

CURRICULUM VITAE

REED FERBER

Ph.D., ATC

Killam Laureate

Professor

**Faculties of Kinesiology, Nursing, Cumming School of Medicine
University of Calgary**

Office: KNB 242

University of Calgary

2500 University Dr NW

Calgary, AB T2N 1N4

Tel: (403) 210-6468

Email: rferber@ucalgary.ca

Director & Founder

Running Injury Clinic

Suite 778 3553 - 31st Street NW,

Calgary, Alberta, Canada T2L 2K7

Tel: (403) 460-5642

W: 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

- 2018 - present: **Professor (Joint Appointment)**
Cumming School of Medicine, Department of Pathology and Laboratory Medicine
- 2017 - present: **Professor (Joint Appointment)**
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 (Joint Appointment)**
Faculties of Kinesiology and Nursing, University of Calgary, Canada
- 2008 - present **Research Associate**
Sports Performance Research Institute New Zealand (SPRINZ)
- 2007 - 2011 **Assistant Professor (Joint Appointment)**
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)

EXPERT WITNESS / CONSULTATION

2011: R. v. Granada.Tatyana (Docket #100680883P1)
Video analysis of movement patterns and determination of grasping pattern whilst pushing a shopping cart.

2014: R. v. Gorell
Establish the specific and individual biometric gait (walking pattern) characteristics of the suspect and determine if these characteristics can be observed in other closed circuit television (CCTV) videos.

2021: R. v. Unknown
Establish the specific and individual biometric gait (walking pattern) characteristics of the suspect and determine if these characteristics can be observed in other closed circuit television (CCTV) videos.

GRANTS / AWARDS AND SCHOLARSHIPS

Total Direct Funding Awarded: \$5,366,377 as PI - \$3,443,247 as Co-I.

Title: Emerging COVID-19 Research Gaps & Priorities Funding Opportunity Operating Grant: REMOTE Study: Longitudinal Monitoring of the Incidence of SARS-CoV-2 Infection and Immunity Levels in Long-term Care Facilities.

Funding Agency: Canadian Institutes of Health Research.

Role: Co-Principal Investigator (Co-PIs: L Duffet-Leger, D Church, A Nehzad)

Date: Jan 2022 - Jan 2023

Amount: \$500,000

Title: Mechanisms underlying running-induced urinary incontinence in females.

Funding Agency: Canadian Institutes of Health Research.

Role: Co-Investigator (PI: Linda McLean)

Date: Oct 2020 - Sept 2025

Amount: \$1,870,000

Title: Before Operational Stress: Evaluating Novel Psychosocial Interventions for Public Safety Personnel (PSP) and their Families

Funding Agency: Canadian Institutes of Health Research.

Role: Co-Investigator (PIs: Schwartz KD, Mcelheran M; Mcluckie A, Mcmorris CA)

Date: April 2020 - March 2023

Amount: \$974,897

Title: Wearable Technology Citizen Scientist Program.

Funding Agency: City of Calgary Innovation Fund.

Role: Principal Investigator

Date: Oct 2019 - Dec 2020

Amount: \$57,500

Title: Developing a platform for wearable technology to monitor hemodialysis patients.
Funding Agency: University of Calgary, Vice-President Research - "Clinical, Health Services and Population Health Research Platform" Strategy.

Role: Principal Investigator

Date: June 2019 - May 2020

Amount: \$50,000

Title: Developing a platform for wearable technology and exercise after head and neck surgery.

Funding Agency: Mackenzie Fund for Head and Neck Surgery Innovation.

Role: Principal Investigator

Date: June 2019 - May 2020

Amount: \$25,000

Title: Methods to improve the reliability of wearable sensor gait data.

Funding Agency: Natural Sciences & Engineering Research Council - Discovery Grant.

Role: Principal Investigator

Date: April 2019 - March 2024

Amount: \$230,000

Title: Building predictive models of joint loading using integrated motion capture and inertial measurement technologies.

Funding Agency: Natural Sciences & Engineering Research Council - Research Tools and Instruments (RTI) Grant.

Role: Principal Investigator

Date: April 2019 - March 2020

Amount: \$150,000

Title: NSERC CREATE for the Wearable Technology Research and Collaboration (We-TRAC) training program.

Funding Agency: Natural Sciences & Engineering Research Council - Collaborative Research and Training Experience (CREATE) Program

Role: Principal Investigator

Date: April 2018 - March 2024

Amount: \$1,650,000

Title: Sensor Technology in Monitoring Movement (STiMM) Workshop - Strategic Networking and Development Grant

Funding Agency: Alberta Innovates

Role: Principal Investigator

Date: Sept 2017 - Dec 2017

Amount: \$5000

Title: Exploring Factors Contributing to Nursing Students' Risk for Back Injury: A Pilot Study

Funding Agency: University of Calgary: Faculty of Nursing Internal Grant

Role: Co-Investigator (PI: Duffet-Leger)

Date: Sept 2017 - Aug 2019

Amount: \$25,000

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: run³ 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: \$1,617,700

- 2021 - 2022: Andy Pohl - Dr. Benno Nigg Distinguished Faculty Achievement Scholarship (\$1000)
- 2021 - 2022: Hannah Dimmick - Alberta Innovates Graduate Studentships in Health Innovation (\$12,000)
- 2021 - 2022: Andy Pohl - University of Calgary Graduate Studies Scholarship (\$5000)
- 2021 - 2022: Hannah Dimmick - Alberta Innovates Graduate Studentships in Health Innovation (\$12000)
- 2020 - 2021: Andy Pohl - Alberta Graduate Excellence Scholarship (AGES) - International (\$18,000)
- 2020 - 2023: Hannah Dimmick - Vanier Canada Graduate Scholarship (Vanier CGS) (\$150,000)
- 2020 - 2023: Hannah Dimmick - Alberta Innovates Health Innovations Studentship (\$120,000)

- 2019 - 2020: Andy Pohl - Alberta Graduate Excellence Scholarship (AGES) - International (\$15,000)
- 2019 - 2023: Hannah Dimmick - Eyes High Doctoral Recruitment Scholarship (\$120,000)
- 2018 - 2019: - Andy Pohl - Vera A Ross Graduate Scholarship (\$8500)
- 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

- 2020: McCaig-Killam Teaching Award - Killam Trust Foundation
- 2019: Great Supervisor Award - University of Calgary
- 2018: Nominated ASTech Finalist - Outstanding Achievement in Applied Technology
- 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 - 2nd 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

- 2019 - present University of Calgary Biomedical Engineering Co-Lead: Health Monitoring and Management (HMM) Research Focus
- 2019 - 2021 The Faculty Association of the University of Calgary (TUCFA)
- 2017 - 2018: Faculty of Kinesiology Active Living & Athletics Committee
- 2017: Faculty of Kinesiology Faculty Tenure and Promotion Committee
- 2016 - 2017: Faculty of Kinesiology Master Planning Committee
- 2016 - 2017: Faculty of Kinesiology Graduate Scholarship Committee
- 2016 - 2018: University of Calgary's Taylor Institute for Teaching and Learning - Teaching Academy Leadership Committee.
- 2016 - 2018: Faculty of Kinesiology Graduate Education Committee
- 2015 - 2016: Faculty of Nursing Faculty Tenure and Promotion Committee
- 2015: Faculty of Kinesiology Faculty Tenure and Promotion Committee
- 2014 - 2016: University of Calgary Advisory Committee on Entrepreneurship and Innovation (ACEI)
- 2014 - present: Editorial Board - *Sports Health: A Multidisciplinary Approach*
- 2013 - 2015: Faculty of Graduate Studies My GradSkills Advisory committee
- 2012 - 2013: NIH Financial Conflict of Interest (FCOI) Committee
- 2012 - 2013: Faculty of Graduate Studies Graduate Scholarship Committee
- 2012 - 2015: Medical and Scientific Advisory Board at Orpyx Inc.
- 2012 - 2015: AIHS Clinician Researcher Training Review Committee
- 2012 - 2014 Strategic University Proposal and Platform Opportunity Review Team (SUPPORT) Training and Development Committee
- 2011 - 2012: Faculty of Kinesiology Decanal Search Committee
- 2011: Killam Memorial Chair Selection Committee
- 2010 - 2012: Campus Recreation and Athletics Committee -
- 2010 - 2011: Faculty of Kinesiology Strategic Directions Committee
- 2010 - present: Editorial Board - Prosthetics and Orthotics International
- 2010 - 2014: Pedorthic Research Foundation of Canada Vice-Chair for Grants
- 2010 - present: Editorial Board - Journal of Sport Rehabilitation
- 2008 - 2010: AHFMR Team Grant - Chair of Communications:
- 2007 - 2018: Faculty of Kinesiology (Co-Chair): UC101 New Student Orientation Committee
- 2004 - 2010: NATA Research and Education Foundation:
 - * Vice Chair for Student Awards (04-07)
 - * Vice Chair for General Grants (08-10)
- 2004 - present: Editorial Board - Journal of Athletic Training
- 2002 - 2008: CATA Exam Review Committee

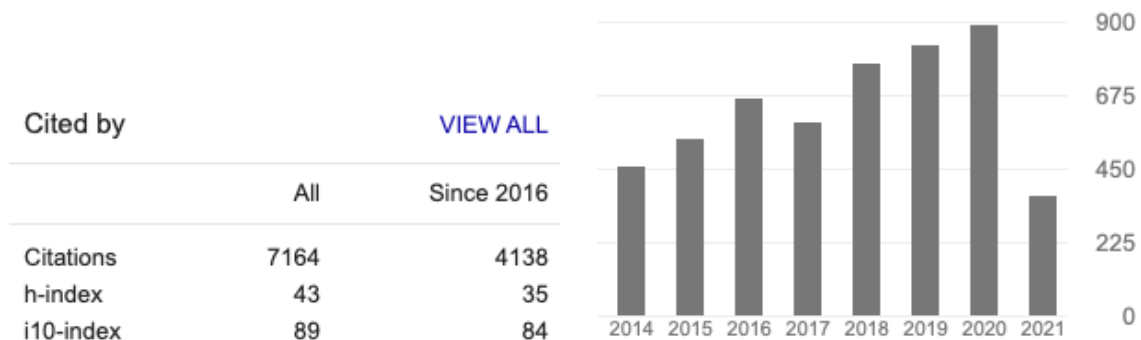
MANUSCRIPT REVIEWER

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 of injury and disease using wearable sensor technology
- 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



PUBLISHED MANUSCRIPTS (underline indicates Trainee)

114. Beck AJ, Duffett-Leger L, Bright KS, Keys EM, Hayden A, Ward TM, **Ferber R.** (2021). Using wearable and mobile technology to measure and promote healthy sleep behaviors in adolescents: a scoping review protocol. *JBI Evidence Synthesis.* 19(10):2760-2769.
113. Lunney M, Wiebe N, Kusi-Appiah E, Tonelli A, Lewis R, **Ferber R**, Tonelli M. (2021). Wearable Fitness Trackers to Predict Clinical Deterioration in Maintenance Hemodialysis: A Prospective Cohort Feasibility Study; Alberta Kidney Disease Network. *Kidney Medicone.* 3(5): 768-775.e1.
112. Chan ZYS, Peeters R, Cheing GLY, **Ferber R**, Cheung RTH. (2021). Evaluation of COVID-19 restrictions on distance runners' training habits using wearable trackers. *Frontiers in Sports and Active Living.* (In press).

111. Fox AS, **Ferber R**, Bonacci J. (2021). Kinematic and Coordination Variability in Individuals With Acute and Chronic Patellofemoral Pain. *Journal of Applied Biomechanics*. 37(5):463-470.
- 110: Pohl A, Schofield MR, **Ferber R**. (2021). Comparing the performance of Bayesian and least-squares approaches for inverse kinematics problems. *Journal of Biomechanics*. 126:110597.
- 109: Rapp E, Shin S, Thomsen W, **Ferber R**, Halilaj E. (2021). Estimation of Kinematics from Inertial Measurement Units Using a Combined Deep Learning and Optimization Framework. *Journal of Biomechanics*. 116:110229.
- 108: Twomey R, Culos-Reed SN, Daun JT, **Ferber R**, Dort JC. (2020). Wearable activity trackers and mobilization after major head and neck cancer surgery: you can't improve what you don't measure. *International Journal of Surgery*. 84: 120-124.
- 107: Manca A, Cugusi L, **Ferber R**, Dvir Z, Deriu F. (2020). More on "Listening to music while running alters ground reaction forces": why women and men pound the ground differently? *Eur J Appl Physiol*. 121(1):351-352.
- 106: Clermont CA, Pohl AJ, **Ferber R**. Fatigue-Related Changes in Running Gait Patterns Persist in the Days Following a Marathon Race. *Journal of Sport Rehabilitation*. 10: 1-8.
105. Hamstra-Wright K, Courtney CA, Maignel M, Jones MW, **Ferber R**. (2020). Effects of Iliotibial Band Syndrome on Pain Sensitivity and Gait Kinematics in Female Runners: A Preliminary Study. *Clinical Biomechanics*. 76: 105017
104. Mousavi SH, Hijmans, JM, Moeini F, Rajabi R, **Ferber R**, Zwerver J, van der Worp H. (2020). Validity and reliability of a smartphone motion analysis app for lower limb kinematics during running. *Journal of Sports Sciences*. 43: 27-35.
103. Benson LC, Clermont CA, **Ferber R**. (2020). New Considerations for Collecting Biomechanical Data Using Wearable Sensors: The Effect of Different Running Environments. *Frontiers in Bioengineering and Biotechnology*. 8(86). doi: 10.3389/fbioe.2020.00086
102. Chan ZYS, Zhang JH, **Ferber R**, Shum GLK, Cheung RTH. (2020). The Effects of Midfoot Strike Gait Retraining on Impact Loading and Joint Stiffness. *Physical Therapy in Sport*. 42: 139-145.
101. Chan ZYS, Zhang JH, **Ferber R**, Shum G, Au IPH¹; An WW, Cheung RTH. (2020). Effects of deceptive footwear condition on subjective comfort and running biomechanics. *Scandinavian Journal of Medicine and Science in Sports*. 42:139-145.
100. Wight JT, Garman J, Hooper DR, Robertson CT, **Ferber R**, Boling MC. (2020). Distance running stride-to-stride variability for sagittal plane joint angles. *Sports Biomechanics*. 4: 1-15.
99. Jauhainen S, Pohl AJ, Äyrämö S, Kauppi JP, **Ferber R**. (2020). A hierarchical cluster analysis to determine whether injured runners exhibit similar kinematic gait patterns. *Scandinavian Journal of Medicine and Science in Sports*. 30(4): 732-740.
98. Chan ZYS, MacPhail AJC, Au IPH, Zhang JH, Lam BMF, **Ferber R**, Cheung RTH. (2019). Walking with head-mounted virtual and augmented reality devices: effects on position control and gait biomechanics. *PLoS ONE*. 14(12):e0225972.
97. Clermont CA, Benson LC, Edwards, WB, Hettinga BA, **Ferber R**. (2019). New Considerations for Wearable Technology Data: Changes in Running Biomechanics during a Marathon. *Journal of Applied Biomechanics*. 18: 1-9.
96. Ahamed NU, Benson LC, Pohl AJ, Clermont CA, **Ferber R**. (2019). New Considerations for Collecting Biomechanical Data Using Wearable Sensors: How does inclination influence the number of runs needed to determine a stable running gait pattern? *Sensors*. 19(11). pii: E2516.

95. Floría P, Sánchez-Sixto A, Harrison D, **Ferber R.** (2019). The effect of running speed on joint coupling coordination and variability in recreational runners. *Human Movement Science.* 66: 449-458.
94. Mo S, Leung SHS, Chan ZYS, Sze LKY, Mok K, Yung PSH, **Ferber R,** Cheung RTH. (2019). The biomechanical difference between running with traditional and 3D printed orthoses. *Journal of Sports Sciences.* 37(19):2191-2197.
93. Madden R, Erdman KA, Shearer J, Spriet, **Ferber R,** Kolstad A, Bigg J, Gamble A, **Benson L.** (2019). Effects of Low Dose Caffeine Supplementation on Measures of Exertion, Skill Performance and Physicality in Ice Hockey. *Applied Physiology, Nutrition, and Metabolism.* (In press).
92. **Benson LC,** **Clermont CA,** **Watari R,** **Exley T,** **Ferber R.** (2019). Automated Accelerometer-Based Gait Event Detection During Multiple Running Conditions. *Sensors.* 19(7). pii: E1483.
91. **Clermont C,** Duffet-Leger L, Hettinga BA, **Ferber R.** (2020). Runners' Perspectives on 'Smart' Wearable Technology and its Use for Preventing Injury. *International Journal of Human-Computer Interaction.* 36(1), 31-40.
90. **Kobsar DJ,** Osis ST, Jacob C, **Ferber R.** (2019). Validity of a novel method to measure vertical oscillation during running using a depth camera. *Journal of Biomechanics.* 85: 182-186.
89. **Ahamed N,** **Kobsar D,** **Benson L,** **Clermont C,** Osis ST, **Ferber R.** (2019). Subject-Specific and Group-Based Running Pattern Classification using a Single Wearable Sensor. *Journal of Biomechanics.* 84: 227-233.
88. **Benson L,** **Ahamed N,** **Kobsar D,** **Ferber R.** (2019). New Considerations for Collecting Biomechanical Data Using Wearable Sensors: Number of Level Runs to Define a Stable Running Pattern with a Single IMU. *Journal of Biomechanics.* 85: 187-192.
87. **dos Santos AF,** Serrão F, Nakagawa T, **Ferber R.** (2018). Patellofemoral joint stress measured across three different running techniques. *Gait & Posture.* 68: 37-43.
86. **Ahamed N,** **Kobsar, DJ,** **Benson L,** **Clermont CA,** **Kohrs R,** Osis ST, **Ferber R.** (2018). Using wearable sensors to classify subject-specific running biomechanical gait patterns based on changes in environmental weather conditions. *PLoS One.* 13(9): e0203839.
85. **Kobsar DJ,** **Ferber R.** (2018). Wearable Sensor Data to Track Subject-Specific Movement Patterns Related to Clinical Outcomes Using a Machine Learning Approach. *Sensors.* 18(9): 2828.
84. **Watari R,** Osis ST, **Ferber R.** (2018). Use of baseline center of mass trajectory and acceleration for discriminating response to treatment in patellofemoral pain: a pilot study. *Clinical Biomechanics.* 57: 74-80.
83. **Clermont CA,** **Benson LC,** Osis ST, **Ferber R.** (2019). Running Patterns for Male and Female Competitive and Recreational Runners based on Accelerometer Data. *Journal of Sports Sciences.* 37(2): 204-211.
82. **Watari R,** Osis ST, Phinyomark A, **Ferber R.** (2018). Runners with patellofemoral pain demonstrate sub-groups of pelvic acceleration profiles using hierarchical cluster analysis: an exploratory cross-sectional study. *BMC Musculoskeletal Disorders.* 19(1): 120.
81. **Benson L,** **Clermont CA,** **Bošnjak E,** **Ferber R.** The use of wearable devices for walking and running gait analysis outside of the lab: a systematic review. *Gait & Posture.* 63: 124-138.
80. **Benson L,** **Clermont CA,** Osis ST, **Kobsar DJ,** **Ferber R.** (2018). Classifying Running Speed Conditions Using a Single Wearable Sensor: Optimal Segmentation and Feature Extraction Methods. *Journal of Biomechanics.* 71: 94-99.

79. Fox A, **Ferber R**, Saunders N, Osis ST, Bonacci J. (2018). Gait kinematics in individuals with acute and chronic patellofemoral pain. *Medicine & Science in Sports & Exercise*. 50(3): 502-509.
78. Kobsar D, Osis ST, Boyd SE, Hettinga BA, **Ferber R**. (2017). Wearable sensors to predict improvement following an exercise intervention in patients with knee osteoarthritis. *Journal of NeuroEngineering and Rehabilitation*. 14(1): 94-104.
77. Macaulay AJ, Osis ST, Clermont C, **Ferber R**. (2017). The use of real-time feedback to improve kinematic marker placement consistency among novice examiners. *Gait & Posture*. 58: 440-445.
76. Earl-Boehm J, Bolgla L, Emery CA, Hamstra-Wright K, Taminov S, **Ferber R**. (2017). Treatment success after hip/core or knee strengthening for patellofemoral pain: development of a clinical prediction rule. *Journal of Athletic Training*. 53(6): 545-552.
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*. 58: 261-267.
74. Clermont C, Phinyomark A, Osis ST, **Ferber R**. (2019). Classification of Higher and Lower-Mileage Runners based on Running Kinematics. *Journal of Sport and Health Science*. 8(3), 249-257.
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*. 22(1): 83-89.
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*. 6(3): 272-278.
71. Clermont C, Osis ST, Phinyomark A, **Ferber R**. (2017). Kinematic Gait Patterns in Competitive and Recreational Runners. *Journal of Applied Biomechanics*. 33(4): 268-276.
70. Phinyomark A, Petri G, Ibáñez-Marcelo E, Osis ST, **Ferber R**. (2018) 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*. 38:244-260.
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). Lasting Improvement of Patient-Reported Outcomes 6 Months After Patellofemoral Pain Rehabilitation. *Journal of Sport Rehabilitation*. 26(4): 223-233.
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.
60. Fukuchi R, Stefanyshyn D, Stirling L, **Ferber R.** (2016). Effects of strengthening and stretching exercise programs on kinematics and kinetics of running in older adults: a randomized controlled trial. *Journal of Sports Sciences*. 34(18):1774-81.
59. Leigh RJ, Osis ST, **Ferber R.** (2016). Kinematic gait patterns and their relationship to Pain in mild-to-moderate hip osteoarthritis. *Clinical Biomechanics*. 34: 12-17.
58. Watari R, Hettinga BA, Osis ST, **Ferber R.** (2016). Validation of a torso-mounted accelerometer for measures of vertical oscillation and ground contact time during treadmill running. *Journal of Applied Biomechanics*. 32(3): 306-310.
57. Osis ST, Hettinga BA, Macdonald S, **Ferber R.** (2016). Effects of simulated marker placement errors on calculated running kinematics and evaluation of a morphometric-based error detection method. *PLoS One*. 11(1): e0147111.
56. Phinyomark A, Osis ST, Hettinga BA, **Ferber R.** (2015). Kinematic gait patterns in healthy runners: A hierarchical cluster analysis. *Journal of Biomechanics*. 48(14): 3897-3904.
55. Kobsar D, Osis ST, Hettinga BA, **Ferber R.** (2015). Gait biomechanics and patient-reported function as predictors of response to a hip strengthening exercise intervention in patients with knee osteoarthritis. *PLoS ONE*. 10(10): e0139923.
54. Phinyomark A, Osis ST, Hettinga, B.A., **Ferber, R.** (2015). Do intermediate- and higher-order principal components contain useful information to detect subtle changes in lower extremity biomechanics during running? *Human Movement Science*. 44:91-101.
53. **Ferber R**, Hettinga BA. (2016). A comparison of different over-the-counter foot orthotic devices on multi-segment foot biomechanics. *Prosthetics and Orthotics International*. 40(6):675-681.
52. Phinyomark, A., Osis, S.T., Hettinga, B.A., Leigh, R.J., **Ferber, R.** (2015). Gender differences in gait kinematics in runners with iliotibial band syndrome. *Scandinavian Journal of Medicine & Science in Sports*. 25(6): 744-753.
51. Bolgla L., Earl-Boehm J., Emery C.A., Hamstra-Wright K., **Ferber R.** (2015). Comparison of hip and knee strength in males with and without patellofemoral pain. *Physical Therapy in Sport*. 16(3):215-221.
50. Kendall K., Wiley P., Emery C.A., **Ferber R.** (2014). The effect of the addition of hip strengthening exercises to a lumbopelvic exercise programme for the treatment of non-specific low back pain: a randomized controlled trial. *Finalist for the Aspire Academy Early Career Researcher Award for Exercise Science & Health: ESSA. Journal of Science and Medicine in Sport*. 18(6): 626-631.
49. Pohl M.B., Kendall K.D., Patel C., Wiley P., Emery C.A., **Ferber R.** (2014). The role of experimentally reduced hip abductor muscle strength on frontal plane biomechanics during gait. *Journal of Athletic Training*. 50(4):385-391.

48. **Ferber, R.**, Bolgla, L.A., Earl-Boehm, J.E., Emery, C.A., Hamstra-Wright, K.L. (2015). Hip and core versus knee-muscle strengthening for the treatment of patellofemoral pain: a multicentre randomized controlled trial. *Journal of Athletic Training*. 50(4):366-377.
47. Osis, S.T., Hettinga, B.A., Macdonald, S., **Ferber, R.** (2014). A novel method to evaluate error in anatomical marker placement using a modified generalized Procrustes analysis. *Computer Methods in Biomechanics and Biomedical Engineering*. 2015; 18(10):1108-1116.
46. Phinyomark A., Hettinga B.A., Osis S.T., **Ferber R.** (2014). Gender and age-related differences in bilateral lower extremity mechanics during treadmill running. *PLoS ONE* 9(8): e105246.
45. Osis S.T., Hettinga B.A., Leitch J., **Ferber R.** (2014). Predicting timing of foot strike during running, independent of striking technique, using principal component analysis of joint angles. *Journal of Biomechanics*. 47(11): 2786-2789.
44. Kobsar, D., Osis, S.T., Hettinga, B.A., **Ferber, R.** (2014). Classification accuracy of a single tri-axial accelerometer for training background and experience level in runners. *Journal of Biomechanics*. 47(10): 2508-2511.
43. Eslami, M., Damavandi, M., **Ferber, R.** (2014). Association of navicular drop and selected lower-limb biomechanical measures during the stance phase of running. *Journal of Applied Biomechanics*. 30(2): 250-254.
42. Leigh, R.J., Pohl, M.B., **Ferber, R.** (2014). Does Tester Experience Influence the Reliability With Which 3D Gait Kinematics are Collected in Healthy Adults? *Physical Therapy in Sport*. 15(2): 112-116.
41. Fukuchi, R., Stefanyshyn, D.J., Stirling, L., Duarte, M., **Ferber, R.** (2014). Flexibility, muscle strength and gait biomechanical adaptations in older runners. *Clinical Biomechanics*. 29(3): 304-310.
40. Mills, K., Hettinga, B.A., Pohl, M.B., **Ferber, R.** (2013). Between-limb kinematic asymmetry during gait in unilateral and bilateral mild-to-moderate knee osteoarthritis. *Archives of Physical Medicine & Rehabilitation*. 94(11): 2241-2247.
39. Mills K, Hunt MA, Leigh, R.J., **Ferber R.** (2013). A systematic review and meta-analysis of lower limb neuromuscular alterations associated with knee osteoarthritis during level walking. *Clinical Biomechanics*. 28(7): 713-724.
38. **Ferber R**, Webber T, Everett B, Groenland M. (2013). Validation of Plantar Pressure Measurements for a Novel in-Shoe Plantar Sensory Replacement Unit. *Journal of Diabetes Science and Technology*. 7(5): 1167-1175.
37. Mills K, Hunt MA, **Ferber R.** (2013). Biomechanical deviations during level walking associated with knee osteoarthritis: a systematic review and meta-analysis. *Arthritis Care and Research*. 65(10): 1643-1665.
36. Eslami, M., **Ferber, R.** (2013). Can orthoses and navicular drop affect foot motion patterns during running? *Journal of Science and Medicine in Sport*. 16(4): 377-381.
35. Pohl, M.B., Patel, C., Wiley, P., **Ferber, R.** (2013). Gait biomechanics and hip muscular strength in patients with patellofemoral osteoarthritis. *Gait & Posture*. 37(3):440-444.
34. Kendall, K., Pohl, M.B., Patel, C., Wiley, P., Emery, C.A., **Ferber, R.** (2013). Steps Toward the Validation of the Trendelenburg Test: The Effect of Experimentally Reduced Hip Abductor Muscle Function on Frontal Plane Mechanics. *Clinical Journal of Sport Medicine*. 23(1):45-51.
33. Schnackenburg, K.E., Macdonald, H.M., **Ferber, R.**, Wiley J.P., Boyd, S.K. (2011). Bone quality and muscle strength in female athletes with lower limb stress fractures. *Medicine and Science in Sport and Exercise*. 43(11), 2110-2119.

32. Rabbito, M., Pohl, M.B., Humble, N., Ferber, R. (2011). Biomechanical and Clinical Factors Related to Stage I Posterior Tibial Tendon Dysfunction. *Journal of Orthopaedic & Sports Physical Therapy*. 41(10), 776-784.
31. Ferber, R., Benson, B. (2011). Changes in multi-segment foot biomechanics with a heat-mouldable semi-custom foot orthotic device. *Journal of Foot and Ankle Research*. 4:18, 1-8.
30. Ferber, R., Kendall, K.D., and Farr, L. (2011). First runner-up for the “Clint Thompson Award for Clinical Practice Advancement:” Changes in knee biomechanics following a hip abductor strengthening protocol for runners with patellofemoral pain syndrome. *Journal of Athletic Training*. 46(2), 142-149.
29. Ferber, R., Pohl, M.B. (2011). Changes in joint coupling and variability during walking following tibialis posterior muscle fatigue. *Journal of Foot and Ankle Research*. 4(6), 1-8.
28. Fukuchi, R.K., Eskofier, B.M., Duarte, M., Ferber, R. (2011). Support Vector Machines for Detecting Age-Related Changes in Running Kinematics. *Journal of Biomechanics*. 44(3), 540-542.
27. Kendall, K.D., Schmidt, C.S., Ferber, R. (2010). The relationship between hip abductor muscle strength and the magnitude of pelvic drop in patients with low back pain. *Journal of Sport Rehabilitation*. 19, 422-435.
26. Pohl, M.B., Lloyd, C., Ferber, R. (2010). Can the reliability of three-dimensional running kinematics be improved using functional joint methodology? *Gait & Posture*. 32(4), 559-563.
25. Ferber, R., Kendall, K.D., and McElory, L. (2010). Normative values and critical criterion for iliotibial band and iliopsoas muscle flexibility. *Journal of Athletic Training*. 45(4), 344-348.
24. Pohl, M.B., Rabbito, M., Ferber, R. (2010). The role of tibialis posterior fatigue on foot kinematics during walking. *Journal of Foot and Ankle Research*, 3(6), 1-8.
23. Ferber, R., Noehren, B., Hamill, J., Davis, I.S. (2010). Competitive female runners with a history of iliotibial band syndrome demonstrate atypical hip and knee kinematics. *Journal of Orthopaedic & Sports Physical Therapy*, 40(2), 52-58.
22. Ferber, R., Sheerin, K., Kendall, K.D. (2009). Measurement error of rearfoot kinematics during running between a 100Hz and 30Hz camera. *International SportMed Journal*, 10(3), 152-162.
21. Butler, R.J., Minick, K., Ferber, R., Underwood, F.B. (2009). Gait mechanics following ACL rupture: Implications for the early onset of knee osteoarthritis. *British Journal of Sports Medicine*, 43(5), 366-370.
20. Ferber, R., Hreljac, A., Kendall, K.D. (2009). Suspected mechanisms in the aetiology of overuse running injuries: a clinical review. *Sports Health: A Multidisciplinary Approach*, 1(3), 242-246.
19. Ferber, R. (2007) The influence of custom foot orthoses on lower extremity running mechanics: Invited Review Paper. *International SportMed Journal*, 8(3), 97-106.
18. Vickers, J.N., Ronsky, J.L., Loitz-Ramage, B., Panchuck, D., Morton, B., Gotch, M., Ferber, R., & Robu, I. (2006). Gaze and postural stability of elite ballet dancers, ACL-deficient and normal controls during the quiet stance and lunge. *Cognitive Processing*, 7(1), 176.
17. Milner, C.E., Ferber, R., Pollard, C.D., Hamill, J., & Davis, I.S. (2006). Biomechanical Factors Associated with Tibial Stress Fracture in Female Runners. *Medicine and Science in Sports and Exercise*, 38(2):323-328.
16. Hreljac, A., Ferber, R. (2006). A Biomechanical Perspective of Predicting Injury Risk in Running. *International SportMed Journal*, 7(2): 98-108.

15. Hamstra-Wright, K.L., Swanik, C.B., Sitler, M.R., Swanik, K.A., Ferber, R., & Ridenour, M. (2006). Gender comparisons of dynamic restraint and motor skill in children. *Clinical Journal of Sports Medicine* 16(1), 56-62.
14. Nigg, B.M., Hintzen, S., Ferber, R. (2005). Effect of an unstable shoe construction on lower extremity gait characteristics. *Clinical Biomechanics* 21(1):82-88.
13. Ferber, R., McClay Davis, I., & Williams III, D.S. (2005). Effect of foot orthotics on rearfoot and tibia joint coupling patterns and variability. *Journal of Biomechanics* 38(3), 477-483.
12. DeLeo A.T., Dierks, T.A., Ferber, R., & Davis, I.S. (2004). Lower extremity joint coupling during running: a current update. *Clinical Biomechanics* 19(10), 983-1074.
11. Ferber, R., Osternig, L.R., Woollacott, M.H., Wasielewski, N.J., & Lee, J-H. (2004). Bilateral accommodations to anterior cruciate ligament deficiency and surgery. *Clinical Biomechanics* 19(2), 136-144.
10. Ferber, R., McClay Davis, I., & Williams III, D.S. (2003). Gender differences in lower extremity mechanics during running. *Clinical Biomechanics* 18(4), 350-357.
9. Ferber, R., Osternig, L.R., Woollacott, M.H., Wasielewski, N.J., & Lee, J-H. (2003). Gait perturbation response in anterior cruciate ligament deficiency and surgery. *Clinical Biomechanics* 18(2), 132-141.
8. Ferber, R., Osternig, L.R., Woollacott, M.H., Wasielewski, N.J., & Lee, J-H. (2002). Reactive balance adjustments to unexpected perturbations during human walking. *Gait and Posture* 16(3), 238-248.
7. Ferber, R., Osternig, L.R., Woollacott, M.H., Wasielewski, N.J., & Lee, J-H. (2002). Gait mechanics in chronic ACL deficiency and subsequent repair. *Clinical Biomechanics* 17(4), 274-285.
6. Ferber, R., Osternig, L.R., & Gravelle, D. (2002). Effect of PNF stretch techniques on knee flexor muscle EMG activity in older adults. *Journal of Electromyography and Kinesiology* 12(5), 391-397.
5. Ferber, R., Osternig, L.R., & Gravelle, D. (2002). Effect of PNF stretch techniques on trained and untrained older adults. *Journal of Aging and Physical Activity* 10(2), 132-142.
4. Ferber, R., McClay Davis, I, Williams III, D.S., & Laughton, C. (2002). A Comparison of between-day reliability of discrete 3-D lower extremity variables in runners. *Journal of Orthopaedic Research* 20, 1139-1145.
3. Hreljac, A., Arata, A., Ferber, R., Mercer, J., & Row, B.S. (2001). An electromyographical analysis of the role of dorsiflexors on the gait transition during human locomotion. *Journal of Applied Biomechanics* 17(4), 287-296.
2. Osternig, L.R., Ferber, R., Mercer, J., & Davis, H. (2001). Effects of position and speed on joint torques and knee shear after ACL injury. *Medicine and Science in Sports and Exercise* 33(7): 1073-1080.
1. Osternig, L.R., Ferber, R., Mercer, J., & Davis, H. (2000). Human hip and knee torque accommodations to anterior cruciate ligament dysfunction. *European Journal of Applied Physiology* 83(1): 71-76.

CONFERENCE PUBLICATIONS

8. Qeiros L, Oliveira H, Yanushkevich, Ferber R. (2020). Video-Based Breathing Rate Monitoring in Sleeping Subjects. 2020 IEEE International Conference on Systems, Man and Cybernetics (SMC). Toronto, Ontario, Canada. October 2020.

7. Graf J, Eastwood S, Yanushkevich S, **Ferber R.** (2019). Risk Inference Models for Security Applications. Emerging Security Technologies (EST) Conference. Colchester, UK. July 2019.
6. Ahamed N, Benson L, Clermont C, Osis ST, **Ferber R.** (2017). Fuzzy Inference System-based Recognition of Slow, Medium and Fast Running Conditions using a Triaxial Accelerometer. *Procedia Computer Science*. 114: 401-407.
5. Phinyomark A, Osis ST, Clermont C, **Ferber R.** Differences In Running Mechanics Between High- And Low-Mileage Runners. ESB Annual Congress 22nd Congress of the European Society of Biomechanics. Lyon, France. July 2016.
4. Phinyomark A, Osis ST, **Ferber R.** Analysis of Big Data in Running Biomechanics: Application of Multivariate Analysis and Machine Learning Methods. Canadian Medical and Biological Engineering Society (CMBEC) 39th Annual Meeting. Calgary, Canada. May 2016.
3. Phinyomark A, Osis ST, Kobsar D, Hettinga BA, Leigh RJ, **Ferber R.** Biomechanical Features of Running Gait Data Associated with Iliotibial Band Syndrome: Discrete Variables versus Principal Component Analysis. In Medicon 2016: Medical and Biological Engineering and Computing. Paphos, Cyprus. March 2016.
2. Phinyomark A, Osis ST, Hettinga BA, **Ferber R.** Kernel Principal Component Analysis for Identification of Between-Group Differences and Changes in Running Gait Patterns. In Medicon 2016: Medical and Biological Engineering and Computing. Paphos, Cyprus. March 2016.
1. Steward, J., Lichti, D., Chow, J., **Ferber, R.**, & Osis, S. (2015). Performance assessment and calibration of the Kinect 2.0 time-of-flight range camera for use in motion capture applications. In FIG Working Week 2015; Sofia, Bulgaria. 14-30.

MANUSCRIPTS UNDER REVIEW

Pohl AJ, Schofield MR, **Ferber R.** Comparing the performance of Bayesian and least-squares approaches for inverse kinematics problems. *Journal of Biomechanics*. (in review).

Benson LC, Räsänen AM, Clermont CA, **Ferber R.** Is this the real life, or is this just laboratory? A scoping review of IMU-based running gait analysis. *Gait & Posture*. (in review).

Fox AS, **Ferber R**, Bonacci J. Gait variability in individuals with acute and chronic patellofemoral pain. *Medicine and Science in Sports and Exercise*. (in review).

Fuller D., **Ferber R.**, Stanley K. Why machine learning has failed physical activity research and how we can improve. (in review). *Journal of Behavioral Nutrition and Physical Activity*.

Hamstra-Wright KL, **Ferber R.** Establishing the Typical Rearfoot: Normative Values Walking Versus Running and Between Sexes. *Clinical Biomechanics*. (in review).

Salari F, Eslami M, **Ferber R.** Effect of patellofemoral tape and brace on ankle and knee joint kinetics and perceived pain in females during stance phase of running. *British Journal of Sports Medicine*. (in review).

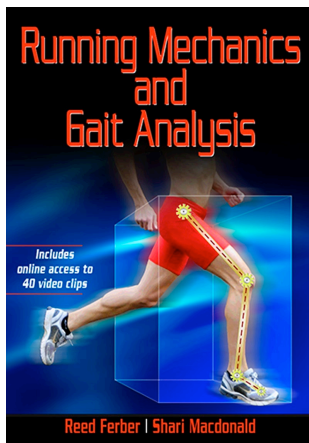
Phinyomark A, Petrib G, Schemea E, **Ferber R**. Biomechanical Gait Features: Understanding the Relationship between Discrete Variables and Principal Component Analysis. *Journal of Biomechanics*.

PATENTS

Ferber, R., Osis, S. (2016). March 17. Foot Morphometric Measuring Device. US Patent 2016/0073931 A1.

Ferber R, Kobsar D, Osis ST, Clermont CA, Benson LC. (2017). Nov 15. Method and system utilizing pattern recognition for detecting atypical movements during physical activity. Provisional Patent US 62/586,565.

BOOKS



Ferber, R., Macdonald, S. (2014). Running Mechanics and Gait Analysis. Human Kinetics, Champaign, Illinois. ISBN-10: 1-4504-2439-2.

Ferber, R., Nettleton, J. (2015). Human Anatomy and Physiology I Lab Manual. Wiley. Toronto, ON. ISBN: 9781119189329.

Ferber, R., Nettleton, J. (2016). Human Anatomy and Physiology II Lab Manual. Wiley. Toronto, ON. ISBN: 9781119255369

BOOK CHAPTERS

Fukuchi R and **Ferber R**. (2016). Detecção Automática de Padrões de Movimento Associados a Lesões de Corrida. *In: SONAFE: Fisioterapia Esportiva E Traumatologia Ortopédica*. Chp.5, Vol 3, p. 127-160.

Ferber, R. (2014). The Science Behind Foot Orthotics. *In: Wilder R, O'Connor F, Magrum E. (eds): Running Medicine, 2nd ed.* Healthy Learning, Monterey, CA. Chp 52, p. 2050-2074 (eBook ed.).

Chmielewski, T., & **Ferber, R.** (2004). Rehabilitation considerations for the female athlete. *In: Andrews, J.R., Harrelson, G.L., & Wilk, K.E. (ed.), Physical Rehabilitation*

of the Injured Athlete, 3rd ed. Saunders, Philadelphia, PA. p. 315-329.

NON-REFEREED PUBLICATIONS

1. **Ferber, R.** Contributor to the Running Room Magazine (Bi-monthly publication: July 2010 - present)
2. Ferber, R., Leigh, R.,J. (2011). New Frontiers in Injury Prevention. *Vicon Inc. The Standard*, 1, 24-25.
3. **Ferber, R.** Hip to the Core. Canadian Running Magazine. Jan/Feb Issue 2009.
4. McClay Davis, I and **Ferber, R.** (2002)Gait Retraining in Runners: An Application of the VICON Real-Time System. *Vicon Inc. The Standard*, 1, 23-24.

TECHNICAL RESEARCH REPORTS

1. **Ferber R**, Hettinga BA, Watari R, Brett A, Osis ST. (2015). Vertical oscillation and ground contact time validation during treadmill running. Research report for Dynastream Inc.
2. Brett A, Osis ST, Hettinga BA, **Ferber R.** (2015). Running power systematic review. Research report for Dynastream Inc.
3. **Ferber R**, Osis ST, Brett A, Hettinga BA. (2015). Database Query for Injury Predictors. Research report for Dynastream Inc.
4. Nigg, B.M., **Ferber, R.**, & Gormley, T. (2004). Effect of an unstable shoe construction on lower extremity gait characteristics. Research report for Masai Switzerland.
5. **Ferber, R.**, Stefanyshyn, D.J., Weber, C., Gromley, T., & Nigg, B.M. (2004). Lister field infilled artificial turf testing. Research report for Cannon-Johnston Sport Architecture.
6. Stefanyshyn, D.J., **Ferber, R.**, Weber, C., & Anderson, B. (2004). Performance requirements for golf footwear. Research report for TaylorMade-adidas Golf.
7. **Ferber, R.**, Stefanyshyn, D.J., Uehli, K., Weber, C. & Nigg, B.M. (2003). Knee joint moments during cutting maneuvers and while running on uneven terrain in XYZ shoes. Research report for adidas International.

PUBLISHED ABSTRACTS

1. Hamstra-Wright KL, Jones MW, Courtney CA, Maiguel D, Ferber R Expanded Pain Sensitivity and Altered Bilateral Kinematics in Runners with Iliotibial Band Syndrome. 2019 NATA Clinical Symposia & AT Expo. Las Vegas, NV. June 2019.
2. Kobsar D, Osis ST, **Ferber R.** Wearable sensors to predict response to a hip strengthening exercise intervention in patients with knee osteoarthritis. 2017 World Congress on Osteoarthritis. Las Vegas, NV. April 2017.
3. Earl-Boehm JE, Thorpe JL, Bolgla L, Emery CA, Hamstra-Wright KL, **Ferber R.** Relationships Among Patient Reported, Demographic And Clinical Baseline Measurements In Patellofemoral Pain Patients. National Athletic Trainers' Association Annual Meeting and Clinical Expo. Houston, TX. June 2017.
4. Floria P, Sanchez-Sixto A, **Ferber R**, Harrison AJ. Gait coordination variability between trained runners and non-runners. 34th International Conference on Biomechanics in Sports. Tsukuba, Japan. July 2016.
5. dos Santos AF, Nakagawa TH, Serrão FV, **Ferber R.** Patellofemoral joint stress

- measured across three different running techniques. 34th World Congress of Sports Medicine. Ljubljana, Slovenia. October 2016.
6. Fuckuchi R, Ferber R. Local and global age-related gait asymmetry in lower extremity joint moments. XXV Brazilian Congress on Biomedical Engineering. Paraná, Brazil. October 2016.
 7. Phinyomark A, Kobsar D, Osis ST, Clermont C, Ferber R. Gender differences in gait kinematics in competitive and recreational runners. 19th Biennial meeting of the Canadian Society for Biomechanics. Hamilton, Canada. August 2016.
 8. Kobsar D, Osis ST, Phinyomark A, Ferber R. Can a wearable sensor predict treatment responses in knee osteoarthritis patients? 19th Biennial meeting of the Canadian Society for Biomechanics. Hamilton, Canada. August 2016.
 9. Mills KA, Martin M, Osis ST, Hettinga BA, Ferber R. Can gait kinematics be used to predict response to standardised exercise programs in individuals with knee osteoarthritis? International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 10. Fukuchi RK, Stefanyshyn DA, Stirling L, Duarte M, Ferber R. Effects of strengthening and stretching exercises on running biomechanics in older adults: a randomized controlled trial. International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 11. Watari R, Kobsar D, Phinyomark A, Hettinga BA, Ferber R. Identification of kinematic and clinical features as predictors for exercise intervention outcomes in patellofemoral pain syndrome. International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 12. Osis ST, Hettinga BA, Ferber R. Predicting timing of foot strike for treadmill walking and running with a principal component model of gait. International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 13. Ferber R, Osis ST, Watari R, Leigh RJ, Hettinga BA. The use of feedback to reduce the errors associated with placement of anatomical marker for kinematic gait analysis. International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 14. Phinyomark A, Osis ST, Hettinga BA, Ferber R. Normal running gait patterns examined by hierarchical cluster analysis. International Society of Biomechanics 2015 Congress. Glasgow, Scotland. July 2015.
 15. Ferber R, Hume P, Osis S, Hettinga B. 2015. Changes in foot pronation biomechanics from a walk to a run. *Medicine and Science in Sport and Exercise*. 46(5), S657.
 16. Fukuchi R, Ferber R. Age-related changes in running gait asymmetry. 2015 Brazilian Congress of Biomechanics. Florianopolis, Brazil. May 2015.
 17. Steward J, Lichti D, Chow J, Ferber R, Osis ST. Performance assessment and calibration of the Kinect 2.0 time-of-flight range camera for use in motion capture applications. The International Federation of Surveyors. Sofia, Bulgaria. May, 2015
 18. Leigh RJ, Osis S, Ferber R. Kinematic Gait Patterns in Individuals with Mild-to-Moderate Hip Osteoarthritis. Canadian Society For Clinical Investigation 2014 Annual Meeting - President's Forum (Top 6 Abstracts). Toronto, Canada. November 2014.
 19. Mills K, Martin M, Osis S.T., Hettinga B.A., Ferber R. Preliminary Predictors of Exercise Success in Individuals with Knee Osteoarthritis: Is self report enough? Sports Medicine Australia 2014 conference. Canberra, Australia.
 20. Kobsar D, Osis S.T., Hettinga B.A., Ferber R. Using wearable technology to identify abnormal strides within a single runner. International Calgary Running Symposium. Calgary, Canada. August 2014.

21. Phinyomark A., Osis S.T., Hettinga B.A., **Ferber R.** Do intermediate- and higher-order principal components contain useful information to detect subtle changes in lower extremity biomechanics during running? International Calgary Running Symposium. Calgary, Canada. August 2014.
22. Hettinga, B.A., Osis S.T., Leitch, J., **Ferber R.** Feature selection using Principal Component Analysis on a gait database to define foot strike timing during treadmill running. International Calgary Running Symposium. Calgary, Canada. August 2014.
23. Osis S.T., Hettinga B.A., **Ferber R.** Minimizing error in marker placement using real-time feedback from a modified generalized Procrustes analysis. International Calgary Running Symposium. Calgary, Canada. August 2014.
24. Kobsar, D., Osis S.T., Hettinga B.A., **Ferber R.** Identification of Clinically Relevant Knee Osteoarthritis Subgroups. 7th World Congress of Biomechanics. Boston, MA. July 2014.
25. Lahamy H., Lichti D., Ahmed T., **Ferber R.**, Hettinga B., Chan T.O. Marker-less Human Motion Analysis using Multiple SR4000 Range Cameras. 13th International Symposium on 3D Analysis of Human Movement. Lausanne, Switzerland. July 2014.
26. Osis S.T., Hettinga B.A., Macdonald S.M., **Ferber R.** A comprehensive simulation of the effects of marker placement errors on running kinematics. 13th International Symposium on 3D Analysis of Human Movement. Lausanne, Switzerland. July 2014.
27. Kendall, K., Wiley, P., Emery, C.A., **Ferber, R.** The effect of hip muscle strengthening on pain and disability for individuals with non-specific low back pain: a randomized controlled trial. Finalist for the *Aspire Academy* Early Career Researcher Award for Exercise Science & Health: 6th Exercise & Sports Science Australia Conference & Sports Dietitians Australia. Adelaide, Australia. April 2014.
28. Mills K, Osis S, Hettinga BA, **Ferber R.** Unilateral and bilateral knee osteoarthritis exhibit different kinematic but similar pain and strength responses to an exercise intervention. Proceedings of the XXIV Congress of the International Society of Biomechanics. Natal, Brazil. Aug 2013.
29. Kobsar D, Osis S, **Ferber R.** Classification of heterogeneous running populations using a tri-axial accelerometer. Proceedings of the XXIV Congress of the International Society of Biomechanics. Natal, Brazil. Aug 2013.
30. Osis S, Hettinga BA, Macdonald S, **Ferber R.** Novel methods for evaluating marker placement error. Proceedings of the XXIV Congress of the International Society of Biomechanics. Natal, Brazil. Aug 2013.
31. Fukuchi R, Stefanyshyn D, Stirling L, Duarte M, **Ferber R.** Biomechanical running gait adaptations in older runners. Proceedings of the XXIV Congress of the International Society of Biomechanics. Natal, Brazil. Aug 2013.
32. Alcantara CPA, Fukuchi R, Durate M, **Ferber R.** Between centre reliability of walking and running three-dimensional gait kinematics. Proceedings of the XXIV Congress of the International Society of Biomechanics. Natal, Brazil. Aug 2013.
33. Bazett-Jones DM, Earl-Boehm JE, Bolgla LA, Hamstra-Wright KL, Emery CA, **Ferber R.** Differences among pelvic and trunk kinematics among those with and without patellofemoral pain. Proceedings of the 3rd International Patellofemoral Research Retreat. Vancouver, BC, Canada. September, 2013.
34. Bazett-Jones DM, Earl-Boehm JE, Bolgla LA, Hamstra-Wright KL, Emery CA, **Ferber R.** Relationships among pelvic and trunk kinematics, pain, and strength. Proceedings of the 3rd International Patellofemoral Research Retreat. Vancouver, BC, Canada. September, 2013.
35. Earl-Boehm JE, Bazett-Jones D, Bolgla, L, Emery CA, Hamstra-Wright KL, Joshi M, **Ferber R.** Changes in lower extremity biomechanics following knee or hip focused rehabilitation in patients with PFP: an RCT study. Proceedings of the 3rd

- International Patellofemoral Research Retreat. Vancouver, BC, Canada. September, 2013.
36. Bolgla, L, Earl-Boehm J, Emery CA, Hamstra-Wright KL, Akinwuntan A, **Ferber R.** Development of a Preliminary Clinical Prediction Rule to Identify Males with Patellofemoral Pain Likely to Benefit from a Core- and Hip-Biased Rehabilitation Program. Proceedings of the 3rd International Patellofemoral Research Retreat. Vancouver, BC, Canada. September, 2013.
 37. **Ferber R,** Bolgla, L, Earl-Boehm J, Emery CA, Hamstra-Wright KL, Baxter J. Proximal vs. local rehabilitation for the treatment of patellofemoral pain: an outcome-based randomized controlled trial. Proceedings of the 3rd International Patellofemoral Research Retreat. Vancouver, BC, Canada. September, 2013.
 38. **Ferber, R.,** Osis, S., Macdonald, S., Hettinga, B. Novel approaches to multi-centre biomechanics research: development of a global research network and database. International Workshop On The Biomedical Basis Of Human Performance Across The Lifespan. University of Calgary. June, 2013.
 39. **Ferber R,** Bolgla, L, Earl-Boehm J, Emery CA, Hamstra-Wright KL. (2013). Optimal rehabilitation protocols for the treatment of patellofemoral pain syndrome: an outcome-based RCT study. *Journal of Athletic Training.* 48(3), S97.
 40. Hamstra-Wright KL, Earl-Boehm J, Bolgla L, Emery CA, **Ferber R.** (2013). Prospective Pain and Function Outcomes after 6-weeks of Rehabilitation for Patellofemoral Pain Syndrome. *Journal of Athletic Training.* 48(3), S94-95.
 41. Bolgla LA, Earl-Boehm J, Emery CA, Hamstra-Wright KL, **Ferber R.** (2013). Pain, function, and strength outcomes for males and females with patellofemoral pain who participate in either a hip- or knee-based rehabilitation program. *Journal of Athletic Training.* 48(3), S255-256.
 42. Earl-Boehm J, Bolgla L, Emery CA, Hamstra-Wright KL, **Ferber R.** (2013). Strength changes following quadriceps or hip focused rehabilitation in patients with PFP: an outcome-based RCT study. *Journal of Athletic Training.* 48(3), S254-255.
 43. Bazett-Jones DM, Earl-Boehm J, Bolgla L, Hamstra-Wright KL, Emery CA, **Ferber R.** (2013). Differences in pelvic and trunk kinematics among those with and without patellofemoral pain. *Journal of Athletic Training.* 48(3), S93-94.
 44. Kimmel W., Hettinga B.A., **Ferber, R.** (2013). Effect of over-the-counter foot orthotic devices on multi-segment foot biomechanics. *Journal of Athletic Training.* 48(3), S133.
 45. Fukuchi, R.K., Stefanyshyn, D., Stirling, L., Duarte, M., **Ferber, R.** Biomechanical running gait adaptations in older runners. 2013 Interdisciplinary Students in Aging Research Symposium. University of Calgary, Calgary, March 2013.
 46. Bolgla, L., Bounds, M., Greavu, S., Rowe, S., Earl-Boehm, J., Emery, C.A., Hamstra-Wright, K., **Ferber, R.** (2013). Comparison of hip strength and core endurance in males with and without patellofemoral pain syndrome. Combined Sections of the American Physical Therapy Association Annual Meeting. *Journal of Orthopaedic & Sports Physical Therapy.* 43(1), A50.
 47. Vicker, J.N., Panchuk, D., Ramage, B., Ronsky, J.L., **Ferber, R.,** Morton, B. New advances in the quiet eye phenomenon from research in neuroscience, centre of pressure (COP), and surgery-Internal and external focus effects during quiet stance on the quiet eye and COP of elite ballet dancers and controls. (2012). *Journal of Sport & Exercise Psychology.* 34(S), S36.
 48. Fukuchi, R.K., Stirling, L., **Ferber, R.** Designing training sample size for support vector machines based on kinematic gait data. (2012). In Proceedings of the American Society of Biomechanics Annual Meeting. Gainesville, Florida, USA.
 49. Collins, K.H., Fukuchi, R.K., Hettinga, B.A., **Ferber, R.** (2012). Detecting gait

- kinematic patterns associated with knee osteoarthritis using a support vector machine algorithm. *Medicine and Science in Sports and Exercise*, 44(5), S284.
50. Cooper, C., Kendall, K.D., Patel, C., Pohl, M.B., Wiley, P., **Ferber, R.** (2012). Changes in lumbopelvic mechanics following ultrasound guided nerve block in the superior gluteal nerve. *Medicine and Science in Sports and Exercise*, 44(5), S575.
 51. **Ferber, R.**, Echeverri, S., Leigh, R.J. (2012). Changes in gait biomechanics after a 6-week rehabilitation program for runners with iliotibial band syndrome. *Medicine and Science in Sports and Exercise*, 44(5), S131.
 52. Pohl, M.B., Wiley, P.J., Patel, C., **Ferber, R.** (2012). Gait biomechanics and muscular strength in patients with patellofemoral osteoarthritis. *Medicine and Science in Sports and Exercise*, 44(5), S16.
 53. Webber, T.R., Mills, K., Pohl, M.B., Park, S.K., **Ferber, R.** (2012). Lower extremity gait and muscle strength asymmetry in patients with medial compartment knee osteoarthritis. *Medicine and Science in Sports and Exercise*, 44(5), S15.
 54. Kendall, K., Pohl, M.B., Patel, C., Wiley, P., Emery, C.A., **Ferber, R.** (2012). Steps towards the validation of the Trendelenburg test: The effect of experimentally reduced hip abductor muscle function on frontal plane mechanics. In Proceedings of the Canadian Athletic Therapists Association Annual Meeting. Quebec City, Quebec.
 55. Bolgla, L., Earl-Boehm, J., Emery, C.A., Hamstra-Wright, K., **Ferber, R.** (2011). A Comparison of Hip Strength and Core Endurance in Males and Females with a History of Patellofemoral Pain Syndrome. In Proceedings of the 2nd PFPS International Research Retreat. Ghent, Belgium.
 56. Earl-Boehm, J., Bazett-Jones, B., Joshi, M., Oblak, P., **Ferber, R.**, Emery, C.A., Hamstra-Wright, K., Bolgla, L. (2011). Frontal and transverse plane hip and knee kinetics and kinematics during running in individuals with PFPS. In Proceedings of the 2nd PFPS International Research Retreat. Ghent, Belgium.
 57. Pohl, M.B., Kendall, K.D., Wiley, P., Patel, C., Emery, C.A., **Ferber, R.** (2011). The role of experimentally induced hip abductor muscle strength deficits on frontal plane biomechanics during gait. In Proceedings of the American Society of Biomechanics Annual Meeting. Long Beach, CA, USA.
 58. Leigh, R.J., Pohl, M.B., Lloyd, C.H., **Ferber, R.** (2011). Does tester experience influence the reliability of 3d-gait analysis? A comparison of the functional and predictive approaches. In Proceedings of the American Society of Biomechanics Annual Meeting. Long Beach, CA, USA.
 59. **Ferber, R.**, Bolgla, L., Earl-Boehm, J., Emery, C.A., Hamstra-Wright, K.L. (2011). Variability of Hip and Knee Joint Biomechanics During Running for Patients With Patellofemoral Pain Syndrome. *Journal of Athletic Training*. 46(3), S28.
 60. Cormack, S., Kendall, K.D., **Ferber, R.** (2011). Validation of 2D Measures of Hip and Knee Frontal Plane Biomechanics During Running. *Journal of Athletic Training*. 46(3), S163.
 61. Benson, B.A., **Ferber, R.** (2011). Changes in multi-segment foot biomechanics between molded and non-molded semi-custom foot orthotic devices. *Journal of Athletic Training*. 46(3), S115.
 62. Fukuchi, R., Pohl, M.B., **Ferber, R.** (2011). Detection of running kinematic features associated with patellofemoral pain syndrome. Book of Abstracts International Society of Biomechanics. Brussels, Belgium.
 63. Pohl, M.B., Kendall, K.D., Patel, C., Wiley, P., Emery, C.A., **Ferber, R.** (2011). The role of experimentally induced hip abductor muscle strength deficits on frontal plane biomechanics during gait. In Proceedings of the American Society of Biomechanics Annual Meeting. Long Beach, CA.

64. Leigh, R.J., Pohl, M.B., Lloyd, C.H., **Ferber, R.** (2011). Does Tester Experience Influence the Reliability of 3D Gait Analysis? A Comparison of the Functional and Predictive Approaches. In Proceedings of the American Society of Biomechanics Annual Meeting. Long Beach, CA.
65. Schnackenburg, K.E., Macdonald, H.M., Ferber, R., Wiley, J.P., Boyd S.K. (2011). Bone quality and muscle strength in lower limb stress fractures in female athletes. *Canadian Orthopaedic Association and Canadian Orthopaedic Research Society Annual Meeting*, St. John's, Canada.
66. Kendall, K.D., Schmidt, C.S., **Ferber, R.** (2010). The relationship between hip abductor muscle strength and the magnitude of pelvic drop in patients with low back pain. In Proceedings of the 2010 World Congress of Low Back Pain, Las Angeles, CA, USA.
67. Park, S.K., Pohl, M.B., Lloyd, C.H., Baxter, J., Wiley, P., **Ferber, R.** (2010). Effect of hip muscle strengthening on frontal plane gait mechanics in patients with knee osteoarthritis. In Proceedings of the American Society of Biomechanics Annual Meeting. Providence, RI, USA.
68. Fukuchi, R.K., Eskofier, B.M., **Ferber, R.**, Duarte, M. (2010). Assessment of the Support Vector Machine for detecting age-related changes in running mechanics. In Proceedings of the American Society of Biomechanics Annual Meeting. Providence, RI, USA.
69. **Ferber, R.**, Kendall, K.D., and Farr, L. (2010). Changes in knee biomechanics following a hip abductor strengthening protocol for runners with patellofemoral pain syndrome. *Journal of Athletic Training*. 45(3), S63.
70. Bachand, A., Farr, L., McElroy, L.K., Rabbito, M., Pohl, M.B., **Ferber, R.** (2010). Reliability and Accuracy of a Digital Photograph Method for Measuring Arch Height Index and Foot Structure. *Journal of Athletic Training*. 45(3), S69.
71. Pohl, M.B., Rabbito, M. and **Ferber, R.** (2010). The relationship between static arch rigidity and foot kinematics during gait. International Foot & Ankle Biomechanics Annual Meeting. Seattle, WA, USA.
72. Lloyd, C.H., Pohl, M.B., **Ferber, R.** Reliability of gait kinematic variables from functionally determined hip, knee, and ankle joint centers. Book of Abstracts 2010 Gait and Clinical Movement Analysis Society Annual Meeting, Miami, FL, USA.
73. Pohl, M.B., Lun, V., Wiley, P., **Ferber, R.** Kinematic compensation strategies in patient with medial compartment knee osteoarthritis. Book of Abstracts 2010 Gait and Clinical Movement Analysis Society Annual Meeting, Miami, FL, USA.
74. **Ferber, R.**, Farr, L., Kendall, K.D. (2010). The relationship between hip abductor strength and knee genu valgum for patients with PFPS following a strengthening protocol. *Journal of Orthopaedic & Sports Physical Therapy*. 40(3), A39.
75. Pohl, M.B., Rabbito, M. and **Ferber, R.** (2009). The role of tibialis posterior on foot kinematics during walking. In Proceedings of the American Society of Biomechanics Annual Meeting. Penn State College, PA, USA.
76. Schnackenburg, K.E., Macdonald, H.M., **Ferber, R.**, Boyd, S.K. (2009). Bone Micro-architectural Parameters and Muscle Strength in Recreational Runners with and without Tibial Stress Fractures. 10th Alberta BME Conference, Banff, Canada
77. Best, C.S., **Ferber, R.** (2009). Comparison of three different hand-held dynamometry measurement techniques. *Journal of Athletic Training*. 44(3), S113.
78. Pohl, M.B., Lloyd, C.H., Lun, V., Wiley, P., **Ferber, R.** (2009). Frontal plane lower extremity gait and muscle strength asymmetry in patients with medial compartment knee osteoarthritis and healthy controls. European League Against Rheumatism (EULAR) Book of Abstracts 2009 World Congress, June, Copenhagen, DE.

79. 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.
80. Butler R.J., Minick K., **Ferber R.**, & Underwood F.B. (2008). Gait mechanics following ACL rupture: Implications for the Early Onset of Knee Osteoarthritis. *Medicine and Science in Sports and Exercise*, 40(5S), 766.
81. Minick K., **Ferber R.**, Underwood F.B., & Butler R.J. (2008). Gender Differences In Gait Mechanics Following an ACL Rupture: Implications For Early Onset Knee Osteoarthritis In Females. *Medicine and Science in Sports and Exercise*, 40(5S), 1940.
82. Kendall K.D., Sheerin K., Keshmiri E., **Ferber R.** (2008) Normative database of common anatomical measures related to running injuries. *Journal of Athletic Training*, 43(3), S123.
83. Kendall K.D., **Ferber R.**, Louro, M. (2007). Proximal and distal clinical measures related to patellofemoral pain syndrome in runners. *Journal of Athletic Training*, 42(2), S114.
84. **Ferber R.**, Kendall K.D. (2007). Biomechanical approach to rehabilitation of lower extremity musculoskeletal injuries in runners. *Journal of Athletic Training*, 42(2), S114.
85. Vickers, J.N., Ronsky, J.L., Loitz-Ramage, B., Panchuck, D., Morton, B., Gotch, M., **Ferber, R.**, & Robu, I. (2006). Gaze and postural stability of elite ballet dancers, ACL-deficient and normal controls during the quiet stance and lunge. *Cognitive Processing*, 7 (S5):176.
86. **Ferber, R.**, Ronsky, J.L., von Tschanner, V., & Osternig, L.R. (2004). Neuromuscular response to unexpected perturbations in anterior cruciate ligament injured non-copers. Book of Abstracts American Society of Biomechanics, Portland, OR, USA.
87. **Ferber, R.**, McClay Davis, I., & Hamill, J. (2003). Prospective biomechanical investigation of iliotibial band syndrome in competitive female runners. *Medicine and Science in Sports and Exercise* 35(5), s91.
88. DeLeo, A.T., **Ferber, R.**, McClay Davis, I., & Mika, E.S. (2003). Comparison of rearfoot motion and comfort between custom and semi-custom orthotics based on arch height. *Medicine and Science in Sports and Exercise* 35(5), s237.
89. Dierks, T.A., McClay Davis, I., & **Ferber, R.** (2003). Gender differences in continuous joint coupling variables during running. *Medicine and Science in Sports and Exercise* 35(5), s89.
90. McClay Davis, I., Dierks, T.A., & **Ferber, R.** (2003). Gender differences in discrete joint coupling variables during running. *Medicine and Science in Sports and Exercise* 35(5), s89.
91. Butler, R.J., **Ferber, R.**, & McClay Davis, I. (2003). Gender differences in lower extremity stiffness during running. *Medicine and Science in Sports and Exercise* 35(5), s89.
92. **Ferber, R.**, Osternig, L.R., Woollacott, M.H., Wasielewski, N.J., & Lee, J-H. (2003). Bilateral accommodations to anterior cruciate ligament deficiency and reconstruction. Book of Abstracts International Society of Biomechanics, Dunedin, New Zealand.
93. 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.
94. McClay Davis, I., Dierks, T.A., **Ferber, R.**, & Hamill, J. (2003). Lower extremity

- mechanics in patients with patellofemoral joint pain: a prospective study. Book of abstracts 2003 American Society of Biomechanics, Toledo, Ohio, USA.
95. Ferber, R., McClay Davis, I., & Williams III, D.S. (2002). Orthotics alter lower extremity joint coupling: a dynamical systems approach. Book of Abstracts 2002 World Congress of Biomechanics, Calgary, Alberta, Canada.
 96. McClay Davis, I., Ferber, R., Dierks, T.A., Butler, R.J., & Hamill, J. (2002). Variables associated with the incidence of lower extremity stress fractures. Book of Abstracts 2002 World Congress of Biomechanics, Calgary, Alberta, Canada.
 97. DeLeo, A.T., McClay Davis, I., & Ferber, R. (2002). Custom and semi-custom orthotic devices: A comparison of rearfoot motion control and comfort. Book of Abstracts 2002 World Congress of Biomechanics, Calgary, Alberta, Canada.
 98. Ferber, R., McClay Davis, I., Hamill, J., Pollard, C.D., & McKeown, K.A. (2002). Kinetic variables in subjects with previous lower extremity stress fractures. Medicine and Science in Sports and Exercise, 34(1), s25.
 99. Osternig, L.R., Ferber, R., Mercer, J., & Davis, H. (2002). Effect of anterior cruciate ligament surgery on lower extremity joint torques and knee shear. Medicine and Science in Sports and Exercise, 34(1), s579.
 100. Pollard, C.D., & McKeown, K.A. Hamill, J., Ferber, R., McClay Davis, I. (2002). Selected structural characteristics of female runners with and without lower extremity stress fractures. Medicine and Science in Sports and Exercise, 34(1), s991.
 101. Ferber, R., Wasielewski, N.J., Lee, J-H., Woollacott, M.H., & Osternig, L.R. (2001). Gait perturbation response in pre and post-surgical anterior cruciate ligament subjects and healthy controls. Book of Abstracts 2001 ISB World Congress, Zurich, Switzerland.
 102. Ferber, R., Wasielewski, N.J., Lee, J-H., Woollacott, M.H., & Osternig, L.R. (2001). Electromyographic response to unexpected gait perturbations in pre and post-surgical anterior cruciate ligament subjects and healthy individuals. Journal of Athletic Training, 36(2), s62.
 103. Ferber, R., Wasielewski, N.J., Lee, J-H., Woollacott, M.H., & Osternig, L.R. (2001). Reactive balance adjustments to unexpected perturbations while walking. Medicine and Science in Sports and Exercise, 33(5), s1321.
 104. Ferber, R., Osternig, L.R. (2000). Lower extremity joint adaptations in an ACL deficient male: Pre-injury to post-surgical evaluation. Medicine and Science in Sports and Exercise, 32(5), s252.
 105. Osternig, L.R., Ferber, R., Mercer, J., & Davis, H. (2000). Effect of velocity and joint position on hip and knee torque and anterior tibial shear in pre-surgical ACL deficient and post-surgical subjects. Medicine and Science in Sports and Exercise, 32(5), s222.
 106. Hreljac, A., & Ferber, R. (2000). The relationship between gait transition speed and dorsiflexor force production. 2000 Canadian Society for Biomechanics Conference Proceedings, Waterloo, Ontario, Canada.
 107. 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.
 108. 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.
 109. Hreljac, A., Arata, A., Chen, S-J, Ferber, R., Keller, T.L., Mercer, J., & Row, B.S. (1999). Neurological considerations of the gait transition in humans. 1999 International Society of Biomechanics Conference Proceedings, Calgary, Alberta,

Canada.

110. **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.
111. 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. *Keynote Address:* Advancing the Field of Biomechanics Through Wearable Sensors and Machine Learning. 12th Annual Meeting of the Danish Society of Biomechanics. Aalborg University, Denmark (via Zoom). Nov 2020.
2. *Keynote Address:* Advancing clinical research through AI and wearable sensors. University of Ottawa Artificial Intelligence Symposium. Jan 2020.
3. *Invited Speaker:* Using wearable sensor data to inform clinical care. Academic Education Day in Rheumatology. Cumming School of Medicine, University of Calgary. Calgary, Canada. November, 2019.
4. *Keynote Address:* What is the Future of Wearable Technology and IoT? Open Geospatial Consortium and SensorThings Summit 2019. Banff, Alberta. September, 2019.
5. *Invited Speaker:* Wearable Technology in Injury Prevention and Rehabilitation. Canadian Athletic Therapists' Association Annual Meeting. Calgary, Canada. June 2019.
6. Recent Research Using Wearable Sensor Data. Video Conference with Rothesay Netherwood School (New Brunswick). May 2019.
7. *Invited Speaker:* Wearable technology in injury prevention and rehabilitation. Canada West University Athletics Association (CWUAA) Medical Committee 2019 meeting. Calgary, Canada. Jan 2019.
8. *Invited Speaker:* Wearable Technology Research and Collaboration (We-TRAC) at the University of Calgary. University of Calgary Chancellor's Club. Canadian Olympic Sports Hall of Fame, Calgary, Canada. Dec 2018.
9. *Invited Speaker:* Applying wearable sensor data to inform clinical care. UBC Wearables Research Symposium. University of British Columbia, Vancouver BC. December 2018.
10. *Invited Speaker:* How to use wearable sensor data in a meaningful way. UBC Wearables Public Symposium. Vancouver General Hospital, Vancouver BC. December 2018.
11. *Invited Speaker:* Wearable Technology to Reduce Foot and Ankle Running Injuries. Wood Forum - McCaig Institute. Calgary, Canada. October 2018.
12. *Keynote Presentation:* The Role of Wearable Technology in Clinical Practice. IVO World Congress, Toronto, Canada. April 2018.
13. *Invited Speaker:* The Research Evidence Behind an Effective Clinical Gait Analysis. IVO World Congress, Toronto, Canada. April 2018.
14. *Invited Speaker:* Evidence-Informed Approach to Treat Running-Related Injuries. Canada West University Athletics Association (CWUAA) Medical Committee 2017 meeting. Calgary, Canada. Dec 2017.
15. Workshop Organizer and Speaker: The Check Engine Light Project. Sensor Technology in Monitoring Movement (STiMM) Annual Workshop. Calgary, Canada.

Nov 2017.

16. Invited Speaker and Panel Discussion: Faculty of Kinesiology Innovation Series: Wearable Technology. Calgary, Canada. June 2017.
17. Workshop: Running Injuries in the Hip and Back. University of Calgary Pain and MSK Clinical Pearls Combined Course. Calgary, Canada. March 2017.
18. *Keynote Presentation*: State of the Art in Gait Analysis. Pedorthic Association of Canada - Research Symposium. Calgary, Canada. October 2016.
19. Invited Speaker and Panel Discussion: Gender differences in gait mechanics - a UofC Perspective. Pedorthic Association of Canada - Research Symposium. Calgary, Canada. October 2016.
20. Invited Speaker: Keeping Your Knees in Shape: The science behind running injury prevention. University of Calgary Alumni Weekend. Calgary, Canada. April 2016.
21. Invited Speaker: I bought my research lab at Walmart. NerdNite Calgary. Calgary, Canada. April 2016.
22. Invited Speaker: How can biomechanics research improve clinical practice? University of Wisconsin - Milwaukee Department of Kinesiology Seminar (via Skype webinar). March 2016.
23. Invited Speaker: Prevention of running injuries and improving rehabilitation outcomes using gait analysis. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Florianapolis, Brazil. November 2015.
24. 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.
25. *Keynote Presentation*: Using 3D biomechanical analysis to prevent injuries and predict rehabilitation and surgical outcomes. Jornada Brasileria de Biomecanica Clinica (JBBC). Rio de Janeiro, Brazil. November 2015.
26. Invited Speaker: Science Behind Running Injury Prevention. University of Calgary Alumni Weekend. Calgary, Canada. June 2015.
27. Invited Speaker: Advances in technology to keep you running injury-free. Calgary Marathon Speaker Series. Calgary, Canada. June 2015.
28. Invited Speaker: Methods to Improve Biomechanical Data Collection. Faculty of Kinesiology Colloquium, Penn State University. State College, PA. April 2015.
29. *Keynote Address*: Lumbopelvic Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
30. *Keynote Address*: Foot and Ankle Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
31. *Invited Workshop*: Footwear and Orthotic Assessment. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
32. *Invited Speaker*: Running Injury Clinic: Integration of Research and Clinical Practice. Department of Kinesiology Seminar Series, University of Virginia. Charlottesville, VA. March 2015.
33. *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.
34. *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.
35. *Invited Panelist*: Biomechanical modeling and data mining. International Calgary Running Symposium. Calgary, Canada. August 2014.
36. *Invited Panelist*: Running Injuries. International Calgary Running Symposium. Calgary, Canada. August 2014.

37. *Invited Lecture:* Wearable Technology and Advances in Running Injury Prevention. Mountain Equipment Co-op Expert Speaker Series. June 2014. Calgary, AB.
38. *Invited Lecture:* Evidence-Based Approach to the Treatment of Running-Related Injuries. Canadian Athletic Therapists Association Annual Meeting. June 2014. Winnipeg, MB.
39. *Invited Lecture:* Advancements in Research and Technology for Injury Prevention and Rehabilitation. PanAm Clinic Foundation Research Rounds. June 2014. Winnipeg, MB.
40. *Invited Lecture:* Wearable Gadgets and Advances in Technology for Running Injury Prevention. CIBC Wood Gundy. Calgary, AB. June 2014.
41. *Keynote Address:* Prevention and treatment of common running injuries. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
42. *Invited Workshop:* Gait Analysis and Footwear prescription. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
43. *Invited Lecture:* Innovations in Technology: Lessons Learned From Masking Tape. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
44. *Keynote Address:* Innovation and Research Platforms for Campus Recreation. Western Canada Campus Recreation Conference. Feb 2014. Calgary, AB.
45. *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.
46. *Invited Lecture:* Biomechanics for Injury Prevention and Performance. Royal College of Chiropractic Sports Sciences (Canada): Run Faster Conference. Nov 2013. Whitby, ON.
47. *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.
48. *Invited Lecture:* Treatment of running injuries through hip muscle strengthening. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
49. *Invited Workshop:* Clinical assessment of hip muscle strength and flexibility. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
50. *Invited Lecture:* How does your exam measure up? Faculty of Nursing, University of Calgary. June 2013.
51. *Keynote Address:* What to do before you bench your training shoes: Barefoot Running 101. Certified Professional Trainers Network (CPTN) Conference. Toronto, ON. June 2013.
52. *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.
53. *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.
54. *Invited Panellist:* "Leadership through Sports and Coaching" panel: Leadership Exchange Conference. University of Calgary, Calgary, AB. April, 2013.
55. *Invited Workshop:* Clinical Assessment Using 3D Motion Analysis. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013

56. *Keynote Address*: Recent Research Behind Over-the-Counter Orthoses. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013
57. *Invited Presentation*: Lessons learned from masking tape: disruptive innovation vs. invention. Student's Union Last Lecture Series. University of Calgary, March 2013.
58. *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.
59. *Invited Presentation*: Biomechanical predictors of knee osteoarthritis. Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark. Jan 2013.
60. *Invited Presentation*: New strategies for injured runners. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
61. Optimal foot kinetics during walking and running. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
62. *Keynote Address*: Student's Union Research Symposium Gala Event. Dec 2012.
63. *Invited Presentation*: Gait Analysis and Footwear prescription. The Running Event, Austin, TX. Dec 2012.
64. *Invited Presentation*: Indications for the use of orthoses in sports medicine. Faculty of Medicine, University of Calgary: Evening Course Program. Nov 2012.
65. Prevention of running injuries. Bloomsburg University of Pennsylvania Sports Medicine Association, Bloomsburg, PA. Nov 2012.
66. *Invited Presentation*: University of Calgary First Lecture Series: Orientation Week. September 2012.
67. *Keynote Address*: The Science Behind Gait Analysis and Footwear Prescription. Fleet Feet National Conference. Washington, DC. June 2012.
68. Clinical and Biomechanical Factors Associated with Running-Related Injuries. University of Calgary Honolulu Marathon Training Program Speaker Series. April 2012.
69. Advances in 3D Gait Technology for Running Injury Prevention. Nuffield Orthopaedic Centre, Oxford University. Oxford, UK. April 2012.
70. The Art of the Scientific Presentation: McCaig Institute Seminar Series. University of Calgary. Calgary, AB. March, 2012
71. Overview of the Running Injury Clinic: An Applied and Translational Research Laboratory. McCaig Institute Seminar Series. University of Calgary. February, 2012
72. *Keynote Address*: Efficacy of Over-the-Counter Orthoses: Current Research and Best Practice Guidelines. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
73. Visual Gait Analysis. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
74. Staying active and healthy through clinical biomechanics research. University of Calgary Emeritus Association. January 2012.
75. New Paradigms in Sustainable Research. Ohio State University: Sports Medicine Movement Analysis & Performance Research. Columbus, OH. November 2011.
76. 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.
77. *Keynote Address*: Clinical and Biomechanical Factors Associated with Running-Related Injuries. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Maceio, Brazil. November 2011.
78. The Science Behind Running Injury Prevention. University of Calgary, Faculty of Medicine and Cenovus Energy: Living Well to 100 Series. Calgary, AB. September 2011.

79. 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
80. *Keynote Address*: Biomechanical Factors Associated with Running Related Injuries. 26th Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
81. Clinical and Biomechanical Considerations for the Assessment and Treatment of Patellofemoral Pain Syndrome. 26th Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
82. Examination of the Hip as a Contributing Factor to Overuse Injuries. 26th Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
83. Aetiology of Running Injuries. University of Calgary Sports Medicine Centre Clinic Rounds. December 2010.
84. Healthy aging and pain-free walking: what research has done for us. Rotary Club of Calgary. November 2010.
85. Development of 3D Gait Analysis for use in a Clinical Setting. The Health Research Transfer Network of Alberta (RTNA) Conference. Edmonton, Alberta. November 2010.
86. Running Injury Free. Royal Victoria Marathon Running Expo, Victoria, BC. October 2010.
87. *NATA Exchange Lecture*: Biomechanical Factors Associated with Running-Related Injuries. American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting, Providence RI. July 2010.
88. Clinical Assessment of Walking Gait Mechanics: Learning Lab. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.
89. *Feature Presentation*: Importance of the hip abductors for the resolution of lower extremity injuries. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.
90. *Keynote Presentation*: Biomechanical and Clinical Factors Associated With Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009
91. Exercise Prescription for Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009
92. The role of tibialis posterior in the control of midfoot and rearfoot mechanics. 12th Annual International PFOLA Conference, Atlanta, USA. October, 2009
93. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. 12th Annual International PFOLA Conference, Atlanta, USA. October, 2009
94. The pain in my knee is a pain in my butt. Big Rock Lecture Series, Calgary, Canada. September, 2009.
95. Advanced Track Seminar: Evaluation and Interpretation of Running Gait. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
96. Clinical Lecture: Clinical Gait Analysis and Proper Footwear Selection. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
97. *Keynote Presentation*: The Inter-Relationship Between Hip Muscle Strength and Running Biomechanics. Pedorthic Association of Canada Annual Symposium. Kelowna British Columbia, April, 2009.
98. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. Pedorthic Association of Canada Annual Symposium. Kelowna, British Columbia, April, 2009.
99. *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
100. Exercise Prescription for Shin Splints and Stress Fractures. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Regina, Saskatchewan. March, 2009
 101. 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
 102. Stress Fracture Management & Treatment. 59th NATA Annual Meeting & Clinical Symposia, St. Louis, MO. June 2008
 103. Pathomechanics of patellofemoral pain syndrome: the hip-down perspective. 11th Annual International PFOLA Conference, Vancouver, BC. October, 2008
 104. Proprioceptive neuromuscular response to unexpected gait perturbation in ACL deficient individuals. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
 105. Bilateral accommodations to anterior cruciate ligament during normal and perturbed gait. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
 106. *Keynote Presentation:* Foot structure and biomechanics of lower extremity injuries. Sutter Heath Group Santa Cruz Seminar, Santa Cruz, CA. October 2004.
 107. Gait retraining for running relateds injuries. York University Athletic Therapy seminar. Toronto, Ontario, Canada. September, 2004.
 108. *Keynote Presentation:* Foot Orthotics: Current Research in Rehabilitation. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.
 109. Factors influencing the etiology and treatment of lower extremity musculoskeletal injuries. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.
 110. Neuromuscular adaptations in anterior cruciate ligament deficient individuals. Distinguished Lecture Series, UNLV Department of Kinesiology, Las Vegas, NV. March 2004.
 111. 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
 112. 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
 113. Patellofemoral pain syndrome: Current trends and research in rehabilitation. Dynamic Rehabilitation Specialists Symposium. Calgary, Alberta, Canada. October 2003
 114. Prehabilitation for the endurance athlete. Clinical Workshop: National Athletic Trainers Association National Meeting. St Louis, MO. June 2003
 115. Gait accommodations to anterior cruciate ligament deficiency and surgery. School of Kinesiology and Health Science Graduate Seminar. York University, Toronto, Ontario, Canada. September 2002
 116. Bilateral accommodations to anterior cruciate ligament deficiency and surgery. Biomechanics Invitational Seminar. Las Vegas, NV, USA. March 2002.
 117. Accommodations to anterior cruciate ligament deficiency and surgery. Lane Athletic Trainers Association Annual Meeting. Eugene, OR, USA. March 2001.
 118. 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 Kyoong 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 - 2017: 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 - 2018: Ricky Watari (Faculty Supervisor: PhD): Determining sub-types of runners that are experiencing patellofemoral pain.
- 2015 - 2019: Christian Clermont (Faculty Supervisor: PhD): Wearable technology to predict running-related injuries.
- 2015 - 2017: AJ (Charles) Macauley (Faculty Supervisor: MSc): Improving the reliability of kinematic data through real-time feedback training.

- 2016 - 2018: Lindsey Logan (Committee Member: MSc): Developing a measure for sense of effort in the KINARM Exoskeleton Robot
- 2016 - 2018: Chandra Tjhai (Committee Member: PhD): Pedestrian Navigation Using Wearable MARG Sensors
- 2016 - 2018: Lauren Benson (Faculty Supervisor: PDF): Methods to Determine Subject-Specific Movement Gait Patterns Using 3D Accelerometry Signals.
- 2017 - 2018: Dylan Kosbar (Faculty Supervisor: PDF): Validation of LiDAR-based gait analysis measurements.
- 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 - present: Michael Baggaley (Committee Member: PhD): Bone tissue loading in response to running
- 2016 - 2017: Ana dos Santos (Committee Member): PhD): Effects of forefoot and rearfoot landing on knee joint loading.
- 2017 - 2019: Nizam Ahamed (Faculty Supervisor: PDF): Sensor technology in monitoring human movement.
- 2018 - present: Andrew Pohl (Faculty Supervisor: PhD): Wearable technology to predict Achilles tendon strain.
- 2018 - present: Ykje Piera (Committee Member: PhD): Maternal and fetal surveillance: citizen sensor, e-textiles, and ethics.
- 2019 - present: Hannah Dimmick (Faculty Supervisor: PhD): Wearable technology to predict running-related injuries.
- 2019 - present: Angela Senavirathna (Faculty Supervisor: PhD): Wearable technology to predict bone strain.
- 2019 - present: Beth Stulen (Faculty Supervisor: MSc): Wearable technology to understand cycling biometrics.
- 2019 - present: Hamidreza Namazi (Faculty Supervisor: PDF): Fractal scaling approach to separating maternal and fetal heart rate signals.

Primary Supervisor - 9 PDF, 9 PhD, 6 MSc
 Supervisory Committee - 7 PhD, 4 MSc

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)

Jan 2020: Global TV Interview - Winter running: boost endurance and lower injury risk
<https://globalnews.ca/video/6365183/winter-running-boost-endurance-and-lower-injury-risk>

October 2019: Global TV Live interview - Wearable Tech Citizen Science
<https://globalnews.ca/video/5974601/become-a-citizen-scientist>

September 2019: CBC Radio 1 Live interview - Wearable Technology research
<https://www.cbc.ca/listen/live-radio/1-1-alberta-at-noon/clip/15736885-wearable-technology>

September 2019: UToday - Citizen scientists with wearable tech needed for UCalgary project
<https://www.ucalgary.ca/news/citizen-scientists-wearable-tech-needed-ucalgary-project>

August 2019: The Globe and Mail - Could wearable technology save your life?
<https://www.theglobeandmail.com/featured-reports/article-could-wearable-technology-save-your-life/>

March 2019: UToday - Proper use of wearable technology is considered the 'wild, wild west'
<https://www.ucalgary.ca/utoday/issue/2019-03-06/proper-use-wearable-technology-considered-wild-wild-west>

Live interview - Breakfast Television Calgary:
<https://www.btcalgary.ca/videos/wearable-technologys-role-in-staying-fit/>

December 2018: Runners Connect Run to the Top Podcast - High Tech Running Form & Injury Evaluation
<https://runnersconnect.net/running-interviews/gait-analysis-running-injury-dr-reed-ferber/>

October 2018: Runners World - The perfect running form - why you shouldn't run tall.
<https://www.runnersworld.co.uk/training/why-you-shouldnt-run-tall>

August 2018: CBC News - University of Calgary launches wearable tech program as demand for graduates explodes.
<https://www.cbc.ca/news/canada/calgary/wearable-technology-university-calgary-1.4801159>
<https://www.wearable-technologies.com/2018/08/university-of-calgary-launches-wearable-tech-program-amid-huge-demand/>
<https://www.iphoneincanada.ca/news/university-of-calgary-wearable-tech-program/>

August 2018: Runner's World - Get More Speed - A Simple Trick To Get Faster!
<https://www.runnersworld.co.za/training/get-more-speed-a-simple-trick-to-get-faster/>

February 2018: Business Insider - How compression pants work and why they are so popular

<http://www.businessinsider.com/do-compression-pants-gear-really-work-exercise-workout-running-2018-2>

November 2017: Sensor Technology in Monitoring Movement (STiMM) Workshop

UToday: <http://www.ucalgary.ca/utoday/issue/2017-11-10/workshop-explore-stepping-purpose-fitness-devices>

CBC Radio - The Homestretch: <http://www.cbc.ca/listen/shows/the-homestretch/segment/14820932>

660 News: <http://www.660news.com/2017/11/16/u-c-researchers-want-medical-professionals-wear-fitbit/>

November 2017: Breakfast Television Calgary - Live Interview: Improving Health Care with Wearable Tech!

<http://www.btcalgary.ca/videos/improving-health-care-with-wearable-tech/>

October 2017: SELF Magazine - How to Increase Your Marathon Training Mileage Without Burning Out

<https://www.self.com/story/marathon-training-mileage>

Aug 2017: The Conversation - Usain Bolt and Andre De Grasse: Hamstring injuries explained

<http://theconversation.com/usain-bolt-and-andre-de-grasse-hamstring-injuries-explained-82431>

Aug 2017: SELF Magazine - 'I'm Not Built for Running' Is a Myth We Need to Stop Perpetuating

<https://www.self.com/story/im-not-built-for-running-myth-need-stop-perpetuating>

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/kinesiologys-reed-ferber-and-team-announce-new-software-running-injury-technology>

August 2016: Globe and Mail - In perfect asymmetry
<https://www.theglobeandmail.com/sports/olympics/small-light-and-unconventional-how-does-de-grasse-do-it/article31450048/>

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

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

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

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.avenucalgary.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-advise/>
<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

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+redefinintg+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

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>

<http://www.youtube.com/watch?v=bxkbDIO4erk>

<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>

Jan 2011: Debunking running shoe myths

<http://www2.canada.com/calgaryherald/news/city/story.html?id=1e880837-15d1-40ce-940d-4aee06d422b7&p=2>

http://www.cbc.ca/video/#/News/TV_Shows/The_National/1233408557/ID=1770330439

Dec 2010: The Globe and Mail: Running man nears the end of line.

<http://www.theglobeandmail.com/sports/more-sports/running-man-nears-the-end-of-line/article1852611/>

November 2010 issue of Runner's World: Is Less More?

<http://www.runnersworld.com/article/0,7120,s6-240-400--13691-6-1X2X3X4X5X6X7X8-9,00.html>

Nov 29, 2010: ABC News Online: Should Runners Surrender Their Soles? Despite Barefoot Running Rage, Conventional Footwear Loyalists Remain

<http://abcnews.go.com/Health/Wellness/runners-save-soles-barefoot-minimalist-shoes/story?id=12228478&page=1>

November 11, 2010: Macleans.ca Don't drink and drive. Run, instead.

<http://www2.macleans.ca/2010/11/11/drink-and-run-instead/>

November 1, 2010: Sweat Science: Biomechanics for Performance and Injuries

<http://sweatscience.com/tag/sports-technology/>

November 2010: Avenue Magazine - Top 40 under 40
<http://www.avenuecalgary.com/top-40-under-40/item/reed-ferber>

Oct 31, 2010: Globe and Mail: Can biomechanics boost my athletic performance?
<http://www.theglobeandmail.com/life/health/alex-hutchinson/can-biomechanics-boost-my-athletic-performance/article1778660/>

October 15, 2010: The Daily (Shaw TV): 3D Gait Analysis_Victoria
<http://www.youtube.com/watch?v=NtyJRRJXxE4>

October 15, 2010: The Daily (Shaw): Goodlife Fitness Victoria Marathon, Running Without Injury by Dr. Reed Ferber

Pt. 1: <http://www.youtube.com/watch?v=GP6XwlR2MtE&feature=related>

Pt. 2: <http://www.youtube.com/watch?v=tqabqYZSUSk>

October 2010: Running Runners Run: Does Running Increase Harm to your knees?
<http://www.runningrunnersrun.com/2008/10/does-running-increase-harm-to-your.html>

September 21, 2010: Canadian Running Magazine: LAB RAT: Fresh Out of the Gait
<http://runningmagazine.ca/lab-rat-3d-gait-analysis/>

September 2, 2010 Innovation Anthology #336 Preventing Running Injuries
<http://www.innovationanthology.com/programs.php?id=352>

September 1, 2010: Canada.com: Push yourself, slowly training for a marathon stresses your body, so don't ignore the pain

<http://www.canada.com/Push+yourself+slowly/3473075/story.html>

also August 24, 2010: Montreal Gazette

<http://www.montrealgazette.com/Fitness+Push+yourself+slowly/3434930/story.html>

August 24, 2010: National Post: Training for a marathon? Be sure to listen to what your body is telling you (also on Calgary Herald)

<http://www.nationalpost.com/life/Training+marthon+sure+listen+what+your+body+telling/3437281/story.html#ixzz1750hLvQg>

June 25, 2010? Running Times: 3D Revolutionizes Gait Analysis

<http://www.runningtimes.com/Article.aspx?ArticleID=19945>

June 24, 2010. CBC News: Clinic gives runners 3D insight into injuries

<http://www.cbc.ca/canada/calgary/story/2010/06/24/calgary-running-clinic-injury-technique-gait-analysis.html>

June 10, 2010: Globe Sports: Jogging into the Unknown

<http://sudburyrocks.ca/archives/2010/06-10index.htm>

May 28, 2010: Breakfast TV: Live Host at the Running Injury Clinic (7am-10am)

May 20, 2010: Calgary Herald: The gaits of heaven and hell

<http://communities.canada.com/calgaryherald/blogs/calgaryrunner/archive/2010/05/20/draft.aspx>

July 2010. Research News: Keep on Moving.

<http://www.ahfmr.ab.ca/researchnews/2010/summer/keeponmoving/>

February 27, 2010: Science News: Running Barefoot Blunts Foot's force:

http://www.sciencenews.org/view/generic/id/55708/title/Running_barefoot_blunts_foot

April 6, 2010: CTV: Shin splints can lead to stress fractures

http://toronto.ctv.ca/servlet/an/local/CTVNews/20100406/CGY_Fracture_Stress_100406/Flashpoint

March 2010: Runner's World: The 10 Laws of Injury Prevention

http://www.runnersworld.com/article/0,7120,s6-241-285--13413-0,00.html?cm_mmc=Mag_URL--2010_March--Injuries--The_Laws_of_Perpetual_Motion

(reposted Ottawa Running Club: 10 Tips to Extend your Running Life:

http://www.soleresponsibility.org/runclub/tips/injuries_burfoot.htm)

February 17, 2010: Natural News: New Harvard Study shows advantages of barefoot

running: http://www.naturalnews.com/028178_barefoot_running.html

February 1, 2010 Calgary Herald: Running Your way fit

http://www.calgaryherald.com/story_print.html?id=2493444&sponsor=

December 2009. Running Times: Do Weak Hips Cause Pronation?

<http://runningtimes.com/Article.aspx?ArticleID=18359>

November 23, 2009: Womens Health: Hip Exercises to Prevent Running Injuries:

<http://www.womenshealthmag.com/fitness/hip-exercise>

September 9, 2009: Calgary Herald: Is Running Barefoot better for you?

<http://www.calgaryherald.com/Video+running+barefoot+better/1977408/story.html>

September 2009: Runner's World: All in the Hips

<http://www.runnersworld.com/article/0,7120,s6-241-286--13410-0,00.html>

May 20, 2009: Sports Injury Clinic: Weakened Hip Muscles May cause overuse Running

Injuries: <http://www.sportsinjuryclinic.net/blog/?p=80>

January 28, 2009: Metro News: High-tech injury clinic takes a three-dimensional

approach: <http://www.metronews.ca/calgary/local/article/173116>

January 27, 2009 CTV: Running injury clinic opens to the public

http://calgary.ctv.ca/servlet/an/local/CTVNews/20090127/CGY_Runner_Clinic_090127/20090127/Ghost%20Whisperer%20

January 2009: McCaig Institute: No Referral Knee Clinic:

<http://mccaiginstitute.com/education/patient-resources/>

December 28, 2008: That's fit: [The Truth About Running and Knees](http://www.thatsfit.ca/2008/12/28/the-truth-about-running-and-knees/)

<http://www.thatsfit.ca/2008/12/28/the-truth-about-running-and-knees/>

July 11, 2008: Dearborn Health: Will building my “core strength” prevent injuries?
<http://www.dearbornhealth.com/main.cfm?id=DB703739-C29A-0912-E2316E3C77B95782>

June 7, 2007, Calgary Herald - Straight from the hip
<http://www.runninginjuryclinic.com/news/straight-from-the-hip.html>