CURRICULUM VITAE

REED FERBER

Ph.D., ATC

Professor
Faculties of Kinesiology, Nursing, Cumming School of Medicine
University of Calgary
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May 2020

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)

GRANTS / AWARDS AND SCHOLARSHIPS

Total Direct Funding Awarded: $4,866,377 as PI - $1,573,247 as Co-I.

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: run^3 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: $1,569,700

- 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

- 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 - 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

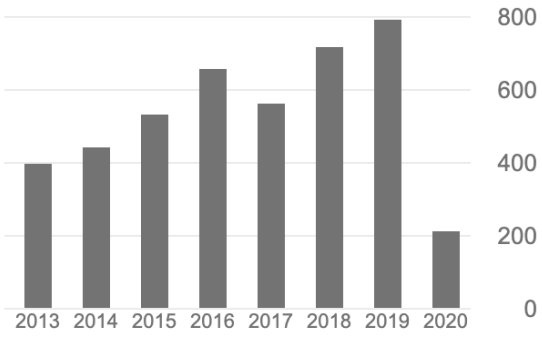
American Journal of Sports Medicine	Sports Medicine
Journal of Orthopaedic Research	Journal of Sport Rehabilitation
Sport Sciences and Medicine	Medicine & Science in Sports and Exercise
Journal of Applied Biomechanics	British Journal of Sports Medicine
Clinical Biomechanics	Clinical Journal of Sports 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

	All	Since 2015
Citations	5876	3484
h-index	39	31
i10-index	78	74



PUBLISHED MANUSCRIPTS (underline indicates Trainee)

105. Hamstra-Wright K, Courtney CA, Maiguel 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*. (In press).
104. Mousavi SH, Hijmans, JM, Moeini F, Rajabi R, **Ferber R**, Zwerver J, van der Worp H. (2020). Reliability and validity of a smartphone motion analysis app for lower limb kinematics during running. *Journal of Sports Sciences*. (In press).
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*. (In press).
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*. (In press).
101. Chan ZYS, Zhang JH, **Ferber R**, Shum G, Au IPH [1]; An WW, Cheung RTH. (2020). Effects of deceptive footwear condition on subjective comfort and running biomechanics. *Scandinavian Journal of Medicine and Science in Sports*. (In press).
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*. (In press).
99. Jauhiainen 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*. (In press).
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*. (In press).
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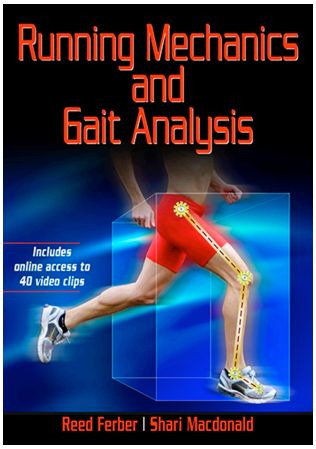

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PUBLISHED ABSTRACTS

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INVITED PRESENTATIONS

1. *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.
2. *Keynote Address*: What is the Future of Wearable Technology and IoT? Open Geospatial Consortium and SensorThings Summit 2019. Banff, Alberta. September, 2019.
3. *Invited Speaker*: Wearable Technology in Injury Prevention and Rehabilitation. Canadian Athletic Therapists' Association Annual Meeting. Calgary, Canada. June 2019.
4. Recent Research Using Wearable Sensor Data. Video Conference with Rothesay Netherwood School (New Brunswick). May 2019.
5. *Invited Speaker*: Wearable technology in injury prevention and rehabilitation. Canada West University Athletics Association (CWUAA) Medical Committee 2019 meeting. Calgary, Canada. Jan 2019.
6. *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.

7. *Invited Speaker*: Applying wearable sensor data to inform clinical care. UBC Wearables Research Symposium. University of British Columbia, Vancouver BC. December 2018.
8. *Invited Speaker:* How to use wearable sensor data in a meaningful way. UBC Wearables Public Symposium. Vancouver General Hospital, Vancouver BC. December 2018.
9. *Invited Speaker*: Wearable Technology to Reduce Foot and Ankle Running Injuries. Wood Forum – McCaig Institute. Calgary, Canada. October 2018.
10. *Keynote Presentation*: The Role of Wearable Technology in Clinical Practice. IVO World Congress, Toronto, Canada. April 2018.
11. Invited Speaker: The Research Evidence Behind an Effective Clinical Gait Analysis. IVO World Congress, Toronto, Canada. April 2018.
12. Invited Speaker: Evidence-Informed Approach to Treat Running-Related Injuries. Canada West University Athletics Association (CWUAA) Medical Committee 2017 meeting. Calgary, Canada. Dec 2017.
13. Workshop Organizer and Speaker: The Check Engine Light Project. Sensor Technology in Monitoring Movement (STiMM) Annual Workshop. Calgary, Canada. Nov 2017.
14. Invited Speaker and Panel Discussion: Faculty of Kinesiology Innovation Series: Wearable Technology. Calgary, Canada. June 2017.
15. Workshop: Running Injuries in the Hip and Back. University of Calgary Pain and MSK Clinical Pearls Combined Course. Calgary, Canada. March 2017.
16. *Keynote Presentation*: State of the Art in Gait Analysis. Pedorthic Association of Canada – Research Symposium. Calgary, Canada. October 2016.
17. Invited Speaker and Panel Discussion: Gender differences in gait mechanics – a UofC Perspective. Pedorthic Association of Canada – Research Symposium. Calgary, Canada. October 2016.
18. Invited Speaker: Keeping Your Knees in Shape: The science behind running injury prevention. University of Calgary Alumni Weekend. Calgary, Canada. April 2016.
19. Invited Speaker: I bought my research lab at Walmart. NerdNite Calgary. Calgary, Canada. April 2016.
20. Invited Speaker: How can biomechanics research improve clinical practice? University of Wisconsin – Milwaukee Department of Kinesiology Seminar (via Skype webinar). March 2016.
21. Invited Speaker: Prevention of running injuries and improving rehabilitation outcomes using gait analysis. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Florianapolis, Brazil. November 2015.
22. 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.
23. *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.
24. Invited Speaker: Science Behind Running Injury Prevention. University of Calgary Alumni Weekend. Calgary, Canada. June 2015.
25. Invited Speaker: Advances in technology to keep you running injury-free. Calgary Marathon Speaker Series. Calgary, Canada. June 2015.
26. Invited Speaker: Methods to Improve Biomechanical Data Collection. Faculty of Kinesiology Colloquium, Penn State University. State College, PA. April 2015.
27. *Keynote Address:* Lumbopelvic Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.

28. *Keynote Address:* Foot and Ankle Dysfunction for the Running Athlete. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
29. *Invited Workshop:* Footwear and Orthotic Assessment. Running Medicine Conference, University of Virginia. Charlottesville, VA. March 2015.
30. *Invited Speaker:* Running Injury Clinic: Integration of Research and Clinical Practice. Department of Kinesiology Seminar Series, University of Virginia. Charlottesville, VA. March 2015.
31. *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.
32. *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.
33. *Invited Panelist*: Biomechanical modeling and data mining. International Calgary Running Symposium. Calgary, Canada. August 2014.
34. *Invited Panelist*: Running Injuries. International Calgary Running Symposium. Calgary, Canada. August 2014.
35. *Invited Lecture*: Wearable Technology and Advances in Running Injury Prevention. Mountain Equipment Co-op Expert Speaker Series. June 2014. Calgary, AB.
36. *Invited Lecture:* Evidence-Based Approach to the Treatment of Running-Related Injuries. Canadian Athletic Therapists Association Annual Meeting. June 2014. Winnipeg, MB.
37. *Invited Lecture:* Advancements in Research and Technology for Injury Prevention and Rehabilitation. PanAm Clinic Foundation Research Rounds. June 2014. Winnipeg, MB.
38. Invited Lecture: Wearable Gadgets and Advances in Technology for Running Injury Prevention. CIBC Wood Gundy. Calgary, AB. June 2014.
39. *Keynote Address:* Prevention and treatment of common running injuries. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
40. *Invited Workshop*: Gait Analysis and Footwear prescription. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
41. *Invited Lecture*: Innovations in Technology: Lessons Learned From Masking Tape. Sports Medicine Council of Alberta (SMCA) Knowledge 2 Action Conference. May 2014, Canmore, AB.
42. *Keynote Address:* Innovation and Research Platforms for Campus Recreation. Western Canada Campus Recreation Conference. Feb 2014. Calgary, AB.
43. *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.
44. *Invited Lecture*: Biomechanics for Injury Prevention and Performance. Royal College of Chiropractic Sports Sciences (Canada): Run Faster Conference. Nov 2013. Whitby, ON.
45. *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.
46. *Invited Lecture*: Treatment of running injuries through hip muscle strengthening. Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.
47. *Invited Workshop*: Clinical assessment of hip muscle strength and flexibility.

Aspetar, Qatar Orthopaedic and Sports Medicine Hospital. Running Injury Conference. Sept, 2013. Doha, Qatar.

48. *Invited Lecture*: How does your exam measure up? Faculty of Nursing, University of Calgary. June 2013.
49. *Keynote Address:* What to do before you bench your training shoes: Barefoot Running 101. Certified Professional Trainers Network (CPTN) Conference. Toronto, ON. June 2013.
50. *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.
51. *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.
52. *Invited Panellist:* "Leadership through Sports and Coaching" panel: Leadership Exchange Conference. University of Calgary, Calgary, AB. April, 2013.
53. *Invited Workshop*: Clinical Assessment Using 3D Motion Analysis. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013
54. *Keynote Address:* Recent Research Behind Over-the-Counter Orthoses. Pedorthic Association of Canada Annual Symposium. Montreal, QC. April, 2013
55. *Invited Presentation*: Lessons learned from masking tape: disruptive innovation vs. invention. Student's Union Last Lecture Series. University of Calgary, March 2013.
56. *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.
57. *Invited Presentation*: Biomechanical predictors of knee osteoarthritis. Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark. Jan 2013.
58. *Invited Presentation*: New strategies for injured runners. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
59. Optimal foot kinetics during walking and running. Danish Annual Congress of Sports Medicine, Kolding, Denmark. Jan 2013.
60. *Keynote Address*: Student's Union Research Symposium Gala Event. Dec 2012.
61. *Invited Presentation*: Gait Analysis and Footwear prescription. The Running Event, Austin, TX. Dec 2012.
62. *Invited Presentation*: Indications for the use of orthoses in sports medicine. Faculty of Medicine, University of Calgary: Evening Course Program. Nov 2012.
63. Prevention of running injuries. Bloomsburg University of Pennsylvania Sports Medicine Association, Bloomsburg, PA. Nov 2012.
64. *Invited Presentation*: University of Calgary First Lecture Series: Orientation Week. September 2012.
65. *Keynote Address:* The Science Behind Gait Analysis and Footwear Prescription. Fleet Feet National Conference. Washington, DC. June 2012.
66. Clinical and Biomechanical Factors Associated with Running-Related Injuries. University of Calgary Honolulu Marathon Training Program Speaker Series. April 2012.
67. Advances in 3D Gait Technology for Running Injury Prevention. Nuffield Orthopaedic Centre, Oxford University. Oxford, UK. April 2012.
68. The Art of the Scientific Presentation: McCaig Institute Seminar Series. University of Calgary. Calgary, AB. March, 2012
69. Overview of the Running Injury Clinic: An Applied and Translational Research

Laboratory. McCaig Institute Seminar Series. University of Calgary. February, 2012
70. *Keynote Address:* Efficacy of Over-the-Counter Orthoses: Current Research and Best Practice Guidelines. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
71. Visual Gait Analysis. 2012 BioPed Annual Meeting. Toronto, ON. February 2012.
72. Staying active and healthy through clinical biomechanics research. University of Calgary Emeritus Association. January 2012.
73. New Paradigms in Sustainable Research. Ohio State University: Sports Medicine Movement Analysis & Performance Research. Columbus, OH. November 2011.
74. 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.
75. *Keynote Address*: Clinical and Biomechanical Factors Associated with Running-Related Injuries. Brazilian Sport Physical Therapy Biennial Conference (SONAFE). Maceio, Brazil. November 2011.
76. The Science Behind Running Injury Prevention. University of Calgary, Faculty of Medicine and Cenovus Energy: Living Well to 100 Series. Calgary, AB. September 2011.
77. 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
78. *Keynote Address:* Biomechanical Factors Associated with Running Related Injuries. 26th Annual University of Iowa Hawkeye Sports Medicine Symposium. Iowa City IO. Dec 2010.
79. 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.
80. 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.
81. Aetiology of Running Injuries. University of Calgary Sports Medicine Centre Clinic Rounds. December 2010.
82. Healthy aging and pain-free walking: what research has done for us. Rotary Club of Calgary. November 2010.
83. Development of 3D Gait Analysis for use in a Clinical Setting. The Health Research Transfer Network of Alberta (RTNA) Conference. Edmonton, Alberta. November 2010.
84. Running Injury Free. Royal Victoria Marathon Running Expo, Victoria, BC. October 2010.
85. *NATA Exchange Lecture:* Biomechanical Factors Associated with Running-Related Injuries. American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting, Providence RI. July 2010.
86. Clinical Assessment of Walking Gait Mechanics: Learning Lab. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.
87. *Feature Presentation*: Importance of the hip abductors for the resolution of lower extremity injuries. 61st NATA Annual Meeting & Clinical Symposia, Philadelphia, PA. June 2010.
88. *Keynote Presentation*: Biomechanical and Clinical Factors Associated With Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009
89. Exercise Prescription for Patellofemoral Pain Syndrome. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Saskatoon, Saskatchewan. Oct, 2009

90. The role of tibialis posterior in the control of midfoot and rearfoot mechanics. 12th Annual International PFOLA Conference, Atlanta, USA. October, 2009
91. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. 12th Annual International PFOLA Conference, Atlanta, USA. October, 2009
92. The pain in my knee is a pain in my butt. Big Rock Lecture Series, Calgary, Canada. September, 2009.
93. Advanced Track Seminar: Evaluation and Interpretation of Running Gait. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
94. Clinical Lecture: Clinical Gait Analysis and Proper Footwear Selection. 60th NATA Annual Meeting & Clinical Symposia, San Antonio, TX. June 2009
95. *Keynote Presentation*: The Inter-Relationship Between Hip Muscle Strength and Running Biomechanics. Pedorthic Association of Canada Annual Symposium. Kelowna British Columbia, April, 2009.
96. Examination of the Hip as a Contributing Factor of Lower Extremity Overuse Injuries. Pedorthic Association of Canada Annual Symposium. Kelowna, British Columbia, April, 2009.
97. *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
98. Exercise Prescription for Shin Splints and Stress Fractures. Saskatchewan Sports Medicine Council: Sports Med Saturday Symposium, Regina, Saskatchewan. March, 2009
99. 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
100. Stress Fracture Management & Treatment. 59th NATA Annual Meeting & Clinical Symposia, St. Louis, MO. June 2008
101. Pathomechanics of patellofemoral pain syndrome: the hip-down perspective. 11th Annual International PFOLA Conference, Vancouver, BC. October, 2008
102. Proprioceptive neuromuscular response to unexpected gait perturbation in ACL deficient individuals. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
103. Bilateral accommodations to anterior cruciate ligament during normal and perturbed gait. 8th International Conference in Orthopaedics, Biomechanics, Sports Rehabilitation. Assisi (Perugia), Italy. November 2004
104. *Keynote Presentation*: Foot structure and biomechanics of lower extremity injuries. Sutter Heath Group Santa Cruz Seminar, Santa Cruz, CA. October 2004.
105. Gait retraining for running relateds injuries. York University Athletic Therapy seminar. Toronto, Ontario, Canada. September, 2004.
106. *Keynote Presentation*: Foot Orthotics: Current Research in Rehabilitation. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.
107. Factors influencing the etiology and treatment of lower extremity musculoskeletal injuries. Canadian Athletic Therapists Association Annual Meeting. Antigonish, Nova Scotia, Canada. May 2004.
108. Neuromuscular adaptations in anterior cruciate ligament deficient individuals. Distinguished Lecture Series, UNLV Department of Kinesiology, Las Vegas, NV. March 2004.
109. 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

110. 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

111. Patellofemoral pain syndrome: Current trends and research in rehabilitation. Dynamic Rehabilitation Specialists Symposium. Calgary, Alberta, Canada. October 2003

112. Prehabilitation for the endurance athlete. Clinical Workshop: National Athletic Trainers Association National Meeting. St Louis, MO. June 2003

113. Gait accommodations to anterior cruciate ligament deficiency and surgery. School of Kinesiology and Health Science Graduate Seminar. York University, Toronto, Ontario, Canada. September 2002

114. Bilateral accommodations to anterior cruciate ligament deficiency and surgery. Biomechanics Invitational Seminar. Las Vegas, NV, USA. March 2002.

115. Accommodations to anterior cruciate ligament deficiency and surgery. Lane Athletic Trainers Association Annual Meeting. Eugene, OR, USA. March 2001.

116. Lower Extremity Joint Accommodations to Anterior Cruciate Ligament Dysfunction. Canadian Athletic Therapists Association Annual Meeting. Calgary, Alberta, Canada. May 2001.

TRAINEE/STUDENT SUPERVISION

- 2007 - 2013: Karen Kendall (Faculty Supervisor: PhD): Validation of the Trendelenburg Test for the purpose of optimal assessment and treatment of low back pain.
- 2007: Mike Green (Committee Member: MKin): The relationship between core strength and patellofemoral pain syndrome.
- 2008-2010: Melissa Rabitto (Faculty Supervisor: MSc): Posterior Tibial Tendon Dysfunction
- 2008 - 2011: Mike Pohl (Faculty Supervisor: PDF): The underlying mechanics between patellofemoral pain syndrome and patellofemoral osteoarthritis.
- 2009 - 2010: San Kyoon Park (Faculty Supervisor: PDF): Biomarkers associated with inflammation and the progression of knee osteoarthritis.
- 2009 - 2011: Katharina Schnackenburg (Committee Member: Msc): Bone Micro-architectural Parameters and Muscle Strength in Recreational Runners with and without Tibial Stress Fractures.
- 2009: Blayne Hettinga (Faculty Supervisor: PDF): Development of biomechanical methodologies for automated analysis.
- 2009 - 2011: Shawn Allen (Committee Member: MSc): Do Components of a Physiotherapist Delivered Pre-participation Examination in Male and Female Adolescent Soccer Players Predict Acute Lower Extremity Injuries in Soccer?
- 2009 - 2012: Bill Wannop (Committee Member: PhD): Biomechanical Model of Lower Extremity Injuries in High School Football.
- 2009 - 2013: Reginaldo Fukuchi (Faculty Supervisor: PhD): Changes in running mechanics across the lifespan: the relationship of chronic running to the development of osteoarthritis.
- 2010 - 2012: Whitney Kilback (Faculty Supervisor: MSc): Biomechanical variables associated with iliotibial band syndrome.
- 2010 - 2016: Ryan Leigh (Faculty Supervisor: PhD): The use of 3-dimensional gait analysis to understand pain, function, and mechanics in hip osteoarthritis patients.
- 2011 - 2013: Talia Webber (Faculty Supervisor: MSc): Between-limb gait and muscle asymmetry in runners with patellofemoral pain syndrome.
- 2011 – 2013: Shari Macdonald (Faculty Supervisor: MSc): The relationship between a medial heel whip and the free moment in distance runners.
- 2011 – 2013: Kathryn Mills (Faculty Supervisor: PDF): Developing real-time feedback tools for the treatment of knee osteoarthritis.
- 2012 – 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 - present: Lindsey Logan (Committee Member: MSc): Developing a measure for sense of effort in the KINARM Exoskeleton Robot
- 2016 - present: 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 - present: Nizam Ahamed (Faculty Supervisor: PDF): Sensor technology in monitoring human movement.
- 2018 – present: Andrew Pohl (Faculty Supervisor: PhD): Wearable technology to predict running-related injuries.
- 2018 – present: Ykje Piera (Committee Member: PhD): Maternal and fetal surveillance: citizen sensor, e-textiles, and ethics.

Primary Supervisor – 8 PDF, 7 PhD, 5 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
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