**Christy Tomkins-Lane, PhD**

**Founder**

Vivametrica

**Visiting Associate Professor**

Wearable Health Lab

Department of Orthopaedic Surgery

Stanford University

[**Clane3@stanford.edu**](mailto:Clane3@stanford.edu)

**Associate Professor**

Department of Health and Physical Education

Mount Royal University

[**clane@mtroyal.ca**](mailto:clane@mtroyal.ca)

**CITIZENSHIP:** Canadian

**GENDER:** Female

**EDUCATION**

**Doctor of Philosophy: Rehabilitation Science**  2008

Department of Rehabilitation Medicine, University of Alberta, Edmonton, Alberta

Thesis: *Measurement of Walking Capacity in Lumbar Spinal Stenosis*

Supervisor: Dr. Michele Crites Battié

**Master of Science: Kinesiology (Exercise Physiology)**

School of Kinesiology, University of Western Ontario, London, Ontario 2004

Thesis: *Dietary Intake, Activity Level, and Blood Glucose in Hospitalized Antenatal Women in the Third Trimester.*

Supervisor: Dr. Michelle Mottola

**Master of Science: Exercise Rehabilitation** (exchange program), 2003

Department of Exercise Rehabilitation, Victoria University of Technology, Melbourne, Australia

**Honours Bachelor of Science: Kinesiology/Scholars Electives, with Distinction**

School of Kinesiology, University of Western Ontario, London, Ontario 2001

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**EMPLOYMENT HISORY**

**Visiting Associate Professor**

Department of Orthopaedic Surgery 2018-2019

Stanford University, Wearable Health Lab 2014-2015

**CEO**

Vivametrica 2018-2019

**COO**

Vivametrica 2014-2018

**Associate Professor (Tenured 2013)**

Department of Physical Education and Recreation Studies

Mount Royal University 2013-present

**Assistant Professor**

Department of Physical Education and Recreation Studies

Mount Royal University 2009-2013

**Postdoctoral Fellow**

Department of Physical Medicine and Rehabilitation

University of Michigan 2008-2009

**Postdoctoral Fellow**

Faculty of Rehabilitation Medicine

University of Alberta 2008

**Instructor and Research Assistant**

Rehabilitation Medicine and Physical Education and Recreation Studies

University of Alberta 2004-2008

**Instructor and Research Assistant**

Kinesiology

University of Western Ontario 2001-2003

**PROFESSIONAL AFFILIATIONS/CERTIFICATIONS**

* Research Associate: Department of Orthopaedic Surgery, Stanford University
* Co-Founder: Stanford University Wearable Health Lab
* Canadian Regional Representative: International Society for the Study of the Lumbar Spine
* Faculty Representative for MRU: Alberta Kinesiology Association
* Research Affiliate: Department of Physical Medicine and Rehabilitation, Spine Program, University of Michigan
* Member: McCaig Institute for Bone and Joint Health
* Certified Kinesiologist (CK), Ontario Kinesiology Association
* Certified Fitness Instructor, CanFit Pro
* Strategic Fellow: Alberta CIHR Training Program in Bone and Joint Health (past)
* Member: International Society for the Study of the Lumbar Spine
* Member: Canadian Society for Exercise Physiology
* Member: American College of Sports Medicine
* Member: The Human Anatomy and Physiology Society

**ACADEMIC TRAINING**

**Postdoctoral Fellow** 2008-2009

Department of Physical Medicine and Rehabilitation, University of Michigan

**Postdoctoral Fellow** Fall 2008

Faculty of Rehabilitation Medicine, University of Alberta

**RESEARCH INTERESTS**

* Wearable technology and lifestyle change
* Predictive analytics for healthcare
* Health promotion and chronic disease prevention in older adults
* Exercise rehabilitation and physical activity in special populations
* Efficacy of interventions for musculoskeletal conditions
* Objective measurement of physical activity
* Lumbar spinal stenosis, neurogenic claudication and ambulation

**SELECTED AWARDS AND HONOURS**

**1st Prize Quesnay Global Female Founders of Insuretech**

2018

**The Spine Journal Outstanding Paper Award in Basic Science**

2018

**The Spine Journal Outstanding Paper Award Surgical Science**

2017

**The Spine Journal Outstanding Paper Award Medical and Interventional Science Runner-Up**

2016

**Archives of Physical Medicine and Rehabilitation Best Pain and Spine Research Paper**

2016

**International Society for the Study of the Lumbar Spine Prize for Clinical Research**

2016

**Best Presentation at University of Alberta Faculty of Rehabilitation Medicine Research Day**

2015

**Canadian Institutes for Health Research (CIHR) Young Investigators’ Forum Invited Attendee**

2015

**The Spine Journal Outstanding Paper Award for Medical and Interventional Science**

2013

**North American Spine Society Annual Meeting Best Paper Award**

2013

**Medtronic Best Poster Award, International Society for the Study of the Lumbar Spine**

2012

**Best Paper in Musculoskeletal Medicine, Annual Meeting of the American Academy of Physical Medicine and Rehabilitation**

2010

**Effective Team Award, Mount Royal University**

2012

**Canadian Institutes for Health Research (CIHR) Summer Program in Aging Invited Attendee**

2007

**Award of Excellence for Teaching in Kinesiology**

University of Western Ontario

2001-2002

**FELLOWSHIP AWARDS**

**Postdoctoral Research Fellowship** $40,000/year

University of Michigan

Department of Physical Medicine and Rehabilitation

2008-2009

**AHFMR Doctoral Health Research Fellowship** $21,500/year

Alberta Heritage Foundation for Medical Research

2007-2008

**Strategic Training Fellow Top-Up Scholarship** $6000

Alberta CIHR Bone and Joint Health Training Program

2008

**Doctoral Queen Elizabeth II Graduate Scholarship** $13,500

University of Alberta

2007-2008

*Declined due to AHFMR Fellowship*

**Strategic Training Fellow Scholarship** $22,000/year

Alberta CIHR Bone and Joint Health Training Program

2004-2006

**RESEARCH FUNDING**

Faculty of Health, Community and Education Bright Ideas Innovation Fund (PI) 2017-2018

($3000)

*Providing personalized physical activity prescription for people with lumbar spinal stenosis using a Pebble smart-watch: App development and pilot*

Mount Royal University Internal Research Grant (PI) ($10,000) 2017-2018

*Providing personalized physical activity prescription for people with lumbar spinal stenosis using a Pebble smart-watch: App development and pilot*

Alberta Spine Foundation Grant (PI) ($20,000) 2016-2018

*The Spinal Stenosis Pedometer and Nutrition e-Health Lifestyle Intervention (SSPANLI) Randomized Trial*

Mallinckrodt Acute Pain Management Grant 2016-2017

Co-Investigator with Patricia Zheng, Stanford University ($9955 USD)

*Utilizing physical activity monitors to characterize free-living physical activity patterns in low back pain*

Faculty of Health, Community and Education Bright Ideas Innovation Fund (PI) 2015-2016

($9050)

*Pedometer and Nutrition Lifestyle Intervention (PANLI) for low back pain*

University of Pittsburgh, Alberta B. Ferguson Orthopaedic Fund 2015-2016

(Co-Investigator with Gwendolyn Sowa) ($5000)

*Identification of biomarkers responsive to lifestyle intervention for lumbar spinal stenosis*

Canadian Institutes for Health Research (CIHR) Catalyst Grant e-Health 2013-2015

Innovations (PI) ($98,968)

*The Spinal Stenosis Pedometer and Nutrition e-Health Lifestyle Intervention (SSPANLI) Randomized Trial*

NCMIC Foundation 2013-2014

(Co-Investigator with Carlo Ammendolia)($23,372)

*Outcomes in Neurogenic Claudication Due to Degenerative Lumbar Spinal Stenosis: A Patients' Perspective*

Mount Royal University Internal Research Grant (PI) ($8,000) 2013-2015

*An examination of community performance before and after total disc replacement surgery for degenerative disc disease: The use of computerized activity monitors*

Bone and Joint Health Research Portfolio, Spine Research Grant (PI) ($30,000) 2012-2013

*An examination of community performance before and after total disc replacement surgery for degenerative disc disease: The use of computerized activity monitors*

Mount Royal University Internal Research Grant (PI) ($10,000) 2011-2013

*A Pedometer and Nutrition Lifestyle Intervention for People with Lumbar Spinal Stenosis Pilot*

AACTI Funding for Student Researcher ($5000) 2011

*A Pedometer and Nutrition Lifestyle Intervention for People with Lumbar Spinal Stenosis*

Private Donation to the University of Calgary Spine Program ($100,000) 2011-2012

*Funding to Start the Active Spine Research Group (with Dr. Richard Hu)*

National Institutes of Health (NIH) R-01 Program 2009-2011

(Co-investigator with Andrew Haig) ($2100000 USD)

*Paraspinal denervation in low back pain*

Mount Royal University Internal Research Grant (PI)($4000) 2010

*An examination of community participation before and after surgery for lumbar spinal stenosis: The use of computerized activity monitors*

University of Calgary Spine Program Research Grant (PI) ($7000) 2010-2013

*An examination of community participation before and after surgery for lumbar spinal stenosis: The use of computerized activity monitors*

National Institutes of Health (NIH) - National Institute on Disability and Rehabilitation Research (NIDRR) Advanced Rehabilitation Research Grant (PI)($2500) 2009

*The use of pedometers to increase physical activity participation in people with lumbar spinal stenosis: Pilot*

EFF Small Faculties Grant for the Advancement of Scholarship, University of Alberta *Measurement of Walking in Lumbar Spinal Stenosis, Follow-up* (Co-PI) ($5000) 2007

EFF Small Faculties Grant for the Advancement of Scholarship, University of Alberta *Measurement of Walking Capacity in Lumbar Spinal Stenosis* (Co-PI)($5000) 2006

**CURRENT RESEARCH PROJECTS**

* **Stanford mHealth Connect Working Group on Validation Standards for Physical Activity Measurement (Role: Member)**
* **Chair of International Taskforce on the Diagnosis and Management of Spinal Stenosis**
* **International Consensus on Diagnosis of Lumbar Spinal Stenosis**

**-** A project of the International Taskforce on the Diagnosis of Lumbar Spinal Stenosis **(Role: Taskforce Chair and PI)**

* **Pedometer and Nutrition Lifestyle Intervention (PANLI) for low back pain (Role: PI)**

- Collaborative project with the University of Calgary and Caleo Spine Clinic

* **Spinal Stenosis Pedometer and Nutrition Lifestyle Intervention (Role: PI and Team Leader)**

- Collaborative project with University of Calgary, Calgary West Central Primary Care Network and Brock University

* **Physical Activity Signatures of Pain (Role: Co-investigator)**

- Collaborative project with Matthew Smuck and Ming Kao, Orthopedic Surgery/Physical Medicine and Rehabilitation, Stanford University

**PUBLICATIONS**

**Articles in Peer-Reviewed Journals**

* **Tomkins-Lane CC**, Norden J, Sinha A, Hu R, Smuck M. Digital Biomarkers of spine and musculoskeletal disease from accelerometers: Defining phenotypes of free-living physical activity in knee osteoarthritis and lumbar spinal stenosis. Spine J, 2019 19(1):15-23. ***Awarded the Spine Journal and North American Spine Society Outstanding Paper for Basic Science 2018***
* Agarawal V, Smuck M, **Tomkins-Lane CC**, Shah NH. Inferring Physical Function from Wearable Activity Monitors: Analysis of Free-Living Activity Data from Patients with Knee Osteoarthritis. JMIR MHealth. 2018 Dec 18:6 (12):e11315.
* Smuck M, Muareimi A, Zheng P, Norden J, Sinha A, Hu R, **Tomkins-Lane CC**. Objective measurement of function following lumbar spinal stenosis decompression reveals improved functional capacity with stagnant real-life physical activity. *Spine Journal*. 2017, September 26. ***Awarded The Spine Journal and North America Spine Society Outstanding Paper for Surgical Science 2017.***
* **Tomkins-Lane CC**, Melloh M, Lurie J, Smuck M, Battie M, Freeman B, Samartzis D, Hu R, Barz T, Stuber K, Schneider M, Haig A, Schizas C, Cheung J, Mannion A, Staub L, Comer C, Macedo, Ahn S, Takahashi K, Sandella D. *Consensus on the clinical diagnosis of lumbar spinal stenosis: Results of an International Delphi Study*. ***ISSLS Prize Winner for Lumbar Spine Research 2016***. *Spine*. 2016 Aug 1;41(15):1239-46
* Ammendolia C, Schneider M, Williams K, Zickmund S, Hamm M, Stuber K, **Tomkins-Lane CC,** Rampersaud YR. The physical and psychological impact of neurogenic claudication: the patients’ perspective. *J Can Chiropr Assoc*. 2017 Mar;61(1):18-31.
* Smuck M, **Tomkins-Lane CC**, Ith MA, Jarosz R, Kao MCJ. Physical performance analysis: A new approach to assessing free-living physical activity in musculoskeletal pain and mobility-limited populations. *Plos One*. 2017 February 24*.*
* Norden J, **Tomkins-Lane CC**, Sinha A, Hu R, Smuck M. Objective measurement of free-living physical activity (performance) in lumbar spinal stenosis: Are physical activity guidelines being met? *The Spine Journal*. 2016. *In Press*. ***Awarded The Spine Journal and North American Spine Society Outstanding Paper Awards for Medical/Interventional Science Runner-Up 2016***
* Zaina F, **Tomkins-Lane CC**, Carragee E, Negrini S. Surgical versus non-surgical treatment for lumbar spinal stenosis. *Cochrane Database Sys Rev*. 2016 January 29.
* Lurie J, **Tomkins-Lane CC**. Management of lumbar spinal stenosis. *BMJ*. 2016 January. 4:352.
* **Tomkins-Lane** CC, Lafave LM, Parnell JA, Rempel J, Moriartey S, Wilson PM, Hu R, Ray H, Andreas YM. The Spinal Stenosis Pedometer and Nutrition Lifestyle Intervention Development and Pilot. *The Spine Journal.* 2015 Apr 1;15(4):577-86
* Melloh M, **Tomkins-Lane CC**, Quint DJ, Gabriel S, Haig AJ. RE: Fazal A, Yoo A, Bendo JA. Does the presence of nerve root sedimentation on MRI correlate with operative level in patients undergoing posterior lumbar decompression for lumbar stenosis? *Spine Journal*. 2014. 14(5):858.
* Verson J, Haig AJ, Sandella D, Yamakawa KS, London Z, **Tomkins-Lane CC**. Patient perception of pain versus observed pain behavior during a standardized electrodiagnostic test. *Muscle Nerve*. 2015. 51(2):185-91.
* Lafave, M. **Tomkins-Lane, CC**. Pan Canadian Environmental Scan of Introductory Human Anatomy Courses in Kinesiology and Physical Education Accredited Programs. European Journal of Anatomy. In press, 2014.
* Ammendolia C, **Tomkins-Lane CC**, Stuber JK, Schneider M, Furlan A, Kennedy C, Rampersaud R. What interventions improve walking ability in neurogenic claudication with lumbar spinal stenosis? A systematic review. *European Spine Jounal*. 2014*.* 23(6):1282-301.
* Smuck, M., Kao, M., Brar, N., & **Tomkins-Lane, CC**. Does physical activity influence the relationship between low back pain and obesity? *The Spine Journal*. 2014. 14(2):209-16. ***Awarded The Spine Journal and North American Spine Society Outstanding Paper Awards for Medical/Interventional Science, 2013 & International Society for the Study of the Lumbar Spine Best Poster Award 2012.***
* **Tomkins-Lane** CC, Lafave LM, Parnell JA, Krishnamurthy A, Rempel J, Macedo LG, Moriartey S, Stuber KJ, Wilson PM, Hu R, Andreas YM. The Spinal Stenosis Pedometer and Nutrition Lifestyle Intervention (SSPANLI) Randomized Controlled Trial Protocol. *BMC Musculoskelet Disord*. 2013 Nov 14; 14:322
* **Tomkins-Lane** CC, Battié MC, Macedo L. Longitudinal construct validity and responsiveness of measures of walking in individuals with lumbar spinal stenosis. *The Spine Journal*. 2013 Nov 26.
* **Tomkins-Lane** CC, Battié MC, Hu R, Macedo L. Pathoanatomical characteristics of clinical lumbar spinal stenosis. *J Back Musculoskelet Rehabil*. 2013 Nov 27.
* Haig AJ, Park P, Henke P, Yamakawa KSJ, Valdivia J, **Tomkins-Lane CC**, Loar S. Reliability of clinical examination in the diagnosis of neurogenic vs. vascular claudication. *The Spine Journal.* 2013 Dec 1;13(12):1826-34.
* **Tomkins-Lane, CC**, Haig , A.J., Gabriel, S., & Quint, D. The nerve root sedimentation sign for diagnosis of lumbar spinal stenosis: Reliability, sensitivity and specificity. *Spine*. 2013 Nov 15;38(24):E1554-60*.*
* **Tomkins-Lane CC**, Battie MC. Predictors of objectively measured walking capacity in people with degenerative lumbar spinal stenosis. *Journal of Back and Musculoskeletal Rehabilitation.* 2013,1; 26(4):345-52.
* Sandella DE, Haig AJ, **Tomkins-Lane CC**,Yamakawa K.Defining the clinical syndrome of lumbar spinal stenosis: A recursive expert survey process. *PM&R.* 2013, June; 5(6):491-5.
* Zaina F, **Tomkins-Lane CC**, Carragee E, Negrini S. Surgical versus non-surgical treatment for lumbar spinal stenosis: Protocol. *The Cochrane Library*. December 2012, In Press.
* **Tomkins-Lane CC**, Haig AJ. Activity monitors. A review of activity monitors as a new technology for objectifying function in lumbar spinal stenosis. *Journal of Back and Musculoskeletal Rehabilitation.* 2012; 25(3):177-85.
* **Tomkins-Lane CC**, Conway J, Hepler C, Haig AJ. Changes in objectively measured physical activity (performance) after epidural steroid injection for lumbar spinal stenosis. *Archives of Physical Medicine and Rehabilitation.* 2012; 93(11):2008-14.
* **Tomkins-Lane CC.** Invited Commentary. Validity and responsiveness of measures of walking in lumbar spinal stenosis – What are we measuring? *The Spine Journal. 2012; 12(2):110-2*
* **Tomkins-Lane CC**, Quint D, Yamakawa K, Phalke V, Holz S, Haig AJ. Predictors of Walking Capacity in People with Lumbar Spinal Stenosis, Low Back Pain and Asymptomatic Controls. *Archives of Physical Medicine and Rehabilitation. 2012; 93(4):647-53.*
* Conway, J., **Tomkins CC**, Haig AJ. Walking assessment in people with lumbar spinal stenosis: capacity, performance, and self-report measures. *The Spine Journal*. 2011; 11(9):816-823.
* **Tomkins-Lane CC**, Battié MC. Self-Report Measures of Walking in Lumbar Spinal Stenosis: Reproducibility and Validity. *Spine.* 2010 Nov 1; 35(23):2097-102.
* **Tomkins CC**, Battié MC, Forman H, Gordon E, McPhail J, Wong J, Andrew K. Physical Therapy Treatments for Lumbar Spinal Stenosis. *Journal of Back and Musculoskeletal Rehabilitation*. 2010; 23(1):31-7.
* Haig AJ, **Tomkins CC**. Diagnosing Lumbar Spinal Stenosis – Reply. JAMA: 2010; 303(15):1479-81.
* Haig AJ, **Tomkins CC**. Diagnosis and Management of Lumbar Spinal Stenosis. *Journal of the American Medical Association* (*JAMA*). 2010; 303: 71-72.
* **Tomkins CC**, Battié MC, Rogers TA, Jiang H, Petersen S. A Criterion Measure of Walking Capacity in Lumbar Spinal Stenosis and Its Comparison with a Treadmill Protocol. *Spine* October 2009; 34(22): 2444-2449
* **Tomkins CC,** Crites Battié M, Hu R. Construct Validity of the Physical Function Scale of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking Capacity. *Spine* 2007; 32(17): 1896-1901
* **Tomkins CC,** Mottola MF, Giroux I. Dietary Intake, Capillary Blood Glucose, and Activity Level of Activity-Restricted, Hospitalized, Pregnant Women in the Third Trimester: A Pilot Study. *Applied Physiology Nutrition and Metabolism* 2007; 32(6): 1105-1114.
* **Tomkins CC**. Does Fetal Under-Nutrition Predispose Disease in Adult Offspring? *UAHSJ* 2007; 4(1):16-20.
* **Tomkins CC**. An Introduction to Non-Parametric Statistics for Health Scientists. *UAHSJ* 2006; 3(1); 20-26.

**Submitted Peer-Reviewed Papers**

* Tomkins-Lane CC, Zheng P, Kao M, Hu R, Smuck M. *Variability among methods and timing of pain assessment tools in lumbar spinal stenosis patients before and after surgery.*  Submitted to Spine.

**Abstracts in Peer-Reviewed Journals**

* **Tomkins-Lane CC**, Zheng P, Kao M, Hu R, Smuck M. Variability among methods and timing of pain assessment tools in lumbar spinal stenosis patients before and after surgery. *Archives of Physical Medicine and Rehabilitation 2016; In press*. ***Awarded Best Paper in Pain and Spine Medicine at the Annual Assembly of the AAPMR, 2016.***
* Eichenbaum L, Smuck M, Kao M, **Tomkins-Lane CC**. Rapidly increasing trends in physical activity research in the published medical literature. *PM&R* 2014: 6(9): S279
* **Tomkins-Lane CC**. Changes in objectively measured walking performance, function and pain following surgery for spondylolisthesis with lumbar spinal stenosis. *The Spine Journal* 2013: 13(9): S133
* **Tomkins-Lane CC**. The Spinal Stenosis Pedometer and Nutrition Lifestyle Intervention (SSPANLI) Pilot Study. *The Spine Journal* 2013: 13 (9): S24-25
* Smuck, M., Kao, M., Brar, N., & **Tomkins-Lane, CC**. Does physical activity influence the relationship between low back pain and obesity? *The Spine Journal* 2013: Vol. 13, Issue 9, Supplement, Page S17. ***Awarded best paper at North American Spine Society Meeting 2013.***
* Kao, M; Jarosz R, **Tomkins-Lane CC**, Smuck M. Physical activity signatures (PAIS) of Pain: Large scale study reveals novel cut-points for accelerometry analysis in regional body pain. *PM&R*: 2012: 4 (10): S324.
* Kao, M; Jarosz R, **Tomkins-Lane CC**, Smuck M. Population Reference Chart for Accelerometry: The Pain-Free Physical Activity Reference Chart (PARC). *PM&R*: 2012: 4 (10): S324.
* Haig AJ, Goodnight S, Sandella D, Yamakawa K, **Tomkins CC**. Exploration of the walking participation-to-capacity ratio in persons with neurogenic claudication, back pain, or asymptomatic volunteers. *PM&R*: 2012: 4 (10): S243
* Haig AJ, Goodnight S, Sandella D, Yamakawa K, **Tomkins CC**. Characteristics of persons with clinical lumbar stenosis in comparison with age matched back pain and asymptomatic volunteers. *PM&R*: 2012: 4 (10): S243
* Sandella, S, Haig AJ, Pierce J, **Tomkins CC**, Yamakawa K. An Innovative Physiatrist Survey to Quantify the Recursive Logical Process of Diagnosing Lumbar Spinal Stenosis. *PM&R*: 2012: 4 (10): S246
* **Tomkins-Lane CC**, Haig AJ, Hepler C, Hu R, Thomas K. Relationship between physical activity, pain and quality of life in lumbar spinal stenosis. *Journal of Aging and Physical Activity*: 2012; 20: S252.
* **Tomkins-Lane CC**, Kaumeyer N, Sine G. Factors Associated with Balance Impairment in Lumbar Spinal Stenosis. *International Society for the Study of the Lumbar Spine Proceedings*. June 2011.
* **Tomkins-Lane CC**, Haig AJ, Yamakawa K. Predictors of community walking participation in people with lumbar spinal stenosis. *World Physical Therapy Congress Proceedings*. June 2011.
* Conway J, **Tomkins CC**, Haig AJ. Walking Assessment in People with Lumbar Spinal Stenosis: Capacity, Performance, and Self-report Measures. *PM&R*: 2010: 2 (9S): S71
* Haig AJ, Henke P, Loar S, Park P, **Tomkins CC**, Valdivia J, Yamkawa K. The Reliability of the Clinical Diagnosis in Persons Offered Surgery for Lumbar Spinal Stenosis. *PM&R*: 2010: 2 (9S): S69 ***Awarded Best Paper in Musculoskeletal Medicine at the Annual Meeting of the American Academy of Physical Medicine and Rehabilitation***.
* **Tomkins CC**, Haig AJ, Conway J. The use of computerized activity monitors to assess changes in community participation after epidural steroid injections for lumbar spinal stenosis. *Medicine & Science in Sports & Exercise*: 2010; 42(5):149
* **Tomkins CC**, Battié MC. Measures of Walking in Lumbar Spinal Stenosis: Criterion Validity. *Medicine and Science in Sports and Exercise* 2008; 40 (5): S414.
* **Tomkins CC**, Battié MC, Forman H, Gordon E, McPhail J, Wong J, Andrew K. An Investigation into Physical Therapy Treatments for Lumbar Spinal Stenosis. *Physiotherapy* 2007; 93 (S1): S447.
* **Tomkins CC**, Battié MC, Hu R. Construct Validity of the Physical Function Scale of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking. *Medicine and Science in Sports and Exercise* 2007; 39 (5): S321.
* **Tomkins CC**, Battié MC. Measures of Walking in Lumbar Spinal Stenosis: Criterion Validity. *Medicine and Science in Sports and Exercise* 2008; 40 (5): S414.
* **Tomkins CC**, Battié MC, Forman H, Gordon E, McPhail J, Wong J, Andrew K. An Investigation into Physical Therapy Treatments for Lumbar Spinal Stenosis. *Physiotherapy* 2007; 93 (S1): S447.
* **Tomkins CC**, Battié MC, Hu R. Construct Validity of the Physical Function Scale of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking. *Medicine and Science in Sports and Exercise* 2007; 39 (5): S321.
* **Tomkins CC,** Mottola MF, Giroux I. Dietary Intake of Hospitalized, Activity-Restricted Pregnant Women: Singleton vs. Multi-fetal Pregnancy. *Medicine and Science in Sports and Exercise* 2007; 39 (5): S247.
* **Tomkins CC**, Mottola MF, and Giroux, I. Activity Restriction, Capillary Glucose, and Energy Intake in High Risk Hospitalized Pregnant Women. *Medicine and Science in Sports and Exercise* 2004; 36 (5): S22.

**Selected Conference Presentation**

* Norden J, **Tomkins-Lane CC**, Sinha A, Hu R, Smuck M. *Defining phenotypes of free-living physical activity (performance) in mobility-limiting musculoskeletal disorders: knee osteoarthritis and lumbar spinal stenosis.* Osteoarthritis Research Society International (OARSI), Las Vegas, April 2017.
* Karpman J, Manns PJ, **Tomkins-Lane CC**, Gross DP. *Do Wearable Fitness Devices Correlate With Performance-Based Tests of Work-Related Functional Capacity?* Faculty of Rehabilitation Medicine Research Day, June 3, 2016. ***Awarded Best Presentation***
* Karpman J, Manns PJ, **Tomkins-Lane CC**, Gross DP. Do Wearable Fitness Devices Correlate With Performance-Based Tests of Work-Related Functional Capacity? 3rd International Functional Capacity Evaluation Research Conference, The Netherlands, Sept. 29, 2016.
* Smuck M, Norden J, **Tomkins-Lane CC**, Sinha A, Hu R. Objective measurement of free-living physical activity (performance) in lumbar spinal stenosis: Are physical activity guidelines being met? International Society for the Study of the Lumbar Spine (ISSLS) and Spineweek, Singapore, May 2016.
* **Tomkins-Lane CC**, Melloh M, Lurie J, Smuck M, Battie M, Freeman B, Samartzis D, Hu R, Barz T, Stuber K, Schneider M, Haig A, Schizas C, Cheung J, Mannion A, Staub L, Comer C, Macedo L, Ahn SH, Takahashi K, Sandella D. Consensus on the clinical diagnosis of lumbar spinal stenosis: Results of an International Delphi Study. International Society for the Study of the Lumbar Spine (ISSLS) at Spineweek, Singapore, May 20, 2016. ***Winner of the 2016 ISSLS Prize for Clinical Research***
* **Tomkins-Lane CC**, Norden J, Sinha A, Hu R, Smuck M. Novel use of accelerometry data to develop phenotypes of free-living physical activity (performance) and differentiate between lumbar spinal stenosis, knee osteoarthritis, and matched healthy populations. International Society for the Study of the Lumbar Spine (ISSLS) and Spineweek, Singapore, May 2016.
* Norden J, **Tomkins-Lane CC**, Sinha A, Hu R, Smuck M. *Novel use of accelerometry data to develop phenotypes of free-living physical activity (performance) and differentiate between knee osteoarthritis, lumbar spinal stenosis, and healthy populations.* Osteoarthritis Research Society International (OARSI), Amsterdam, March 2016.
* Sinha A, Norden J, **Tomkins-Lane CC**, Hu R, Smuck M. *Characterizing and distinguishing free-living physical activity (performance) in disease populations using accelerometry data: Applying new analytic techniques to derive clinical insights in knee osteoarthritis and lumbar spinal stenosis.* Osteoarthritis Research Society International (OARSI), Amsterdam, March 2016.
* Norden J, **Tomkins-Lane CC**, Sinha A, Hu R, Smuck M. *Objective measurement of free-living physical activity (performance) in lumbar spinal stenosis: Are physical activity guidelines being met?* Osteoarthritis Research Society International (OARSI), Amsterdam, March 2016.
* Norden J, **Tomkins-Lane CC**, Sinha A, Hu R, Smuck M. *Objective measurement of free-living physical activity (performance) in lumbar spinal stenosis: Are physical activity guidelines being met?* Canadian Spine Society Annual Meeting, Whistler, Canada, February 2016.
* **Tomkins-Lane CC**, Hu, R., Haig AJ, Smuck M. There’s an app for that – using mobile technology in physical medicine and rehabilitation practice. *American Academy of Physical Medicine and Rehabilitation Annual Meeting*, Boston, October 2, 2015.
* **Tomkins-Lane CC**, Smuck M, Kao MC, Buman M, Ma A, Haskell W. Objective measures of physical performance normalize following surgery for lumbar spinal stenosis. International Conference on Ambulatory Monitoring of Physical Activity and Movement. Limerick, Ireland, June 10, 2015.
* **Tomkins-Lane CC**, Smuck M, Kao MC, Haskell W, Buman M, Ma A. Changes in accelerometry measures following surgery for lumbar spinal stenosis related more to self-report outcomes than laboratory measures. International Conference on Ambulatory Monitoring of Physical Activity and Movement. Limerick, Ireland, June 11, 2015.
* Smuck M, Buman MP, Martinez A, **Tomkins-Lane CC**. Accelerometer-Derived Physical Activity and Lower Extremity Functional Changes Following Lumbar Spinal Stenosis Decompression. The International Society for the Study of the Lumbar Spine (ISSLS), San Francisco, CA, June 2015.
* **Tomkins-Lane CC**., Hu R., Hepler C. Changes in objectively measured walking performance, function and pain following surgery for spondylolisthesis with lumbar spinal stenosis. Presented at *Canadian Spine Society Annual Meeting,* Lake Louise, February 2014.
* **Tomkins-Lane, CC.**, Lafave, L., Parnell, J., Hu, R., & Moriartey, S, Hepler C. The spinal stenosis pedometer and nutrition lifestyle intervention (SSPANLI) pilot. Presented at *Canadian Spine Society Annual Meeting 2014,* Lake Louise, February 2014.
* Eichenbaum LR, Kao MCJ, **Tomkins-Lane CC**, Smuck M. Rapidly Increasing Trends in Physical Activity Research within the Published Medical Literature. AAPM&R Annual Assembly, San Diego, CA. November 2014.
* **Tomkins-Lane CC**., Hu R., Hepler C. Changes in objectively measured walking performance, function and pain following surgery for spondylolisthesis with lumbar spinal stenosis. Presented at *North American Spine Society Annual Meeting*. New Orleans, October 2013.
* Smuck, M., Kao, M., Brar, N., & **Tomkins-Lane, CC**. Does physical activity influence the relationship between low back pain and obesity? *Presented at North American Spine Society Annual Meeting.* New Orleans, October 2013.***Awarded The Spine Journal and North American Spine Society Outstanding Paper Award for Medical/Interventional Science, 2013.***
* **Tomkins-Lane, CC.**, Lafave, L., Parnell, J., Hu, R., & Moriartey, S, Hepler C. The spinal stenosis pedometer and nutrition lifestyle intervention (SSPANLI) pilot. Presented at *North American Spine Society Annual Meeting.* New Orleans, October 2013.
* Kao M, Jarosz R, Mackey S, **Tomkins‐Lane CC**, Smuck M. Physical Activity Intensity Signature (PAIS) Of Pain: Large‐scale Study Reveals Novel Cut‐points For Accelerometry Analysis In Regional Body Pain. Presented at International Conference on Ambulatory Monitoring of Physical Activity and Movement. Amherst, June 2013.
* Sandella D, **Tomkins-Lane CC**., Yamakawa KS, Haig AJ. Defining the clinical syndrome of lumbar spinal stenosis: A recursive specialist survey. Presented at the *International Society for the Lumbar Spine*. Scottsdale, 2013.
* **Tomkins-Lane, CC**., Lafave, L., Parnell, J., Hu, R., & Moriartey, S. The spinal stenosis pedometer and nutrition lifestyle intervention (SSPANLI) pilot. Presented at *International Society for the Study of the Lumbar Spine. Scottsdale, 2013*
* **Tomkins-Lane, CC.**, Haig , A.J., Hepler, C., & Conway, J. Changes in objectively measured

performance, pain and quality of life after epidural steroid injection for lumbar spinal stenosis. Presented at *Low Back Pain Forum XII,* Odense, Denmark, 2012.

* **Tomkins-Lane, C.C**. Relationship between physical activity, pain, function and quality of life in older adults with lumbar spinal stenosis. Presented at *Low Back Pain Forum XII,* Odense, Denmark, 2012.
* Kao, M; Jarosz R, **Tomkins-Lane CC**, Smuck M. Population Reference Chart for Accelerometry: The Pain-Free Physical Activity Reference Chart (PARC). Centres for Disease Control and Prevention Conference. 2012.
* Kao, M; Jarosz R, **Tomkins-Lane CC**, Smuck M. Physical activity signatures (PAIS) of Pain: Large scale study reveals novel cut-points for accelerometry analysis in regional body pain. Centres for Disease Control and Prevention Conference. 2012.
* **Tomkins-Lane CC**. Relationship between physical activity, pain, function and quality of life in older adults with lumbar spinal stenosis. World Congress on Active Aging. Glasgow, August 2012.
* Smuck, M., Kao, M., & **Tomkins-Lane, CC.** Body mass index modulates association of physical activity with low back pain. Presented at International Society for the Study of the Lumbar Spine, Amsterdam, June 2012. ***Medtronic Best Poster Award for 2012.***
* **Tomkins-Lane CC**, Haig AJ, Hu R, Hepler C. The relationship between performance and traditional outcomes of pain, function and quality of life in spondylolisthesis and lumbar spinal stenosis. SpineWeek. Amsterdam, June 2012.
* **Tomkins-Lane CC**, Haig AJ, Quint D, Gabriel S. The nerve root sedimentation sign for diagnosis of lumbar spinal stenosis: reliability, sensitivity and specificity. SpineWeek. Amsterdam, June 2012.
* Rowed K, Choi K, **Tomkins-Lane CC**. Community specific step goals - A new method for physical activity promotion in older adults. MRU Student Research Day, May 2012.
* **Tomkins-Lane CC**, Kaumeyer N, Sine G, Battie MC. Factors associated with balance impairment in lumbar spinal stenosis. World Congress on Physical Therapy. Amsterdam, Netherlands, June 2011.
* **Tomkins-Lane CC**, Conway J, Yamakawa K, Haig AJ. Predictors of community walking participation and walking capacity in people with lumbar spinal stenosis. World Congress on Physical Therapy. Amsterdam, Netherlands, June 2011.
* **Tomkins-Lane CC**, Kaumeyer N, Sine G, Battie MC Factors associated with balance impairment in lumbar spinal stenosis. International Society for the Study of the Lumbar Spine. Gothenburg, Sweden, June 2011.
* Conway J, **Tomkins-Lane CC**, Haig AJ. Walking Assessment in People with Lumbar Spinal Stenosis: Capacity, Performance, and Self-report Measures. American Academy of Physical Medicine and Rehabilitation Annual Meeting, Seattle, November 2010.
* **Tomkins-Lane CC**, Conway J, Yamakawa K, Haig AJ Community walking participation in lumbar spinal stenosis and low back pain predicted by obesity, pain, age and gender, not by diagnosis. Canadian Society for Exercise Physiology (CSEP) Annual Meeting. Toronto, November 2010.
* Haig AJ, **Tomkins-Lane CC**, Henke P, Loar S, Park P, Valdivia J, Yamakawa K. The Reliability of the Clinical Diagnosis in Persons Offered Surgery for Lumbar Spinal Stenosis. *PM&R* 2010: 2 (9S): S69 (***Awarded Best Paper in Musculoskeletal Medicine at the Annual Meeting of the American Academy of Physical Medicine and Rehabilitation, Seattle, November 2010)***
* **Tomkins-Lane CC**, Conway J, Yamakawa K, Haig AJ. The use of computerized activity monitors to assess changes in community participation after epidural steroid injections for lumbar spinal stenosis. American College of Sports Medicine, Baltimore, May 2010.
* **Tomkins CC**, Battie MC. Factors Associated with Walking Capacity in Lumbar Spinal Stenosis. International Society for the Study of the Lumbar Spine, Miami, May 2009.
* **Tomkins CC**, Battie MC. Measures of Walking in Lumbar Spinal Stenosis; Criterion Validity: Special Poster Presentation, at the International Society for the Lumbar Spine/Spineweek, Geneva, May 2008.
* **Tomkins CC**, Battie MC. Walking in Lumbar Spinal Stenosis: Alberta Physiotherapy Conference, Edmonton, October 2007.
* **Tomkins CC**, Battie MC, Rogers T, Hu R. Measures of Walking in Lumbar Spinal Stenosis- Criterion Validity: International Low Back Forum, Palma de Mallorca, Spain, October 2007.
* **Tomkins CC**, Battie MC. Measures of Walking in Lumbar Spinal Stenosis: Annual Meeting of the Alberta Provincial CIHR Training Program in Bone and Joint Health, Banff, October 2007.
* **Tomkins CC**, Battie MC, Rogers T, Hu R. Construct Validity of the Physical Function Scale of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking: American College of Sports Medicine Conference, New Orleans, May 2007.
* **Tomkins CC**, Giroux I, Mottola M. Dietary Intake of Hospitalized, Activity-Restricted Pregnant Women: Singleton vs. Multi-fetal Pregnancy: American College of Sports Medicine Conference, New Orleans, May 2007.
* **Tomkins CC**, Dimoff K, Forman HS, Gordon ES, McPhail J, Wong JR, Battie MC. An Investigation into Physical Therapy Treatments for Lumbar Spinal Stenosis: World Physiotherapy Congress, Vancouver, June 2007.
* **Tomkins CC**, Dimoff K, Forman HS, Gordon ES, McPhail J, Wong JR, Battie MC Physical Therapy Treatment for Lumbar Spinal Stenosis: Annual Meeting of the Alberta CIHR Training Program in Bone and Joint Health, October, 2006.
* **Tomkins CC**, Battie MC, Rogers T, Hu R Construct Validity of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking Capacity: International Society for the Study of the Lumbar Spine, Norway, June 2006.
* **Tomkins CC**, Battie MC, Rogers T, Hu R Construct Validity of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking Capacity: International Low Back forum, Amsterdam, June 2006.
* **Tomkins CC**, Battie MC, Rogers T, Hu R **Construct Validity of the Physical Function Scale of the Swiss Spinal Stenosis Questionnaire for the Measurement of Walking Capacity of Persons with Lumbar Spinal Stenosis:** Annual Meeting of the Alberta CIHR Training Program in Bone and Joint Health, October 2005.

**Selected Invited Presentations**

* Innovations in Outcome Measures for Lumbar Spinal Stenosis: Physiatry - AAP Annual Meeting, Atlanta, February 2018.
* Digital Health for Spine Providers: North American Spine Society (NASS), Orlando, October 2017
* Diagnosis of Lumbar Spinal Stenosis: ISICO Italian Scientific Congress, Milan, October 2017.
* Health Risk Assessment: Application of IOT to measure and motivate. Big Data Healthcare Summit Western Canada, Vancouver, February 2017.
* Creating Successful Research Proposals. Faculty of Health, Community and Education Research Mentorship Program, September 19, 2016.
* Focus Group Moderator: International Taskforce for the Diagnosis of Lumbar Spinal Stenosis. International Society for the Study of the Lumbar Spine, Singapore, May 2016.
* Moderator: Spine Complications, International Society for the Study of the Lumbar Spine, Singapore, May 2016.
* Physical Performance Monitoring in Mobility Limited Populations. 4th International Symposium on Automated Sensor Based Mobility Analysis for Disease Prevention and Treatment at the 13th Annual International Body Sensor Networks Conference. San Francisco, CA, 2016.
* Designing for Health. Guest lecture for BIOE273, Biodesign for Mobile Health, Stanford Medical School, October 2015.
* At what point does a consumer product become a medical device? E-health Conference, Toronto, May 2015.
* Measuring and Motivating with Mobile Technology. Grand Rounds, Physical Medicine and Rehabilitation, Stanford University, May 2015.
* Physical Activity for an Aging Population. Guest lecture for Lifestyle Medicine, Stanford Medical School, April 2015.
* Measuring exercise and motivating spine patients. Presented as part of Mobile Technology Symposium: American Academy of Physical Medicine and Rehabilitation, San Diego, November 2014.
* The Objective Outcomes Movement. Presented as part of How Mobile Technology is Changing Spine Care Symposium: North American Spine Society Annual Meeting, New Orleans, October 2013.
* Measuring Physical Performance. Presented as part of Activity Monitoring in Patients with Lumbar Spinal Stenosis Focused Discussion: North American Spine Society Annual Meeting, New Orleans, October 2013.
* Walking in Lumbar Spinal Stenosis: Diagnosis and Treatment. James Rae Scientific Day, University of Michigan Medical School, April 2009.
* Differential Diagnosis of Neurogenic Claudication and Vascular Claudication: Invited guest presenter for the University of Alberta Spine Interest Group, March 2009.
* Preparing for the Academic Interview: Invited Seminar Facilitator for Alberta Bone and Joint Health Training Program Core Course, University of Alberta, November 2008.
* Validity of Measures of Walking in Lumbar Spinal Stenosis: Invited Guest Lecture for Rehabilitation Seminars, University of Alberta, March 2008.
* Measures of Walking in Lumbar Spinal Stenosis: University of Toronto Spine Program, Toronto, January 2008.
* Measurement of Walking in Lumbar Spinal Stenosis Populations: Guest Seminar Speaker for Rehabilitation Medicine 603, February 2007.
* Walking Tolerance in Lumbar Spinal Stenosis: Seminars in Rehabilitation Science, April 2005.
* Physiological and Psychological Effects of Bed Rest on High Risk Pregnant Women: R. Samuel McLaughlin Exercise and Pregnancy Lab, UWO, 2003.

**PRESS AND OTHER MEDIA**

* “Could Physical Activity Be a Magic Bullet Against Low Back Pain Among Overweight and Obese Americans?” *The Back Letter*, 2014 Jan; 29(1): 4-5.
* “Improving spinal care with activity monitors” Spinal News International. Article published online Nov. 12, 2013 at: <http://www.cxvascular.com/sn-features/spinal-news---features/improving-spinal-care-with-activity-monitors?utm_medium=email&utm_campaign=Spinal+News+International+e-newsletter+13-11-13&utm_content=Spinal+News+International+e-newsletter+13-11-13+CID_8b58f2c818dd76ae56792a0aa0de2012&utm_source=Email%20marketing%20software&utm_term=Read%20more>
* “Astonishingly Simple Change Lowers Back Pain 40% in Obese Patients: 1 Minute (60 Seconds) Lowers Back Pain 40% in Obese Patients” by Elizabeth Hofheinz, M.P.H., M.Ed. Published Nov. 18, 2013 in Orthopaedics This Week: <http://ryortho.com/2013/11/1-minute-60-seconds-lowers-back-pain-40-in-obese-patients-more-fractures-at-higher-bone-density-in-diabetics-and-more/>

**PEER REVIEW ACTIVITIES**

**Associate Editor, Rehabilitation, Physical Therapy and Occupational Health**

* BMC Musculoskeletal Disorders

**Editorial Board Member:**

* World Journal of Orthpaedics

**Reviewer of abstracts for the following societies:**

* North American Spine Society
* International Society for the Study of the Lumbar Spine

**Reviewer for the following journals (present):**

* Journal of the American Medical Association (JAMA)
* Pain
* Spine
* The Spine Journal
* Archives of Physical Medicine and Rehabilitation
* Journal of Back and Musculoskeletal Rehabilitation
* International Journal of Clinical Rheumatology
* PLOS one
* BMC Musculoskeletal Disorders
* The Clinical Journal of Pain
* BMC Neurology
* Journal of the Peripheral Nervous System
* Journal of Pain Research
* BMC Complimentary and Alternative Medicine

**SELECTED TEACHING EXPERIENCE**

**Biodesign for Health** 2015-2019

School of Medicine, Stanford University

**Lifestyle Medicine** 2015-2019

School of Medicine, Stanford University

**Exercise Physiology (HPED 3514)** 2015-present

Department of Physical Education and Recreation, Mount Royal University

**Human Anatomy (HPED 1512)** 2009-present

Department of Physical Education and Recreation, Mount Royal University

**Cardiovascular Training (PHED 2308)** 2009-2014

Department of Physical Education and Recreation, Mount Royal University

**Fitness and Measurement (PHED 2203)** 2009-2014

Department of Physical Education and Recreation, Mount Royal University

**Spine Program Medical Resident Anatomy** 2009

Department of Physical Medicine and Rehabilitation, University of Michigan

**Medical Gross Anatomy** 2008-2009

Department of Anatomy, University of Michigan Medical School

**Medical Applied Anatomy for the Musculoskeletal System** 2009

Department of Anatomy, University of Michigan Medical School

**Scientific Basis of Human Movement (PEDS 391)** 2007

Department of Physical Education and Recreation, University of Alberta

**Clinical Exercise Physiology (PT 504)**  2007

Department of Physical Therapy, University of Alberta

**Introduction to Basketball (PAC 111)** 2005-2006

Department of Physical Education and Recreation, University of Alberta

**Human Gross Anatomy (OT 302)** 2005

Department of Occupational Therapy, University of Alberta

**Human Gross Anatomy (PEDS 400)** 2005-2007

Department of Physical Education and Recreation, University of Alberta

**Human Gross Anatomy (KIN 221)** 2001-2003

School of Kinesiology, University of Western Ontario

**Athletic Injuries and Rehabilitation (KIN 336)** 2001-2003

School of Kinesiology, University of Western Ontario

**Exercise Physiology (KIN 232)** 2001-2002

School of Kinesiology, University of Western Ontario

**Introduction to Basketball (KIN 200a)**  2001

School of Kinesiology, University of Western Ontario

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**Tutor for Anatomy** 2009

University of Michigan Medical School

* Provide individual tutoring in the anatomy lab to first year medical students

**Tutor for the Transition Year Program, Anatomy and Physiology** 2004-2005

Aboriginal Student Services, University of Alberta

* Weekly tutoring sessions with aboriginal students in 1st year nursing

**Tutor for Specialized Support and Disability Services** 2005

University of Alberta

* Individual tutoring of various subjects for students with disabilities

**Tutoring for Biology 021, Chemistry 020, Physiology 030** 1998-2003

University of Western Ontario

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**STUDENT SUPERVISION**

**Masters**

Jesse Karpinen, University of Alberta, Masters of Physical Therapy

Alexandra Stratton, University of Calgary, Masters of Public Health

Kathy Hildebrant, University of Calgary, Masters of Nursing

**Post-Doc and Medical Residents**

Justin Norden, Stanford University Medical School

Patricia Zheng, Stanford University Medical School

Aman Sinha, Stanford University School of Engineering

Justin Conway, University of Michigan Medical School

Nate Stockham, Stanford University

**Undergraduate**

Kylie Rowed, Mount Royal University

Brenlea Farkas, Mount Royal University

Khuyo Choi, Mount Royal University

Luke Wartman, Mount Royal University

Nicolla Kaumeyer, Mount Royal University

Alicia Stone, Mount Royal University

Corey Thatcher, Mount Royal University

Katie Boudreau, Mount Royal University

**SELECTED ACADEMIC SERVICE**

* Faculty Representative for MRU for Alberta Kinesiology Association 2015-present
* Canadian Representative for International Society for the Study of

The Lumbar Spine (ISSLS) 2015-present

* Chair of ISSLS 2018 Annual Meeting Organization Committee 2015-2018
* HPED Hiring Committees for Lab Technologist and HPED 3514 2016
* Faculty of Health, Education and Community Innovation Fund 2016-present
* Stanford Rehabilitation Research and Quality Committee 2015
* Stanford Rehabilitation Research Day Planning Committee 2015
* Stanford Rehabilitation Research Day Judge 2015
* Physical Medicine & Rehabilitation Research Day Committee, Stanford 2015
* MRU Human Research Ethics Board 2012-2014
* Academic Policies and Procedures Committee 2012-2014
* Support Staff Working Group: Chair 2011-2014
* Faculty of Health and Community Studies Scholars' Council 2010-2014
* Mount Royal University General Faculties Council 2011-2014
* Mount Royal University Undergraduate Research Committee 2009-2014
* Mount Royal Faculty Association: Social Committee 2010-2011
* Mount Royal University Corporate Challenge Committee 2011-present
* Department of Physical Education and Recreation: Social Committee 2009-present
* University of Alberta Health Sciences Journal Representative for 2005-2008

Faculty of Rehabilitation Medicine

* Rehabilitation Medicine Student Association PhD Student Representative 2005-2008
* Faculties of Graduate Studies and Research Outreach Programs: 2004-2008

Volunteer for Read In and Experts Day events

* Peer Mentor: Centre for New Students, UWO 1998-2001
* Lab Assistant for Athletic Injuries Training Program, UWO 1999-2000

**RELEVANT GRADUATE LEVEL COURSE WORK**

* Graduate Histology: University of Michigan Medical School
* Advanced Topics in Statistics: University of Michigan
* Randomized Controlled Trials: University of Michigan
* Exercise Testing and Prescription (PEDS 511): University of Alberta
* Seminars in Exercise Physiology (PEDS 512) : University of Alberta
* Exercise Biochemistry (PEDS 517): University of Alberta
* Biostatistics and Epidemiology (PHS 598): University of Alberta
* Research Methods in Rehabilitation Science (REHAB 601): University of Alberta
* Test and Measurement Theory (ED PSYCH 507): University of Alberta
* Functional Cadaver Anatomy: Victoria University of Technology (VUT), Australia
* Musculoskeletal and Neurological Physiology for Rehabilitation: VUT
* Physiological Testing for Rehabilitation: VUT
* Advanced Exercise Physiology (KIN 532): University of Western Ontario

**COMMUNITY SERVICE AND VOLUNTEER INVOLVEMENT**

Alberta Sport Development Centre: Student Volunteer Co-ordinator 2009-2013

Mount Royal University Women's Rugby Club: Faculty Representative 2011-present

Calgary Youth Science Fair: Judge 2012-2013

Richmond Park Warriors Rugby Club: Secretary 2012-2013

Edmonton Clansmen Rugby Club: Club Captain and Athletic Trainer 2004-2008

Alberta Junior Rugby Association Member and Coach 2004-2008

UWO Varsity Women’s Rugby, Wrestling and Lacrosse team member 1997-2003

Centre for Activity and Aging, UWO: Aerobics Instructor 2002-2003

Fowler Kennedy Sports Medicine Clinic: Volunteer 1997-2002

East Melbourne Rehabilitation Centre: Volunteer 2003

Kinesiology Special Games: Chaperone 2001-2003