

# **CURRICULUM VITAE**

## **REED FERBER**

**Ph.D., ATC**

### **Professor**

**Faculties of Kinesiology and Nursing  
University of Calgary**

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University of Calgary

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Calgary, AB T2N 1N4

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### **Director & Founder**

**Running Injury Clinic**

Suite A201 - 1600 - 90 Ave SW

Calgary, AB T2V 5A8

Tel: (403) 460-5642

W: [www.runninginjuryclinic.com](http://www.runninginjuryclinic.com)

## PERSONAL INFORMATION

**Name:** Reed Ferber

**Place of Birth:** Calgary, Canada

**Date of Birth:** September 22, 1970

**Nationality:** Canadian

## EDUCATION

- 2001 Ph.D. University of Oregon, Eugene, Oregon Biomechanics
- 1998 M.S. University of Oregon, Eugene, Oregon Sports Medicine
- 1993 B.P.E. University of Calgary, Calgary, Alberta Physical Education

## PROFESSIONAL EXPERIENCE

- 2017 - present: **Professor**  
Faculties of Kinesiology and Nursing, University of Calgary, Canada
- 2017 - present: **Scientific Advisory Board Member**  
Biotricity Inc., Redwood City CA
- 2016 - present: **Scientific Advisory Board Member**  
Fitbit Inc., San Francisco, CA, USA
- 2013 - present: **Adjunct Professor**  
Canadian Memorial Chiropractic College, Toronto, Canada
- 2011 - 2017 **Associate Professor**  
Faculties of Kinesiology and Nursing, University of Calgary, Canada
- 2008 - present **Research Associate**  
Sports Performance Research Institute New Zealand (SPRINZ)
- 2007 - 2011 **Assistant Professor**  
Faculties of Kinesiology and Nursing, University of Calgary, Canada
- 2005 - 2007 **Adjunct Assistant Professor**  
Faculty of Kinesiology, University of Calgary, Canada
- 2004 - present **Director & Chief Scientific Officer: Running Injury Clinic**  
Calgary, Canada
- 2003 - 2004 **Post-Doctoral Research Fellow**  
Faculty of Kinesiology, University of Calgary, Canada
- 2001 - 2003: **Post-Doctoral Research Fellow**  
Department of Physical Therapy, University of Delaware
- 1999 - 2000: **Instructor of Sports Medicine**  
Department of Exercise and Sport Science, Oregon State University
- 1995 - 2001: **Graduate Teaching Fellow**  
Department of Exercise and Movement Science, Univ. of Oregon
- 1994 - 1995: **Head Athletic Therapist / Head of Basketball Operations**  
Calgary Outlaws Professional Basketball, Canada

## PROFESSIONAL MEMBERSHIPS / CERTIFICATIONS

- Canadian Athletic Therapists Association (certified CAT(C) 1997 - 2014)
- National Athletic Trainers Association (certified ATC 1997 - present)

## GRANTS / AWARDS AND SCHOLARSHIPS

**Total Direct Funding Awarded: \$2,698,877 as PI - \$573,350 as Co-I.**

**Title:** Validation of novel balance assessment software using Microsoft Kinect v2.0

**Funding Agency:** NSERC Mitacs - Accelerate Program

**Role:** Principal Investigator

**Date:** July 2017 - Nov 2017

**Amount:** \$15,000 Direct funding

**Title:** Travel Grant to Establish Clinical and Research Partnerships

**Funding Agency:** Canadian Digital Media Network (CDMN) Soft Landing program

**Role:** Principal Investigator

**Date:** Feb 2017 - June 2017

**Amount:** \$4,000 Direct funding

**Title:** Methods to Determine Subject-Specific Movement Gait Patterns Using Wearable Technology

**Funding Agency:** Natural Sciences & Engineering Research Council - Idea-2-Innovation (I2I) Grant

**Role:** Principal Investigator

**Date:** Aug 2016 - Aug 2017

**Amount:** \$125,000 Direct funding

**Title:** Canadian MSK Rehab Research Network

**Funding Agency:** Canadian Institute of Health Research (CIHR) Catalyst Grant: Musculoskeletal Rehabilitation and Myalgic Encephalomyelopathy/Chronic Fatigue Syndrome

**Role:** Co-Investigator (Co-PIs: MacDermid JC (NPI), Astephen Wilson J, Birmingham T, Robinovitch S, Roy JS)

**Date:** July 2016 - June 2018

**Amount:** \$599,979 (Direct Funding: \$0)

**Title:** Methods to Determine Subject-Specific Movement Gait Patterns Using 3D Accelerometry Signals

**Funding Agency:** Faculty of Kinesiology Seed Grant

**Role:** Principal Investigator

**Date:** July 2016 - June 2017

**Amount:** \$50,000 Direct funding

**Title:** Wearable Technology to Monitor Running Injuries

**Funding Agency:** NRC Industrial Research Assistance Program (NRC-IRAP)

**Role:** Principal Investigator

**Date:** July 2016 - Feb 2018

**Amount:** \$82,000 Direct funding

**Title:** Sensor Technology in Monitoring Movement (STiMM)  
**Funding Agency:** University of Calgary, Vice-President Research  
**Role:** Principal Investigator  
**Date:** July 2016 - June 2020  
**Amount:** \$200,000 Direct funding (\$50,000/yr)

**Title:** Development of LiDAR based clinical gait analysis.  
**Funding Agency:** Alberta Innovates: Technology Futures, r&D Associates Program  
**Role:** Principal Investigator  
**Date:** April 2016 - March 2018  
**Amount:** \$124,000 Direct funding (\$62,000/yr)

**Title:** Pattern recognition techniques to monitor and predict running injuries.  
**Funding Agency:** University of Calgary: Eyes High Postdoctoral Scholars Competition  
**Role:** Principal Investigator  
**Date:** Sept 2016 - Aug 2018  
**Amount:** \$100,000 Direct funding (\$50,000/yr)

**Title:** Treatment of recalcitrant patellofemoral pain using Synvisc injection: a randomized controlled trial.  
**Funding Agency:** Sanofi Canada Inc.  
**Role:** Co-Investigator  
**Date:** Aug, 2015 - July, 2017  
**Amount:** \$15,750 Direct funding

**Title:** run<sup>3</sup> Opportunity Assessment  
**Funding Agency:** National Research Council - Business Innovation Access Program  
**Role:** Principal Investigator  
**Date:** June 2015 - Sept 2016  
**Amount:** \$38,448 Direct funding

**Title:** Dysfunctional Breathing in Pediatric Asthma: a case for physiotherapy intervention?  
**Funding Agency:** Canadian Physiotherapy Association: Clinical Research Innovation Grant  
**Role:** Co-Investigator  
**Date:** May 2015 - April 2017  
**Amount:** \$10,700 Direct funding

**Title:** Center of Excellence for Big Data Computing (BD2K): Mobility Data Integration to Insight  
**Funding Agency:** National Institutes of Health (1-U54EB020405-01)  
**Role:** Health Application Consultant  
**Date:** Oct 2014 - Oct 2019  
**Amount:** \$11,000,000: \$10,000/yr Direct funding

**Title:** Faculty of Kinesiology Dean's Doctoral Studentship Program  
**Funding Agency:** University of Calgary  
**Role:** Principal Investigator  
**Date:** Sept 2015 - August 2019

**Amount:** \$80,000 Direct funding

**Title:** Methods to improve the reliability of biomechanical gait kinematic data  
**Funding Agency:** Natural Sciences & Engineering Research Council Discovery Grant  
**Role:** Principal Investigator  
**Date:** April 2014 - May 2019  
**Amount:** \$195,000 Direct funding

**Title:** Methods to improve the reliability of biomechanical gait kinematic data  
**Funding Agency:** Natural Sciences & Engineering Research Council Accelerator Award  
**Role:** Principal Investigator  
**Date:** April 2014 - May 2017  
**Amount:** \$120,000 Direct funding

**Title:** LiDAR based clinical 3D GAIT analysis system  
**Funding Agency:** National Research Council - Industrial Research Assistance Program  
**Role:** Principal Investigator  
**Date:** April 2014 - May 2015  
**Amount:** \$146,000 Direct funding

**Title:** Consequences of knee joint injury in youth sport: Implications for knee osteoarthritis and other health outcomes  
**Funding Agency:** Canadian Institutes of Health Research: Operating Grant  
**Role:** Co-Investigator (PI: Carolyn Emery)  
**Date:** May 2014 - April 2017  
**Amount:** \$519,999 (\$173,333/year) \$0 Direct funding

**Title:** Validation of 3D GAIT and Improving Between-Centre Reliability  
**Funding Agency:** Canada-UK Collaboration Development Award (CDA) Programme  
**Role:** Co-Investigator (Co-I: Jessica Leitch - Oxford University)  
**Date:** September 16, 2013 - January 31, 2014  
**Amount:** \$2,050 (£1,250)

**Title:** Alberta Program in Youth Sport and Recreational Injury Prevention  
**Funding Agency:** AI:HS Collaborative Research Innovation Opportunity Program  
**Role:** Co-Investigator (Co-PIs: Carolyn Emery, Brent Hagel)  
**Date:** April 1, 2013 - March 30, 2018  
**Amount:** \$2,500,000: \$0 Direct funding

**Title:** Machine learning approaches to understand injury aetiology and prediction.  
**Funding Agency:** University of Calgary: Eyes High Postdoctoral Scholars Competition  
**Role:** Principal Investigator  
**Date:** April 1, 2013 - March 30, 2015  
**Amount:** \$100,000 Direct funding (\$50,000/yr)

**Title:** The Alberta Osteoarthritis Team: Translating Knowledge to Improve Health  
**Funding Agency:** AI:HS Collaborative Research Innovation Opportunity Team  
**Role:** Co-Investigator (Co-PIs: Linda Woodhouse, Walter Herzog)  
**Date:** April 1, 2013 - March 30, 2014  
**Amount:** \$1,000,000 Direct funding \$98,780

**Title:** Commercialization of 3D skate analysis technology  
**Funding Agency:** Alberta Innovates: Technology Futures, Industry Associates Program  
**Role:** Principal Investigator  
**Date:** September 2012 - August 2014  
**Amount:** \$124,000 Direct funding (\$62,000/yr)

**Title:** Research and Development for 3D Gait Analysis Technology  
**Funding Agency:** Global Commerce Support Program - Innovation Travel Grant  
**Role:** Principal Investigator  
**Date:** April 15-27, 2012  
**Amount:** \$9,469

**Title:** Accelerometer detection of running kinematics features associated with iliotibial band pain.  
**Funding Agency:** Auckland University of Technology (AUT) Contestable Research Fund (FHES)  
**Role:** Co-Investigator  
**Date:** May 2012 - April 2013  
**Amount:** \$33,940 (\$0 Direct funding)

**Title:** Validating Plantar Pressure Measurements from a Pressure-Sensing Orthotic Insole: with Industry Partner Orpyx Inc.  
**Funding Agency:** NSERC Mitacs - Accelerate Program  
**Role:** Principal Investigator  
**Date:** March 2012 - August 2013  
**Amount:** \$15,000 Direct funding

**Title:** Functional imaging of joint pain in hip impingement and OA.  
**Funding Agency:** AHFMR Osteoarthritis Team Grant: Inter/Intra Pilot Project  
**Role:** Co- Investigator  
**Date:** Jan 2012 - Sept 2013  
**Amount:** \$10,500 total: \$3,000 Direct funding

**Title:** The use of real time feedback in the rehabilitation of knee OA: effects on pain, function and disease severity.  
**Funding Agency:** AHFMR Osteoarthritis Team Grant: Inter/Intra Pilot Project  
**Role:** Principal Investigator  
**Date:** Jan 2012 - Sept 2013  
**Amount:** \$24,000 total: \$20,000 Direct funding

**Title:** Faculty Travel Grant: IOC World Conference on Prevention of Injury & Illness in Sport: Monte-Carlo, Principality of Monaco  
**Funding Agency:** University of Calgary: Research Grants Committee  
**Role:** Principal Investigator  
**Date:** April 7-9, 2011  
**Amount:** \$1372

**Title:** The effect of hip stabilizer muscle strengthening on pain and disability for patients with non-specific low back pain: an outcome-based RCT  
**Funding Agency:** Workers Compensation Board -Alberta  
**Role:** Principal Investigator

**Date:** Oct 2010 - Oct 2012  
**Amount:** \$86,000 Direct funding (\$43,000/yr)

**Title:** Commercialization of 3D gait analysis technology for use in a clinical setting  
**Funding Agency:** Alberta Ingenuity Fund, Commercialization Associates Program  
**Role:** Principal Investigator  
**Date:** June 2010 - June 2012  
**Amount:** \$124,000 Direct funding (\$62,000/yr)

**Title:** The role of orthotic devices for treatment of running-related injuries.  
**Funding Agency:** SOLE (Industry Partnership)  
**Role:** Principal Investigator  
**Date:** Jan 2010 - July 2017  
**Amount:** \$450,000 Direct funding (\$112,500/yr)

**Title:** Development of 3D gait analysis technology for use in a clinical setting  
**Funding Agency:** Alberta Ingenuity Fund, r&D Associates Program  
**Role:** Principal Investigator  
**Date:** Nov 2009 - Nov 2011  
**Amount:** \$124,000 Direct funding (\$62,000/yr)

**Title:** Optimal rehabilitation protocols for the treatment of patellofemoral pain syndrome: an outcome-based RCT multi-centered study  
**Funding Agency:** National Athletic Trainers Association: Research and Education Foundation Outcomes Grant Program  
**Role:** Principal Investigator  
**Date:** Jan 2009 - Jan 2014  
**Amount:** \$476,833 total: \$219,205 Direct funding (\$54,800/yr)

**Title:** The role of orthotic devices in the treatment of tibialis posterior tendinopathy.  
**Funding Agency:** SOLE (Industry Partnership)  
**Role:** Principal Investigator  
**Date:** Dec 2008 - Dec 2009  
**Amount:** \$39,996 Direct funding

**Title:** The relationship between patellofemoral pain syndrome, gait biomechanics, and muscular strength  
**Funding Agency:** Alberta Heritage Foundation for Medical Research: Population Health New Investigator Award  
**Role:** Principal Investigator  
**Date:** July 2008 - July 2015  
**Amount:** \$325,000 Direct funding (\$108,440/yr Y1-Y3) + salary support (\$110,000/yr)

**Title:** Creating Bone and Joint Health from the Bedside to the Bench and Back Again - 'Designer Therapies' to Reduce the Burden of Osteoarthritis (OA) - from Mechanisms to Prevention: Real-time feedback to restore gait mechanics for mild-to-moderate knee OA patients: a randomized clinical trial.  
**Funding Agency:** Alberta Heritage Foundation for Medical Research Team Grant  
**Role:** Co-Investigator  
**Date:** July 2008 - July 2012  
**Amount:** \$5,067,103 total: \$395,120 Direct funding (\$98,780/yr)

**Title:** The relationship between foot structure, muscular strength, and foot biomechanics

**Funding Agency:** Olympic Oval High Performance Fund

**Role:** Principal Investigator

**Date:** Jan 2008 - Jan 2010

**Amount:** \$23,410 total: only \$11,705 Direct funding for Y1 paid out.

**Title:** The effectiveness of hip strengthening exercises in patients with knee osteoarthritis

**Funding Agency:** Canadian Academy of Sports Medicine

**Role:** Co-Investigator

**Date:** Sept 2007 - June 2009

**Amount:** \$7500 total: \$0 Direct funding

**Title:** Building a multidisciplinary team in adolescent Sports Injury Prevention

**Funding Agency:** Canadian Institutes of Health Research: Team Planning and Development Grants

**Role:** Co-Investigator

**Date:** June 2002 - June 2006

**Amount:** \$98,805 total: \$0 Direct funding

**Title:** Electromyographic response to unexpected gait perturbations

**Funding Agency:** Eugene Evonuk Award

**Role:** Principal Investigator

**Date:** June 2000 - June 2001

**Amount:** \$2500 Direct funding

**Title:** Effect of unexpected gait perturbation on ACL deficient subjects

**Funding Agency:** International Society of Biomechanics - Doctoral Award

**Role:** Principal Investigator

**Date:** June 2000 - June 2001

**Amount:** \$2000 Direct funding

**Title:** Effect of unexpected gait perturbation on ACL deficient

**Funding Agency:** National Athletic Trainers Association Research Education Foundation Doctoral Research Grant

**Role:** Principal Investigator

**Date:** June 1999 - June 2001

**Amount:** \$2000 Direct funding

## STUDENT FINANCIAL SUPPORT

**Total Amount Awarded: \$1,156,200**

- 2017 - 2019 - Christian Clermont - AI:HS Graduate Studentship (\$12,000 top-up to NSERC PGS-D Award + \$2,000 research allowance)
- 2017 - Dylan Kobsar - Dr Benno M Nigg Distinguished Faculty Achievement Graduate Scholarship (\$800).
- 2017 - 2019: Christian Clermont - NSERC Postgraduate Scholarship-Doctoral (PGS D)



- (\$42,000)
- 2017 - 2018: Christian Clermont - Faculty of Graduate Studies: Queen Elizabeth II Scholarship (\$15,000) - Declined
  - 2015 - 2016: AJ Macaulay- Faculty of Kinesiology Vera Ross Scholarship (\$4,125)
  - 2015 - 2017: Angkoon Phinyomark - CIHR Postdoctoral Fellowship (\$40,000 + \$5,000 research allowance).
  - 2015 - 2018: Angkoon Phinyomark - AI:HS Postdoctoral Fellowship (\$50,000 + \$5,000 research allowance).
  - 2014 - 2017: Ryan Leigh - AI:HS MD/PhD Studentship (\$30,000 + \$2,000 research allowance).
  - 2014 - 2018: Dylan Kobsar - AI:HS Graduate Studentship (\$12,000 top-up to CIHR Doctoral Award + \$2,000 research allowance)
  - 2014: Dylan Kobsar - 2014 Allan Markin Doctoral Scholarship (\$5000)
  - 2013: Ricky Witari - Science Without Borders PhD Program - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES Ministério da Educação, Brazil (\$116,000)
  - 2013: Dylan Kobsar - University of Calgary Eyes High leadership doctoral scholarship (\$4000)
  - 2013 - 2016: Dylan Kobsar - CIHR Doctoral Award: Frederick Banting and Charles Best Canada Graduate Scholarships (\$30,000/yr + \$5000 research stipend)
  - 2013 - 2015: Dr. Kathryn Mills - CIHR Post-Doctoral Research Fellowship Award (\$40,000/yr: Declined)
  - 2013 - 2015: Dr. Kathryn Mills - NSERC Mitacs Accelerate Post-Doctoral Research Award (\$57,500/yr: Declined)
  - 2012 - Travis Brown - USRP Award: Reliability of gait kinematics across different running speeds (\$6000)
  - 2012 - 2013 - Talia Webber - CIHR Master's Award: Frederick Banting and Charles Best Canada Graduate Scholarships (\$17,500 + \$3000 Faculty top-up award)
  - 2012 - 2015 - Ryan Leigh - Alberta Innovates: Health Solutions Clinical Fellowship (\$70,000/yr + \$5000/yr research stipend + \$3000 Faculty top-up award)
  - 2012 - Dylan Kosbar - Faculty of Graduate Studies: PhD Queen Elizabeth II Scholarship (\$10,800), Dean's Entrance Scholarship (\$6,000)
  - 2012 - Alison Fyfe - University of Calgary PURE Summer Studentship: Validation and Calibration of a Novel Custom Pressure Sensing Insole Device (\$6000 - Declined)
  - 2012 - Alison Fyfe - NSERC CREATE Summer Studentship: Validation and Calibration of a Novel Custom Pressure Sensing Insole Device (\$6000)
  - 2012 - Shari Macdonald - Faculty of Graduate Studies: MSc Queen Elizabeth II Scholarship (\$10,800)
  - 2012 - Ryan Leigh - 2012 Allan Markin Doctoral Scholarship Competition (\$5,000)
  - 2012 - Shari Macdonald - AI:HS OA Team Grant MSc Studentship (\$20,000)
  - 2012 - Talia Webber - Mitacs - Accelerate Program / Orpyx Inc. (\$15,000)
  - 2011 - Ryan Leigh - Faculty of Graduate Studies: PhD Queen Elizabeth II Doctoral Scholarship (\$15,000)
  - 2011 - Reginaldo Fukuchi - Alberta Association on Gerontology Scholarship (\$1000)
  - 2011 - Reginaldo Fukuchi - Faculty of Graduate Studies Scholarship (\$2000)
  - 2011 - Talia Webber - USRP Award: Gait asymmetry for knee OA patients (\$6000)
  - 2011 - Talia Webber - PURE Award (declined): Gait asymmetry for knee OA patients
  - 2011 - Reginaldo Fukuchi - Allan Markin Doctoral Scholarship Competition (\$5,000)
  - 2011 - Reginaldo Fukuchi - Faculty of Graduate Studies Scholarship (\$6,175)
  - 2010 - Whitney Kilback - Canadian Institutes of Health Research: Frederick Banting

- and Charles Best Canada Graduate Scholarships - Master's Award (\$17,500)
- 2010 - Karen Kendall - Faculty of Graduate Studies: Queen Elizabeth II Doctoral Scholarship (\$10,000)
- 2010 - Lindsay Burnett - USRP Award: Pathomechanics and Optimal Treatment of Iliotibial Band Syndrome (\$4000)
- 2010 - Brittany Benson - PURE Award: Biomechanical Effect of Semi-Custom Foot Orthoses (\$5000)
- 2009 - 2013 - Reginaldo Fukuchi - Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES Ministério da Educação, Brazil (\$116,000)
- 2009 - Carolyn Graham - PURE Award: Differences in hip, knee, and ankle muscle stabilizer strength in subjects diagnosed with PFPS (\$5000)
- 2008 - Karen Kendall - Meredith Doctoral Award, Workers Compensation Board - Alberta (\$25,000)
- 2008 - Karen Kendall - Graduate Student Research Scholarship, Faculty of Kinesiology, University of Calgary (\$4100)
- 2008 - Lindsay Farr - USRP Award: Changes in lower extremity biomechanics following a hip muscle strengthening protocol and resultant reductions in patellofemoral pain (\$5000)
- 2008 - Christie Schmidt - USRP Award: The role of gluteus medius muscle strengthening on reducing low back pain and its effect on a positive Trendelenburg test (\$5000)

## HONORS

- 2017: University of Calgary Teaching Award for Educational Leadership
- 2016: Named to Canada's Top 100 Most Influential People in Health and Wellness.
- 2016: Nominated for the McCaig-Killam Teaching Award
- 2016: TEC Edmonton DynaLIFE Dx Health Award - 2<sup>nd</sup> place for top health-technology
- 2015: Member of the University of Calgary Teaching Academy
- 2015: University of Calgary Teaching Award for Full-Time Academic Staff (Associate Professor)
- 2014: Natural Sciences & Engineering Research Council Accelerator Award
- 2014: University of Calgary Entrepreneurship and Innovation Award
- 2013: Inducted into the University of Calgary Teaching Hall of Fame
- 2013: Teaching Excellence Award: Winner, University of Calgary
- 2012: Teaching Excellence Award: Winner, University of Calgary
- 2012: Faculty Award of Excellence for Teaching/Research, University of Calgary
- 2011: Journal of Athletic Training - Clint Thompson Award for Clinical Practice Advancement
- 2011: Winner: Top 40 Under 40 - Calgary Avenue Magazine
- 2010: Teaching Excellence Award: Honorable Mention, University of Calgary
- 2009: Faculty Award of Excellence for Teaching/Research, University of Calgary
- 2009: Teaching Excellence Award: Honorable Mention, University of Calgary
- 2008: Teaching Excellence Award: Winner, University of Calgary
- 2008: Faculty Award of Excellence for Teaching/Research, University of Calgary
- 2007: Teaching Excellence Award: Nomination, University of Calgary
- 2006: Teaching Excellence Award: Winner, University of Calgary
- 2006: Faculty Award of Excellence for Teaching/Research, University of Calgary

- 2005: Teaching Excellence Award: Honorable Mention, University of Calgary
- 2005: Faculty Award of Excellence for Teaching/Research, University of Calgary
- 2004: Canadian Athletic Therapists' Association and Human Kinetics Writing Award
- 2003 Third place - Promising Young Scientist Award - International Society of Biomechanics
- 2001 Outstanding Student Research Award: Northwest Chapter of ACSM
- 2001 Finalist for the ISB Congress Scherb Award: Outstanding biomechanical research in the area of human locomotion with emphasis on clinical application
- 1999 Nominated for University of Oregon Graduate Teaching Award
- 1993 Dr. Lou Goodwin Award: Outstanding service to the University of Calgary Department of Athletics

## TEACHING EXPERIENCE

### University of Calgary

- KNES 259/260 - Human Anatomy & Physiology I/II
- KNES 503 - Clinical Biomechanics
- ZOOL 269 - Anatomy and Physiology for Nurses
- BMEN 309 - Anatomy and Physiology for Engineers
- KNES 261 - Human Anatomy
- KNES 460 - Anatomical Dissection
- KNES 503.63 - Clinical Biomechanics
- KNES 591 - Special Studies in Clinical Biomechanics Research

### *University of Oregon*

- EMS 101 - Exercise as Medicine
- ANAT 311/312 - Human Anatomy
- ANAT 507 - Anatomical Dissection
- EMS 361 - Sports Medicine
- EMS 406 - Care and Prevention of Athletic Injuries
- EMS 609 - Graduate Advanced Clinical Anatomy
- EMS 607 - Graduate Advanced Seminar in Sports Medicine

### *Oregon State University*

- EXSS 257 - Athletic Training Practicum - injury evaluation
- EXSS 356 - Care and Prevention of Athletic Injuries
- EXSS 357 - Athletic Training Practicum - advanced rehabilitation
- EXSS 365 - Emergency Management
- EXSS 380 - Therapeutic Modalities
- EXSS 390 - Athletic Training Practicum - advanced therapeutic exercise
- EXSS 445 - Therapeutic Exercise

## INTERNAL / EXTERNAL ADMINISTRATIVE COMMITTEES

- 2016 - present: Member of the Faculty of Kinesiology Master Planning Committee
- 2016 - 2017: Member of the Faculty of Graduate Studies Graduate Scholarship Committee
- 2016 - 2018: Member of the Faculty of Kinesiology Graduate Education Committee
- 2015 - present: Member of the Faculty of Nursing Faculty Tenure and Promotion Committee
- 2015: Member of the Faculty of Kinesiology Faculty Tenure and Promotion Committee
- 2014 - present: Member of the University of Calgary Advisory Committee on Entrepreneurship and Innovation (ACEI)
- 2014 - present: Member of the Editorial Board - *Sports Health: A Multidisciplinary Approach*
- 2013 - 2015: Member of the Faculty of Graduate Studies My GradSkills Academic Advisory committee
- 2012 - 2013: Member of the NIH Financial Conflict of Interest (FCOI) Committee University of Calgary
- 2012 - 2013: Member of the Faculty of Graduate Studies Graduate Scholarship Committee - University of Calgary
- 2012 - present: Member of the Medical and Scientific Advisory Board at Orpyx Inc.
- 2012 - 2015: Member of AIHS Clinician Researcher Training Review Committee
- 2012 - 2014 Member of the Strategic University Proposal and Platform Opportunity Review Team (SUPPORT) Training and Professional Development Committee - University of Calgary
- 2011 - 2012: Member of the Kinesiology Decanal Search Committee
- 2011: Member of Killam Memorial Chair Selection Committee
- 2010 - 2012: Member of Campus Recreation and Athletics Committee -
- 2010 - 2011: Member of Strategic Directions Committee - Faculty of Kinesiology
- 2010 - present: Member of the Editorial Board - Prosthetics and Orthotics International
- 2010 - 2014: Member of the Pedorthic Research Foundation of Canada Vice-Chair for Grants
- 2010 - present: Member of the Editorial Board - Journal of Sport Rehabilitation
- 2008 - 2010: Chair of Communications: AHFMR Team Grant
- 2007 - present: Co-Chair: UC101 New Student Orientation Committee
- 2004 - 2010: Member of the NATA Research and Education Foundation: Vice Chair for Student Awards (04-07)  
Vice Chair for General Grants (08-10)
- 2004 - present: Member of the Editorial Board - Journal of Athletic Training
- 2002 - 2008: Member of the CATA Exam Review Committee

## MANUSCRIPT REVIEWER

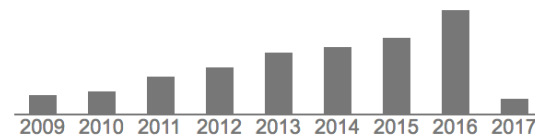
American Journal of Sports Medicine	Sports Medicine
Journal of Orthopaedic Research	Journal of Sport Rehabilitation
Sport Sciences and Medicine	Medicine & Science in Sports and Exercise
Journal of Applied Biomechanics	British Journal of Sports Medicine
Clinical Biomechanics	Clinical Journal of Sports Medicine
Gait and Posture	Footwear Science
Journal of Biomechanics	Journal of Orthopaedic Research
Journal of Sport Science and Medicine	Journal of Athletic Training
Journal of Foot and Ankle Research	Osteoarthritis and Cartilage

## RESEARCH INTERESTS

Prevention and rehabilitation of running-related injuries  
Biomechanical factors related to the treatment of knee osteoarthritis  
Methods to improve the reliability of kinematic gait data

Google scholar

Citation indices	All	Since 2012
Citations	3500	2420
h-index	29	26
i10-index	44	42



## PUBLISHED MANUSCRIPTS (underline indicates Trainee)

75. Osis ST, Kobsar D, Leigh RJ, Macaulay AJ, Ferber R. (2017). An expert system feedback tool improves the reliability of clinical gait kinematics for older adults with lower limb osteoarthritis. *Gait & Posture*. (In press).
74. Clermont C, Phinyomark A, Osis ST, Ferber R. (2017). Classification of Higher and Lower-Mileage Runners based on Running Kinematics. *Journal of Sport and Health Science*. (In press).
73. Jafarnezhadgero AA, Ferber R, Morteza MS. (2017). The effect of foot orthoses on joint moment asymmetry in children with flexible flat feet. *Journal of Bodywork & Movement Therapies*. In press
72. Floria P, Sanchez-Sixto A, Ferber R, Harrison AJ. (2017). Effects of running experience on coordination and its variability in runners. *Journal of Sports Sciences*. (In press).
71. Clermont C, Osis ST, Phinyomark A, Ferber R. (2017). Kinematic Gait Patterns in Competitive and Recreational Runners. *Journal of Applied Biomechanics*. In press.
70. Phinyomark A, Petri' G, Ibáñez-Marcelo' E, Osis ST, Ferber R. (2017) Analysis of Big Data in Running Biomechanics: Current Trends and Future Directions. *Journal of Medical and Biological Engineering - Special Issue: Recent Advances in Biomedical Engineering*. In press.
69. Kobsar D, Osis ST, Phinyomark A, Boyd JE, Ferber R. (2016). Reliability of gait analysis using wearable sensors in patients with knee osteoarthritis. *Journal of Biomechanics*. 49(16): 3977-3982.

68. Bolgla LA, Earl-Boehm J, Emery CA, Hamstra-Wright K, **Ferber R.** (2016). Pain, Function, and Strength Outcomes for Males and Females with Patellofemoral Pain Who Participate in Either a Hip/Core- or Knee-Based Rehabilitation Program. **Best Original Research Manuscript Award from the Sports Physical Therapy Section of the American Physical Therapy Association.** *International Journal of Sports Physical Therapy.* 11(6): 926-935.
67. **Ferber R,** Osis ST, Hicks JL, Delp SL. (2016). Gait Biomechanics in the Era of Data Science. *Journal of Biomechanics.* 49(16): 3759-3761.
66. Park SK, Kobsar D, **Ferber R.** (2016). Relationship between lower limb muscle strength, self-reported pain and function, and frontal plane gait kinematics in knee osteoarthritis. *Clinical Biomechanics.* 38: 68-74.
65. Watari R, Kobsar D, Phinyomark A, Osis ST, **Ferber R.** (2016). Determination of patellofemoral pain sub-groups and predicting treatment outcome using running gait kinematics. *Clinical Biomechanics.* 38: 13-21.
64. Phinyomark A, Osis ST, Hettinga BA, Kobsar D, **Ferber R.** (2016). Gender differences in gait kinematics for patients with knee osteoarthritis. *BMC Musculoskeletal Disorders.* 17(1): 157.
63. Osis ST, Hettinga BA, **Ferber R.** (2016). Predicting ground contact events for a continuum of gait types: an application of targeted machine learning using principal component analysis. *Gait & Posture.* 46: 86-90.
62. Hamstra-Wright K, Aydemir B, Bolgla L, Earl-Boehm J, Emery CA, **Ferber R.** (2016). Patient-Reported Outcomes Remain Improved 6-Months Post Patellofemoral Pain Rehabilitation. *Journal of Sport Rehabilitation.* In press.
61. Hamstra-Wright K, Earl-Boehm J, Bolgla L, Emery CA, **Ferber R.** (2017). Individuals with Patellofemoral Pain Have Less Hip Flexibility than Controls Regardless of Treatment Outcome. *Clinical Journal of Sport Medicine.* 27(2): 97-103.
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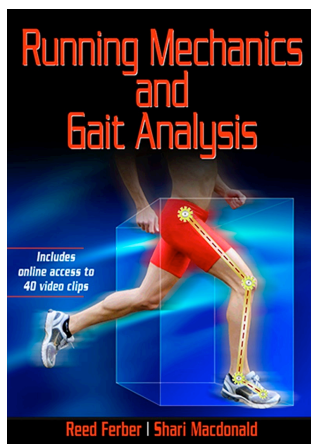
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78. Kendall, K.D., Schmidt, C., & Ferber, R. The relationship between hip abductor muscle strength and magnitude of pelvic drop following a 3 week strengthening protocol in non-specific low back pain patients. Book of Abstracts, 2009 Canadian Athletic Therapists Association National Conference, May, Vancouver, BC.
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- joint coupling variables during running. Medicine and Science in Sports and Exercise 35(5), s89.
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  92. McClay Davis, I., Ferber, R., Hamill, J., & Pollard, C. (2003). Rearfoot mechanics in competitive runners who had experienced plantar fasciitis. Book of Abstracts International Society of Biomechanics, Dunedin, New Zealand.
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- ACL deficient and post-surgical subjects. Medicine and Science in Sports and Exercise, 32(5), s222.
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  106. Ferber, R., Osternig, L.R., & Neros, C. (1999). Effect of biological aging on lower extremity torque and power production in Masters class athletes. Medicine and Science in Sports and Exercise, 31(5), s385.
  107. Osternig, L.R., Ferber, R., Mercer, J., & Davis, H. (1999). Muscle accommodation to Anterior Cruciate Ligament dysfunction. Journal of Athletic Training, 34(2), S-11.
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  109. Ferber, R., Osternig, L.R., & Gravelle, D. (1998). Range of motion and EMG response to Proprioceptive Neuromuscular Facilitation stretch techniques in trained and untrained older adults. Medicine and Science in Sports and Exercise, 30(5), s213.
  110. Osternig, L. R. and Ferber, R. (1998). Effects of aging and training on PNF stretching. Proceedings, 24th Annual Meeting of the AOSSM, Vancouver, BC, Canada; pp. 314-315.

#### INVITED PRESENTATIONS

1. Invited Speaker and Panel Discussion: Faculty of Kinesiology Innovation Series: Wearable Technology. Calgary, Canada. June 2017.
2. Workshop: Running Injuries in the Hip and Back. University of Calgary Pain and MSK Clinical Pearls Combined Course. Calgary, Canada. March 2017.
3. *Keynote Presentation*: State of the Art in Gait Analysis. Pedorthic Association of Canada - Research Symposium. Calgary, Canada. October 2016.
4. Invited Speaker and Panel Discussion: Gender differences in gait mechanics - a UofC Perspective. Pedorthic Association of Canada - Research Symposium. Calgary, Canada. October 2016.
5. Invited Speaker: Keeping Your Knees in Shape: The science behind running injury prevention. University of Calgary Alumni Weekend. Calgary, Canada. April 2016.
6. Invited Speaker: I bought my research lab at Walmart. NerdNite Calgary. Calgary, Canada. April 2016.
7. Invited Speaker: How can biomechanics research improve clinical practice? University of Wisconsin - Milwaukee Department of Kinesiology Seminar (via Skype webinar). March 2016.
8. Invited Speaker: Prevention of running injuries and improving rehabilitation outcomes using gait analysis. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Florianapolis, Brazil. November 2015.
9. Invited Panelist: Cooperation and International Partnerships for Post-Graduate Sports Physiotherapy Research and Development. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Florianapolis, Brazil. November 2015.
10. *Keynote Presentation*: Using 3D biomechanical analysis to prevent injuries and predict rehabilitation and surgical outcomes. Jornada Brasileira de Biomechanica Clinica (JBBC). Rio de Janeiro, Brazil. November 2015.

11. Invited Speaker: Science Behind Running Injury Prevention. University of Calgary Alumni Weekend. Calgary, Canada. June 2015.
12. Invited Speaker: Advances in technology to keep you running injury-free. Calgary Marathon Speaker Series. Calgary, Canada. June 2015.
13. Invited Speaker: Methods to Improve Biomechanical Data Collection. Faculty of Kinesiology Colloquium, Penn State University. State College, PA. April 2015.
14. *Keynote Address*: Lumbopelvic Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
15. *Keynote Address*: Foot and Ankle Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
16. *Invited Workshop*: Footwear and Orthotic Assessment. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
17. *Invited Speaker*: Running Injury Clinic: Integration of Research and Clinical Practice. Department of Kinesiology Seminar Series, University of Virginia. Charlottesville, VA. March 2015.
18. *Invited Speaker*: Recent Advances in Personalized Medicine and Therapeutic Exercise for Knee Osteoarthritis Patients. Cumming School Of Medicine: 2014 Calgary Pain Conference. Calgary, AB. December 2014.
19. *Invited Speaker*: Novel methods to improve gait kinematic data reliability through a worldwide network of research and clinic partners. Korean Society of Sports Biomechanics. Chungju, Korea. September 2014.
20. *Invited Panelist*: Biomechanical modeling and data mining. International Calgary Running Symposium. Calgary, Canada. August 2014.
21. *Invited Panelist*: Running Injuries. International Calgary Running Symposium. Calgary, Canada. August 2014.
22. *Invited Lecture*: Wearable Technology and Advances in Running Injury Prevention. Mountain Equipment Co-op Expert Speaker Series. June 2014. Calgary, AB.
23. *Invited Lecture*: Evidence-Based Approach to the Treatment of Running-Related Injuries. Canadian Athletic Therapists Association Annual Meeting. June 2014. Winnipeg, MB.
24. *Invited Lecture*: Advancements in Research and Technology for Injury Prevention and Rehabilitation. PanAm Clinic Foundation Research Rounds. June 2014. Winnipeg, MB.
25. Invited Lecture: Wearable Gadgets and Advances in Technology for Running Injury Prevention. CIBC Wood Gundy. Calgary, AB. June 2014.
26. *Keynote Address*: Prevention and treatment of common running injuries. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
27. *Invited Workshop*: Gait Analysis and Footwear prescription. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
28. *Invited Lecture*: Innovations in Technology: Lessons Learned From Masking Tape. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
29. *Keynote Address*: Innovation and Research Platforms for Campus Recreation. Western Canada Campus Recreation Conference. Feb 2014. Calgary, AB.
30. *Invited Lecture*: Combining research and entrepreneurship for the purpose of disruptive innovation. University of Calgary Society of Young Researchers Interdisciplinary Research Forum. Feb 2014. Calgary, AB.
31. *Invited Lecture*: Biomechanics for Injury Prevention and Performance. Royal College of Chiropractic Sports Sciences (Canada): Run Faster Conference. Nov 2013. Whitby, ON.

32. *Invited Lecture*: A Comprehensive Approach for the Assessment of Running Injuries: Distal to proximal considerations of strength, flexibility, and gait biomechanics. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
33. *Invited Lecture*: Treatment of running injuries through hip muscle strengthening. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
34. *Invited Workshop*: Clinical assessment of hip muscle strength and flexibility. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
35. *Invited Lecture*: How does your exam measure up? Faculty of Nursing, University of Calgary. June 2013.
36. *Keynote Address*: What to do before you bench your training shoes: Barefoot Running 101. Certified Professional Trainers Network (CPTN) Conference. Toronto, ON. June 2013.
37. *Invited Panellist*: “Enhancing Student Learning through the Eyes of Teaching Award Winners” University of Calgary Teaching and Learning Centre: Collaborating for Learning Conference. Calgary, AB. May 2013.
38. *Invited Lecture*: Running After Knee Injury. International Society of Arthroscopy, Knee Surgery and Orthopedic Sports Medicine (ISAKOS) Congress - Concurrent Course: Sports Rehabilitation. Toronto, ON. May 2013.
39. *Invited Panellist*: “Leadership through Sports and Coaching” panel: Leadership Exchange Conference. University of Calgary, Calgary, AB. April, 2013.
40. *Invited Workshop*: Clinical Assessment Using 3D Motion Analysis. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013
41. *Keynote Address*: Recent Research Behind Over-the-Counter Orthoses. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013
42. *Invited Presentation*: Lessons learned from masking tape: disruptive innovation vs. invention. Student’s Union Last Lecture Series. University of Calgary, March 2013.
43. *Invited Presentation*: Predicting Sports Injuries Through Critical Gait Analysis: Bringing the Lab into the Clinic. Alberta Chapter of the Canadian Society of Orthopaedic Technologists “Weekend Warriors” Conference. Alberta Children’s Hospital, Calgary, AB. Feb 2013.
44. *Invited Presentation*: Biomechanical predictors of knee osteoarthritis. Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark. Jan 2013.
45. *Invited Presentation*: New strategies for injured runners. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
46. Optimal foot kinetics during walking and running. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
47. *Keynote Address*: Student’s Union Research Symposium Gala Event. Dec 2012.
48. *Invited Presentation*: Gait Analysis and Footwear prescription. The Running Event, Austin, TX. Dec 2012.
49. *Invited Presentation*: Indications for the use of orthoses in sports medicine. Faculty of Medicine, University of Calgary: Evening Course Program. Nov 2012.
50. Prevention of running injuries. Bloomsburg University of Pennsylvania Sports Medicine Association, Bloomsburg, PA. Nov 2012.
51. *Invited Presentation*: University of Calgary First Lecture Series: Orientation Week. September 2012.
52. *Keynote Address*: The Science Behind Gait Analysis and Footwear Prescription. Fleet

- Feet National Conference. Washington, DC. June 2012.
53. Clinical and Biomechanical Factors Associated with Running-Related Injuries. University of Calgary Honolulu Marathon Training Program Speaker Series. April 2012.
  54. Advances in 3D Gait Technology for Running Injury Prevention. Nuffield Orthopaedic Centre, Oxford University. Oxford, UK. April 2012.
  55. The Art of the Scientific Presentation: McCaig Institute Seminar Series. University of Calgary. Calgary, AB. March, 2012
  56. Overview of the Running Injury Clinic: An Applied and Translational Research Laboratory. McCaig Institute Seminar Series. University of Calgary. February, 2012
  57. *Keynote Address*: Efficacy of Over-the-Counter Orthoses: Current Research and Best Practice Guidelines. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
  58. Visual Gait Analysis. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
  59. Staying active and healthy through clinical biomechanics research. University of Calgary Emeritus Association. January 2012.
  60. New Paradigms in Sustainable Research. Ohio State University: Sports Medicine Movement Analysis & Performance Research. Columbus, OH. November 2011.
  61. The Aetiology of Running Injuries: Current Research. School of Physical Education and Sport (Escola de Educação Física e Esporte) University of Sao Paulo. November 2011.
  62. *Keynote Address*: Clinical and Biomechanical Factors Associated with Running-Related Injuries. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Maceio, Brazil. November 2011.
  63. The Science Behind Running Injury Prevention. University of Calgary, Faculty of Medicine and Cenovus Energy: Living Well to 100 Series. Calgary, AB. September 2011.
  64. Symposium Lecture: Getting to the core: Scientific evidence for core stability in sport injury prevention. 2011 IOC World Conference on Prevention of Injury & Illness in Sport. Monaco, Monte Carlo. April 2011
  65. *Keynote Address*: Biomechanical Factors Associated with Running Related Injuries. 26<sup>th</sup> Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
  66. Clinical and Biomechanical Considerations for the Assessment and Treatment of Patellofemoral Pain Syndrome. 26<sup>th</sup> Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
  67. Examination of the Hip as a Contributing Factor to Overuse Injuries. 26<sup>th</sup> Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
  68. Aetiology of Running Injuries. University of Calgary Sports Medicine Centre Clinic Rounds. December 2010.
  69. Healthy aging and pain-free walking: what research has done for us. Rotary Club of Calgary. November 2010.
  70. Development of 3D Gait Analysis for use in a Clinical Setting. The Health Research Transfer Network of Alberta (RTNA) Conference. Edmonton, Alberta. November 2010.
  71. Running Injury Free. Royal Victoria Marathon Running Expo, Victoria, BC. October 2010.
  72. *NATA Exchange Lecture*: Biomechanical Factors Associated with Running-Related Injuries. American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting, Providence RI. July 2010.
  73. Clinical Assessment of Walking Gait Mechanics: Learning Lab. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.

74. *Feature Presentation*: Importance of the hip abductors for the resolution of lower extremity injuries. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.
75. *Keynote Presentation*: Biomechanical and Clinical Factors Associated With Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009
76. Exercise Prescription for Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009
77. The role of tibialis posterior in the control of midfoot and rearfoot mechanics. 12th Annual International PFOA Conference, Atlanta, USA. October, 2009
78. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. 12th Annual International PFOA Conference, Atlanta, USA. October, 2009
79. The pain in my knee is a pain in my butt. Big Rock Lecture Series, Calgary, Canada. September, 2009.
80. Advanced Track Seminar: Evaluation and Interpretation of Running Gait. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
81. Clinical Lecture: Clinical Gait Analysis and Proper Footwear Selection. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
82. *Keynote Presentation*: The Inter-Relationship Between Hip Muscle Strength and Running Biomechanics. Pedorthic Association of Canada Annual Symposium. Kelowna British Columbia, April, 2009.
83. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. Pedorthic Association of Canada Annual Symposium. Kelowna, British Columbia, April, 2009.
84. *Keynote Presentation*: Biomechanical and Clinical Factors Associated With Shin Splints and Stress Fractures. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Regina, Saskatchewan. March, 2009
85. Exercise Prescription for Shin Splints and Stress Fractures. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Regina, Saskatchewan. March, 2009
86. Understanding the pathomechanics of musculoskeletal injury: the inter-relationship of clinical and biomechanical factors. University of Oregon, Department of Human Physiology Graduate Lecture Series, Eugene, Oregon. January, 2009
87. Stress Fracture Management & Treatment. 59<sup>th</sup> NATA Annual Meeting & Clinical Symposia, St. Louis, MO. June 2008
88. Pathomechanics of patellofemoral pain syndrome: the hip-down perspective. 11th Annual International PFOA Conference, Vancouver, BC. October, 2008
89. Proprioceptive neuromuscular response to unexpected gait perturbation in ACL deficient individuals. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
90. Bilateral accommodations to anterior cruciate ligament during normal and perturbed gait. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
91. *Keynote Presentation*: Foot structure and biomechanics of lower extremity injuries. Sutter Heath Group Santa Cruz Seminar, Santa Cruz, CA. October 2004.
92. Gait retraining for running relateds injuries. York University Athletic Therapy seminar. Toronto, Ontario, Canada. September, 2004.
93. *Keynote Presentation*: Foot Orthotics: Current Research in Rehabilitation. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.



94. Factors influencing the etiology and treatment of lower extremity musculoskeletal injuries. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.
95. Neuromuscular adaptations in anterior cruciate ligament deficient individuals. Distinguished Lecture Series, UNLV Department of Kinesiology, Las Vegas, NV. March 2004.
96. How puberty influences the biomechanics of running and landing in male and female adolescents. 7th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2003
97. Influence of puberty and consequent structural alterations on anterior knee pain in young runners. 7th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2003
98. Patellofemoral pain syndrome: Current trends and research in rehabilitation. Dynamic Rehabilitation Specialists Symposium. Calgary, Alberta, Canada. October 2003
99. Prehabilitation for the endurance athlete. Clinical Workshop: National Athletic Trainers Association National Meeting. St Louis, MO. June 2003
100. Gait accommodations to anterior cruciate ligament deficiency and surgery. School of Kinesiology and Health Science Graduate Seminar. York University, Toronto, Ontario, Canada. September 2002
101. Bilateral accommodations to anterior cruciate ligament deficiency and surgery. Biomechanics Invitational Seminar. Las Vegas, NV, USA. March 2002.
102. Accommodations to anterior cruciate ligament deficiency and surgery. Lane Athletic Trainers Association Annual Meeting. Eugene, OR, USA. March 2001.
103. Lower Extremity Joint Accommodations to Anterior Cruciate Ligament Dysfunction. Canadian Athletic Therapists Association Annual Meeting. Calgary, Alberta, Canada. May 2001.

## TRAINEE/STUDENT SUPERVISION

- 2007 - 2013: Karen Kendall (Faculty Supervisor: PhD): Validation of the Trendelenburg Test for the purpose of optimal assessment and treatment of low back pain.
- 2007: Mike Green (Committee Member: MKin): The relationship between core strength and patellofemoral pain syndrome.
- 2008-2010: Melissa Rabitto (Faculty Supervisor: MSc): Posterior Tibial Tendon Dysfunction
- 2008 - 2011: Mike Pohl (Faculty Supervisor: PDF): The underlying mechanics between patellofemoral pain syndrome and patellofemoral osteoarthritis.
- 2009 - 2010: San Kyoon Park (Faculty Supervisor: PDF): Biomarkers associated with inflammation and the progression of knee osteoarthritis.
- 2009 - 2011: Katharina Schnackenburg (Committee Member: Msc): Bone Micro-architectural Parameters and Muscle Strength in Recreational Runners with and without Tibial Stress Fractures.
- 2009: Blayne Hettinga (Faculty Supervisor: PDF): Development of biomechanical methodologies for automated analysis.
- 2009 - 2011: Shawn Allen (Committee Member: MSc): Do Components of a Physiotherapist Delivered Pre-participation Examination in Male and Female Adolescent Soccer Players Predict Acute Lower Extremity Injuries in Soccer?
- 2009 - 2012: Bill Wannop (Committee Member: PhD): Biomechanical Model of Lower Extremity Injuries in High School Football.
- 2009 - 2013: Reginaldo Fukuchi (Faculty Supervisor: PhD): Changes in running mechanics across the lifespan: the relationship of chronic running to the development of osteoarthritis.
- 2010 - 2012: Whitney Kilback (Faculty Supervisor: MSc): Biomechanical variables associated with iliotibial band syndrome.
- 2010 - 2016: Ryan Leigh (Faculty Supervisor: PhD): The use of 3-dimensional gait analysis to understand pain, function, and mechanics in hip osteoarthritis patients.
- 2011 - 2013: Talia Webber (Faculty Supervisor: MSc): Between-limb gait and muscle asymmetry in runners with patellofemoral pain syndrome.
- 2011 - 2013: Shari Macdonald (Faculty Supervisor: MSc): The relationship between a medial heel whip and the free moment in distance runners.
- 2011 - 2013: Kathryn Mills (Faculty Supervisor: PDF): Developing real-time feedback tools for the treatment of knee osteoarthritis.
- 2012 - present: Sarah Kenny (Committee Member: PhD): Risk factors associated with dance-related injuries.
- 2012 - present: Dylan Kosbar (Faculty Supervisor: PhD): The relationship between joint kinematics, the patterning of trunk accelerations to predict running-injury risk.
- 2013 - 2016: Angkoon Phinomark (Faculty Supervisor: PDF): Machine Learning Approaches To Identify Biomechanical Risk Factors Associated With Musculoskeletal Injury.
- 2014 - present: Ricky Watari (Faculty Supervisor: PhD): Determining sub-types of runners that are experiencing patellofemoral pain.
- 2015 - present: Christian Clermont (Faculty Supervisor: PhD): Wearable technology to predict running-related injuries.

- 2015 - present: AJ (Charles) Macauley (Faculty Supervisor: MSc): Improving the reliability of kinematic data through real-time feedback training.
- 2016 - present: Lindsey Logan (Committee Member: MSc): Developing a measure for sense of effort in the KINARM Exoskeleton Robot
- 2016 - present: Chandra Tjhaj (Committee Member: PhD): Pedestrian Navigation Using Wearable MARG Sensors
- 2016 - present: Lauren Benson (Faculty Supervisor: PDF): Methods to Determine Subject-Specific Movement Gait Patterns Using 3D Accelerometry Signals.
- 2016 - present: Simon Barrick (Committee Member: PhD): Exploring the role of sport participation in the integration of newcomers into Canadian society.
- 2016 - present: Amy Beck (Committee Member: PhD): Sleep health in adolescents.
- 2016 - 2017: Ana dos Santos (Committee Member): PhD): Effects of forefoot and rearfoot landing on knee joint loading.
- 2017 - present: Nizam Ahamed (Faculty Supervisor: PDF): Sensor technology in monitoring human movement.
- 2018 - present: Andrew Pohl (Faculty Supervisor: PhD): Wearable technology to predict running-related injuries.

#### SUMMER STUDENTS AND SPECIAL PROJECTS

- 2011 - Rebecca Johnson - Societal cost of MSK injury.
- 2011 - Talia Webber - Gait asymmetry for knee OA patients
- 2010 - Angela McClintock - Commercialization and marketing strategies related to the Running Injury Clinic
- 2010 - Lindsay Burnett - Functional vs. manual calculation of anatomical joint coordinate systems
- 2010 - Lissandre Dufresne - Biomechanical factors related to lower extremity running injuries
- 2009 - Andrea Bachand - Development of a 3-dimensional motion capture system for use in a clinical setting
- 2009 - Lauren Tompkins - Biomechanical and clinical factors related to PFPS
- 2009 - Holliston Logan - HYRS Alberta Heritage Foundation for Health Research
- 2008 - Lindsay MacNeil- Normative values and critical criterion for iliotibial band and iliopsoas muscle flexibility

#### POPULAR PRESS INTERVIEWS / CONTRIBUTIONS (abbreviated list of 1-2 links per story)

May 2017: SELF Magazine - Tips for beginner runners

May 2017: Los Angeles Times - That moment you realize you can't work out like you used to ...

<http://www.latimes.com/health/la-he-feeling-your-age-20170506-story.html>

April 2017: SELF Magazine - 4 Beginner Running Injuries That Are Totally Normal and How to Fix Them.

<http://www.self.com/story/beginner-runner-injuries-that-are-normal-how-to-fix-them>

April 2017: Calgary Journal - How the new run3 system allows you to run without risk.  
<http://www.calgaryjournal.ca/index.php/sports/3632-how-the-new-run3-system-allows-you-to-run-without-risk>

April 2017: QR77 Radio (live interview) - Are knee replacements are the best way to treat knee pain?

March 2017: UToday - StrengthsQuest tool growing in popularity among students, faculty, and staff.  
<http://www.ucalgary.ca/utoday/issue/2017-03-07/strengthsquest-tool-growing-popularity-among-students-faculty-and-staff>

March 2017: Avenue Magazine - Reed Ferber is the Guy Researching How to Keep Runners Injury-Free  
<http://www.avenuecalgary.com/City-Life/People/Reed-Ferber-Running-Injury-Clinic-University-of-Calgary/>

February 2017: UToday - Instructors share teaching approaches and practices with colleagues across campus.  
<http://www.ucalgary.ca/utoday/issue/2017-02-28/instructors-share-teaching-approaches-and-practices-colleagues-across-campus>

January 2017: QR77 Radio (live interview) - New technology for diagnosing running injuries easily.

January 2017: CityTV Breakfast Television (live interview) - New technology for diagnosing running injuries easily.  
<http://www.btcalgary.ca/videos/diagnosing-running-injuries-easily/>

January 2017: University of Calgary UToday - Kinesiology's Reed Ferber and team announce new software in running injury technology.  
<https://www.ucalgary.ca/utoday/issue/2017-01-06/kinesiology-s-reed-ferber-and-team-announce-new-software-running-injury-technology>

August 2016: University of Calgary UToday -Leading the race in running injury treatment  
<http://www.ucalgary.ca/explore/leading-race-running-injury-treatment>

February 2016: Calgary Herald - Making strides: Calgary professor leads world's largest study in running injury prevention.  
<http://calgaryherald.com/health/diet-fitness/making-strides-calgary-professor-leads-worlds-largest-study-in-running-injury-prevention>

December 2015: Winnipeg Free Press - Sports clinic's 3D gait-analysis machine takes guesswork out of treating injuries.  
<http://www.winnipegfreepress.com/arts-and-life/life/health/up-and-running-363618041.html>

November 2015: Runner's World - Get Better, Stay Better: How to recover from (and/or prevent) common running injuries.  
<http://www.runnersworld.com/injury-prevention-recovery/get-better-stay-better>

May 2015: Globe and Mail - Cross training a key part of a runner's regimen – especially as they age.

[http://www.theglobeandmail.com/life/health-and-fitness/fitness/cross-training-a-key-part-of-a-runners-regimen-especially-as-they-age/article24397289/?cmpid=rss1&click=sf\\_globe](http://www.theglobeandmail.com/life/health-and-fitness/fitness/cross-training-a-key-part-of-a-runners-regimen-especially-as-they-age/article24397289/?cmpid=rss1&click=sf_globe)

May 2015: iRun Magazine - Make the Next 36 Hours Count: Your Ultimate Post-Race Recovery Guide

<http://www.irun.ca/blog/index.php/how-the-next-36-hours-can-keep-injury-at-bay-the-ultimate-post-race-recovery-guide/>

May 2015: Runner's World - Gender-Specific Injury Prevention

<http://www.runnersworld.com/injury-prevention-recovery/gender-specific-injury-prevention>

May 2015: Globe and Mail - Running injuries point to differences and similarities between genders

<http://www.theglobeandmail.com/life/health-and-fitness/fitness/running-injuries-point-to-differences-and-similarities-between-genders/article24224355/?page=all>

February 2015: Outside Magazine - The Tech that Will Predict (and Prevent) Your Next Running Injury

<http://www.outsideonline.com/1928811/tech-will-predict-and-prevent-your-next-running-injury>

February 2015: ABC News - Myth Debunked: Treadmill Just as Good as Road Running

<http://abcnews.go.com/Health/myth-debunked-treadmill-good-road-running/story?id=29050477>

January 2015: Global TV - 3D Analysis helping osteoarthritis sufferers get back in action

<http://globalnews.ca/news/1751672/3d-analysis-helping-osteoarthritis-sufferers-get-back-in-action/>

November 2014: AskMen.com - Elliptical Trainer - New Cardio Tech

<http://ca.askmen.com/sports/bodybuilding/new-cardio-tech-elliptical-trainer.html>

November 2014: Runner's World - To Relieve Runner's Knee, Strengthen Your Hips Study: Hip exercises trump knee exercises for ending pain.

<http://www.runnersworld.com/injury-treatment/to-relieve-runners-knee-strengthen-your-hips>

June 2014: Men's Fitness Magazine - "Ask Men's Fitness. Will Running on Pavement Every Day Kill My Knees?"

<http://www.mensfitness.com/training/endurance/ask-mens-fitness-will-running-pavement-every-day-kill-my-knees>

May 2014: FITNESS Magazine - Change Your Running Terrain

<http://www.fitnessmagazine.com/workout/running/tips/trail-running/>

July 2014: The Fitness Informer (Summer Issue)- Recent Advances in Running Injury Rehabilitation Research.

<http://www.joomag.com/magazine/fitness-informer-july-2014/0058734001404769045?short>

July 2014: Wall Street Journal - The Just-Right Running Shoe: Runners Race for a Middle Ground Between Earlier Design Trends

<http://online.wsj.com/articles/the-just-right-running-shoe-1406068998>

June 2014: iRun Magazine - From Couch to Marathon in One Year.

<http://www.irun.ca/blog/index.php/how-to-get-from-the-couch-to-the-marathon-lesson-1-begin/>

July 2014: UToday University of Calgary - Cutting-edge researchers earn NSERC funding.

<http://www.ucalgary.ca/utoday/issue/2014-07-11/cutting-edge-researchers-earn-nserc-funding>

<http://www.ucalgary.ca/knes/news/ferber-accelerator>

July 2014: Chicago Tribune - Tread carefully with treadmills: Looking at pros, cons of using treadmills and treadmill desks

[http://articles.chicagotribune.com/2014-07-11/health/sc-health-0709-fitness-treadmill-20140711\\_1\\_treadmill-weight-loss-3-pounds](http://articles.chicagotribune.com/2014-07-11/health/sc-health-0709-fitness-treadmill-20140711_1_treadmill-weight-loss-3-pounds)

June 2014: AskMen.com - The 500 People, Products & Trends That Will Define The Next 12 Months.

[http://ca.askmen.com/2014\\_pulse\\_report/health\\_and\\_fitness/reed-ferber.html](http://ca.askmen.com/2014_pulse_report/health_and_fitness/reed-ferber.html)

June 2014: UToday University of Calgary - Reed Ferber authors first biomechanics text on gait analysis.

<http://www.ucalgary.ca/utoday/issue/2014-06-13/reed-ferber-authors-first-biomechanics-text-gait-analysis?>

June 2014: Women's Health Magazine. The Running Technique That Can Reduce Your Risk of Injury. The secret to staying pain-free may lie in the length of your steps.

<http://www.womenshealthmag.com/fitness/best-running-technique>

May 2014: Avenue Magazine Calgary. How to Make an Effective Running Program and Stick to It.

<http://www.avenuecalgary.com/articles/how-to-make-an-effective-running-program-and-stick-to-it>

April 2014: Chicago Tribune: Runner with a mission: Boston

<http://www.chicagotribune.com/health/sc-health-0423-fitness-boston-marathon-20140425,0,2581231,full.story>

April 2014: Global TV Calgary: How avoiding running-related injuries could save millions of dollars

<http://globalnews.ca/news/1278439/how-avoiding-running-related-injuries-could-save-millions-of-dollars/>

April 2014: Askmen.com: Part Two: Boston Marathon Preparation

<http://ca.askmen.com/sports/bodybuilding/part-two-boston-marathon-preparation.html>

April 2014: Breakfast Television Calgary - Remote Broadcast:  
Segment 1: <http://www.btcalgary.ca/videos/3418210942001/>  
Segment 2: <http://www.btcalgary.ca/videos/3418375518001/>  
Segment 3: <http://www.btcalgary.ca/videos/3421024486001/>  
Segment 4: <http://www.btcalgary.ca/videos/3421035366001/>

March 2014: Biomedical Computation Reviews: Mobilizing Big Data to Understand Mobility.  
<http://biomedicalcomputationreview.org/content/mobilizing-big-data-understand-mobility>

March 2014: Health Magazine: 3 Tips for Finding Feel-Great Running Shoes  
<http://newsle.com/article/0/130320140/>

March 2014: Canadian Running Magazine: The Science of Running - Stride Variability. (7(2), pg. 32).

Feb 2014: Montreal Gazette, Ottawa Citizen, Calgary Herald: Running shoe conundrum picks up speed.  
<http://www2.canada.com/calgaryherald/iphone/life/latest/story.html?id=9521208>  
<http://www.montrealgazette.com/life/fashion-beauty/Jill+Barker+running+shoe+conundrum+picks+speed/9514866/story.html>

Jan 2014: Runner's World: Stay Injury-Free on the Treadmill  
<http://www.runnersworld.com/workouts/stay-injury-free-on-the-treadmill>

Jan 2014: Active Times: 8 Lessons Every Runner Should Absolutely Learn  
<http://www.theactivetimes.com/8-lessons-every-runner-should-absolutely-learn>

Jan 2014: Canadian Running Magazine: Tibial Stress Injuries: To avoid a bigger problem, don't ignore shin pain. (7(1), pg 63).

Jan 2014: Calgary Herald / National Post: Running during winter? Slowing down, strengthening muscles can help avoid injury.  
<http://www.calgaryherald.com/health/Running+during+winter+Slowing+down+strengthening+muscles+help/9368783/story.html>  
<http://life.nationalpost.com/2014/01/10/tips-for-winter-running-slow-down-modify-your-stride-and-work-on-muscles-to-avoid-injuries-experts-advice/>  
<http://globalnews.ca/news/1072615/tips-for-avoiding-injuries-when-running-during-winter/>

Dec 2013: Prevention Magazine: Are You Running The Wrong Way?  
<http://www.prevention.com/fitness/fitness-tips/running-form-linked-injury>

Dec 2013: The Globe and Mail: What's wrong with your running form? The devil's in the details  
<http://www.theglobeandmail.com/life/health-and-fitness/fitness/whats-wrong-with-your-running-form-the-devils-in-the-details/article15803662/>

Nov 2013: Runner's World: 5 Moves To Cure Knee Pain!

<http://www.runnersworld.co.za/injury-prevention/5-moves-cure-knee-pain/>

Nov 2013: National Post: EachCoach - Coach of the Week

[http://eachcoach.com/img/EachCoach\\_November-13-2013.pdf](http://eachcoach.com/img/EachCoach_November-13-2013.pdf)

Nov 2013: Health Magazine: Injury-Proof Your Run

<http://www.health.com/health/wp/0,,20513305,00.html>

June 2013: Chatelaine: Four ways to prevent running injuries.

<http://www.chatelaine.com/health/fitness/how-to-prevent-running-injuries/>

May 2013: Runner's World: How to Prevent Common Running Injuries

<http://www.runnersworld.com/injury-prevention-recovery/how-to-prevent-common-running-injuries?page=single>

April 2013: The Calgary Journal: Trials and rewards for Calgary runners

<http://www.calgaryjournal.ca/index.php/healthyliving/fitness/1704-trials-and-rewards-for-calgary-runners>

March 2013: National Post: Marathon Man: Expert exercise advice for spring, in convenient 140-word form.

<http://life.nationalpost.com/2013/03/18/marathon-man-expert-exercise-advice-for-spring-in-convenient-140-word-form/>

Dec 2012: National Post: A Running Resolution: How to get out there, stay injury-free and keep going in 2013

<http://life.nationalpost.com/2012/12/17/a-running-resolution-how-to-get-out-there-stay-injury-free-and-keep-going-in-2013/>

July 2012: Men's Health: Cure This Common Running Pain

<http://news.menshealth.com/it-band-syndrome/2012/07/27/>

June 2012: Globe and Mail: Strengthening beats stretching when it comes to this common running injury

<http://www.theglobeandmail.com/life/health-and-fitness/fitness/running/strengthening-beats-stretching-when-it-comes-to-this-common-running-injury/article4365074/>

June 2012: Wall Street Journal: Maybe Grass Makes You Faster

<http://online.wsj.com/article/SB10001424052702303768104577462681286183966.html>

May 2012: National Post: Stride science: Learning how the body works during a run holds injury insight

<http://life.nationalpost.com/2012/05/30/stride-science-learning-how-the-body-coordinates-during-a-run-holds-injury-insight/>

April 2012: Runner's World: The Shoe Believer

<http://www.runnersworld.com/article/printer/1,7124,s6-240-400--14265-0,00.html>

April 2012: Men's Health: The Men's Health Guide to Running Faster

<http://www.menshealth.com/fitness/faster-running/page/3>



April 2012: Montreal Gazette (blog) Barefoot, shod or minimalist- join the debate  
<http://blogs.montrealgazette.com/2012/04/18/barefoot-shod-or-minimalist-join-the-debate/>

Feb 2012: Runner's World: Injury Prevention Law #1: Know Your Limits  
<http://www.runnersworld.co.za/injury-prevention/health-fitness/injury-prevention-law-1-know-your-limits/>

Feb 2012: Los Angeles Times: Go ahead, run into old age  
<http://www.businessmirror.com.ph/home/life/23644-go-ahead-run-into-old-age>

Feb 2012: National Post: Knack for the future: 3D gait analysis is on the cusp of redefining your run  
<http://www.nationalpost.com/life/running/Knack+future+gait+analysis+cusp+redefining+your/6223826/story.html>

January 2012: LA Times: In-Your-Face Fitness: Go ahead, run into old age  
<http://articles.latimes.com/2012/jan/16/health/la-he-fitness-running-joints-20120116>

December 2011: Oxford opens Run3D Clinic in cooperation with the Running Injury Clinic at the University of Calgary  
<http://www.eng.ox.ac.uk/public-relations/news/london-2012-olympic-athlete-launches-new-running-biomechanics-service>  
<http://blogs.people.co.uk/sam-cope/2011/12/analyse-your-running-style.html#more>  
<http://www.theengineer.co.uk/sectors/medical-and-healthcare/news/3d-motion-analysis-facility-could-help-prevent-injuries/1011305.article>  
<http://www.technologyreview.com/blog/helloworld/27448/>

November 2011: The Globe and Mail: Off-the-shelf orthotics offer relief of running injuries  
<http://www.theglobeandmail.com/life/health/fitness/exercise/fitness-research/off-the-shelf-orthotics-offer-relief-of-running-injuries/article2225588/>

November 2011: Medical News Today: Running Injury Clinic Researchers Examine Effectiveness Of Shoe Inserts  
<http://www.medicalnewstoday.com/releases/236915.php>

August 2011: Star Phoenix Saskatoon: 3D cameras help diagnose injuries  
<http://www.thestarphoenix.com/health/cameras+help+diagnose+injuries/5207878/story.html>

August 2011: Nelson Star: Finding the root of foot pain  
[http://www.bclocalnews.com/kootenay\\_rockies/nelsonstar/sports/127889643.html](http://www.bclocalnews.com/kootenay_rockies/nelsonstar/sports/127889643.html)

July 2011: Globe and Mail: Do you have the body type to run a marathon?  
<http://www.theglobeandmail.com/life/health/fitness/running/training-and-technique/do-you-have-the-body-type-to-run-a-marathon/article2091748/>

July 2011: National Post: A professor's biomechanic crystal ball

<http://www.nationalpost.com/news/professor+biomechanic+crystal+ball/5055589/story.html>

June 2011: Barefoot Running - City TV Calgary Breakfast Television

<http://video.citytv.com/video/detail/1016994673001.000000/barefoot-running--june-23rd/>

May 2011: Healing your knees starts at the hips - Metro news

<http://www.metronews.ca:80/edmonton/life/article/868452--healing-your-knees-starts-at-the-hips>

April 2011: Knee bone's connected to the hip bone: Blame weak hips, not bad knees

<http://www.calgaryherald.com/Knee+bone+connected+bone/4685868/story.html#ixzz1KpXnThMj>

April 2011: Macleans Magazine: Cooler runnings: A Calgary team's cutting-edge 3-D modelling system diagnoses, treats, and even predicts runners' injuries

<http://www2.macleans.ca/2011/04/20/cooler-runnings/>

April 2011: Chatelaine Magazine: Does running really hurt your knees?

<http://www.chatelaine.com/en/article/26281--does-running-really-hurt-your-knees>

March 2011: National Post: Research Uncovers New Strategy for Injured Runners

<http://www.nationalpost.com/Stronger+hips+lessen+pain+knees+study+shows/4495542/story.html>

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<http://www.ahfmr.ab.ca/media-tracker/share/28/286/5e18946c9>

March 2011: New machine at U of A uses 3-D tech to help runners

<http://www.edmontonjournal.com/health/machine+uses+tech+help+runners/4479791/story.html>

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