophy of Kinesiology
- 2008-2011** Guest Lecturer, Kinesiology, McMaster University, Hamilton, Canada
Courses:
- KIN 2C03 Neuromuscular Exercise Physiology
- 2010-2011** endMS Research and Training Network, Multiple Sclerosis Society of Canada
- endMS Summer School 2011, University of Calgary, Calgary, Canada
 - endMS Summer School 2010, Dalhousie University, Halifax, Canada
 - endMS Network Trainee Champion 2010-2011, Manitoba-Ontario Regional Research and Training Centre
 - end MS Manitoba-Ontario Regional Research and Training Centre 2011 Meeting and Neuroinflammation Symposium, Toronto, Canada
 - endMS 2010 Annual Conference and Meeting, Whistler, Canada
- 2006-2011** Exercise Leader, Centre for Health Promotion & Rehabilitation
 Department of Kinesiology, McMaster University, Hamilton, Canada
- MacTurtles – Cardiac Exercise Rehabilitation Program
 - MacSeniors – Seniors Exercise Program
 - MacWheelers – Spinal Cord Injury Rehabilitation Program