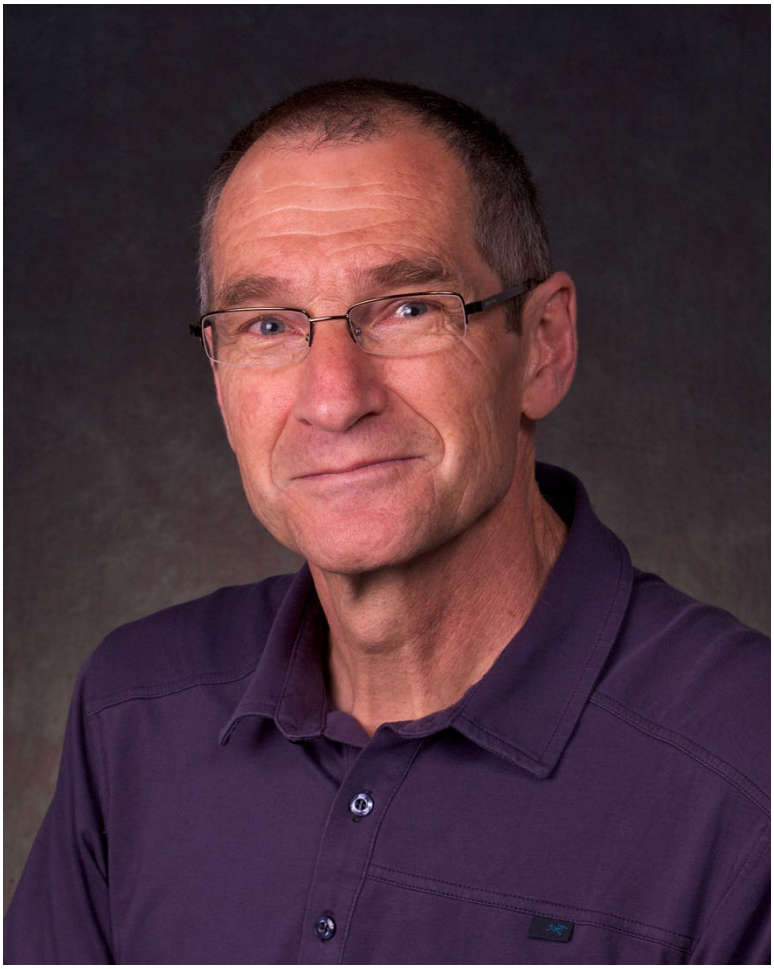
DR. WALTER HERZOG



CURRICULUM VITAE

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PERSONAL DATA

Name: Walter Herzog
Born: February 19, 1955, Leuggern, Switzerland
Citizenship: Swiss, Canadian

ACADEMIC RECORD

1971-1974	High School Baden
	Graduated with Matura Diploma C (Natural Sciences Branch)
1974-1977	Federal Technical Institute Zurich
	Graduated with Diploma I in Physical Education
1977-1978	Federal Technical Institute Zurich
	Graduated with Diploma II in Physical Education (Biomechanics)
1979-1985	University of Iowa, Iowa City
	Graduated with PhD degree in Biomechanics
1985-1987	The University of Calgary, Calgary
	Postdoctoral Fellow
1987-1991	The University of Calgary, Calgary
	Assistant Professor in Kinesiology
1987-1995	The University of Calgary, Calgary
	Adjunct Assistant Professor in Medicine (Surgery)
1991-1994	The University of Calgary, Calgary
	Associate Professor in Kinesiology
1991-2000	The University of Calgary, Calgary
	Adjunct Associate Professor in Engineering (Mechanical Engineering)
1994-present	The University of Calgary, Calgary
	Professor in Kinesiology (Biomechanics)
1994–1995	The University of Calgary, Calgary
	Acting Head, The Human Performance Laboratory
1995-2002	The University of Calgary, Calgary
	Adjunct Associate Professor in Medicine (Surgery)
1997-2009	The University of Calgary, Calgary
	Associate Dean Research, Faculty of Kinesiology
2000-2001	The University of Calgary, Calgary
	Adjunct Professor in Engineering (Mechanical Engineering)
2001-present	The University of Calgary, Calgary
	Professor, Engineering (Mechanical & Manufacturing Engineering)
2001-2014	The University of Calgary, Calgary
	Co-Director, Human Performance Laboratory
2001-2022	Canada Research Chair, Tier I for Cellular and Molecular Biomechanics
2002-2027	The University of Calgary, Calgary
	Adjunct Professor, Cumming School of Medicine, Department of Surgery
2009-present	The University of Calgary
	Adjunct Professor, Faculty of Veterinary Medicine, Department of Comparative Biology and Experimental Medicine
2014-present	The University of Calgary, Calgary
	Director of the Human Performance Laboratory
2018	February – June, Acting Dean, Faculty of Kinesiology
2021-2023	Adjunct Professor, Federal University of Santa Catarina, Florianopolis, Brazil
2021-2022	The University of Calgary, Calgary

	Associate Dean Research, Faculty of Kinesiology
2021-2026	Dr. Benno Nigg Chair in Biomechanics, Mobility and Longevity (Endowed Chair) The University of Calgary
Currently:	The University of Calgary, Calgary Professor, Kinesiology, Engineering, Medicine and Veterinary Medicine Director of the Human Performance Laboratory Canada Research Chair, Tier I for Cellular and Molecular Biomechanics Dr. Benno Nigg Chair in Biomechanics, Mobility and Longevity Associate Dean Research, Faculty of Kinesiology

RECENT ACCOMPLISHMENTS

2016-2019	Chairperson, 27th International Society of Biomechanics Conference hosted in Calgary in 2019
2015	Frontiers in Physiology, 11th most downloaded article among 12,500 published
2015	Inaugural Fellowship - International Society of Biomechanics

From AWARDS AND HONOURS

2022	University of Calgary Internationalization Career Achievement Award (UCIA)
2022	Killam Annual Professor, University of Calgary, Killam Trust
2021	ASTech Researcher of the Year Award, Alberta Science and Technology Leadership (ASTech) Foundation, sponsored by Innovate Calgary
2021	Outstanding Reviewer, CIHR College of Reviewers, 2020 Fall Grant Competition
2021	2020 Journal of Biomechanical Engineering (JBME) Editor's Choice Paper selected by ASME Journal of Biomechanical Engineering Editorial Board for manuscript "Direct validation of model-predicted muscle forces in the cat hindlimb during locomotion"
2021	Named Award "Dr. Walter Herzog Award for Excellence in Undergraduate Research", Brazilian Society for Biomechanics
2020	1st Prize and Award for "Excellence in Basic, Clinical, and Translational Science" form the Orthopaedic Research Society for manuscript "Multiparametric MR imaging reveals early cartilage degeneration at 2 and 8 weeks after ACL transection in a rabbit model"
2020	Outstanding Reviewer, CIHR College of Reviewers, 2019 Fall Grant Competition
2018	Killam Prize in Engineering from Canada Council for the Arts for body of work in musculoskeletal biomechanics
2017	Muybridge Career Award from the International Society of Biomechanics
2017	Geoffrey Dyson Career Award from the International Society of Biomechanics in Sports
2016	Elected Honorary Member, Chilean Association for Human Movement Science
2015	Kinesiology Outstanding Supervisor Award
2015	BME GP Outstanding Supervisor Award
2015	Hero of Biomechanics, awarded by student body of International Society of Biomechanics for supervisory excellence and support of students and scientists from economically developing countries
2015	Best Paper in Biomechanics, Korean Society for Precision Engineering 2016 Fall Conference
2009-2014	Natural Sciences and Engineering Research Council CREATE Training Programme for Biomedical Engineers for the 21st Century ($300,000/year)
2013	Induction into the Royal Society of Canada Fellowship
2013	GSA Supervisory Excellence Award Nomination (Student Nominated Finalist)
2012	Izaak Walton Killam Graduate Supervision & Mentoring Award
2011/2016	Canada Research Chair in Cellular and Molecular Biomechanics, Tier I
2011/2016	Killam Memorial Chair (2011 – 2021)
2011	American Society of Biomechanics, Elected Fellow
2009-2011	Killam Fellowship - Canada Council for the Arts

2010	Plenary Lecturer – World Congress on Biomechanics. Singapore
2010	Presidents Lecture - American College of Sports Medicine
2010	First prize, “Paper of highest public interest 2009” award, Sportorthopadie Sporttraumatologie
2009	Winner of the Faculty of Kinesiology Excellence in Teaching and Research Award
2009-2011	Past President-International Society of Biomechanics
2007-2009	President-International Society of Biomechanics
2006	Canadian Society for Biomechanics, Elected Fellow
2006	Canadian Society for Biomechanics, Career Award Presentation title: Muscle Mechanics: From Society to Cell and Back
2006	Winner, ASB Borelli Award, Premier Research Award of the American Society of Biomechanics Presentation, Title: Of myosins, muscles and mechanisms of contraction
2005	Visiting Scholar, Mayo Clinic, Rochester, MN
2004	Invited Workshop on Skeletal Muscle Mechanics, American Society of Biomechanics, Portland, Oregon
2004	Steven's Visiting Scholar, University of Florida, Gainesville, FL
2003	Winner of the Inaugural Award for Excellence in Graduate Student Supervision, University of Calgary
2003-2004	President, American Society of Biomechanics
2002	Winner of the President's Circle Award for Excellence and Creativity in Scientific Research, University of Calgary
2001	Inaugural Research Excellence Award, Faculty of Kinesiology, University of Calgary, Calgary, AB
1999	Winner of the Scott Haldeman Award and 1st prize in the international free paper competition for original research at the World Conference of Chiropractic fifth Congress, Auckland, New Zealand (with E. Suter, G. McMorland, R. Bray)
1999	The Killam Resident Fellowship (for excellence in scientific research)
1998	CCA Researcher of the Year Award for Basic Research on the Mechanics of the Spine
1998	Best scientific paper in the Journal of Applied Biomechanics for 1998 (with E. Suter, R. Bray, K. DeSouza)
1996	The Killam Resident Fellowship
1996	“JCCA Award of Excellence” for manuscript which made the most significant contribution between 1993-1995 (Category: Literature Reviews)
1995-1997	President, Canadian Society for Biomechanics
1997-1999	Past President, Canadian Society for Biomechanics
1995	First prize for spinal research done by a private practitioner, Chiropractic Centennial Conference, Washington, D.C. (with G. Kawchuk)
1995	CCA Centennial Research Award Lecture, Toronto, ON
1994	Winner of the International Conference of Spinal Manipulation Basic Science Research Award (with J. Gál)
1994	Winner of the Canadian Association for Sports Medicine Research Award (with M. Maitland)
1993	Winner of the CCA Centennial Convention Research Competition

KEYNOTE PRESENTATIONS

2022 (Total to date: 99)

November — International Women in Biomechanics Group, Virtual Event, Nov 2
Undergraduate involvement in biomechanics (keynote and panel discussion)

July — 12th Congress of Applied Neuromechanics, Porto Alegre, Brazil, Jul 22
The importance of undergraduate research: a gateway to a career in science and international research

June — 3rd Bio-Ergonomics Conference, Manaus, Brazil, Jun 17

Musculoskeletal injuries and diseases: mechanics and/or biology

2021

October — French Society for Biomechanics, St. Etienne, France (Virtual), Oct 25
The three-filament sarcomere model: titin-actin-myosin interaction and force production

August — The Science and Environmental Studies Biotechnology & Allied Sciences Symposium, Thunder Bay, OT (Virtual), August 27
The many faces of knee joint osteoarthritis

July — International Sport Sciences Conference, Lisbon, Portugal (virtual), July 21
Basic muscle mechanics and selected applications in sport

July — Society for Orthopedics and Traumatology in Sports Medicine, Basel, Switzerland, July 1
The role of titin in muscle contraction and active force production (virtual event)

June — King's College, London, UK, Virtual Event, Jun 16
Huxley's Missing Filament

March — 11th International Conference on Biomedical Engineering and Technology, Tokyo, Japan, Virtual Event, Mar 17
Recent observations on the molecular mechanisms of muscle contraction

2020

September — 10th International Conference on Biomedical Engineering and Technology, Tokyo, Japan, Sep 15
Titin: the forgotten filament in muscle contraction (Live virtual session)

July — 23rd Conference of the International Society for Electrophysiology and Kinesiology, Tokyo, Japan, Jul 12
Dos and don'ts in anacademic scientific career (Live virtual session)

2019

December — 17th International Conference of Biomedical Engineering, Singapore, Dec 11
Reflections in muscle: the evolution of a new paradigm for muscle contraction

July — International Society of Biomechanics in Sports, Oxford, Ohio, USA, Jul 22
Of muscle force magnitude, direction and synergies in sports

March — European Conference of Science in Skiing, Vuokatti, Finland, Mar 14
Cross country skiing as a model for human movement analysis

2018

September — International Society of Biomechanics in Sports, Auckland, New Zeeland, Sept 11
Keynote Panel: How to plan your research career

July — International Society of Electrophysiology and Kinesiology, Inaugural Carlo de Luca Lecture, Dublin, Ireland, Jul 1
Merging biomechanics and motor control

2017

September — European Society for Movement Analysis in Adults and Children (ESMAC), Trondheim, Norway, Sep 9
Basic muscle mechanics: from single sarcomeres to whole muscle function in health and disease

July — XXVII Congress of the International Society of Biomechanics, Brisbane, Australia, July 26
Reflections on muscle: of intuition, truth, serendipity and paradigms (Muybridge Award Lecture)

July — 23rd Congress of the European Society of Biomechanics, Seville, Spain, July 3
Do we need a new paradigm for muscle contraction?

June — 35th International Conference on Biomechanics in Sport, Cologne, Germany, June 15
From medals to muscles to molecules and back again (Dyson Award Lecture)

May — 17th Congress of the Brazilian Society of Biomechanics, Porto Alegre, Brazil, May 15
Muscle Mechanics made in Brazil

May — Applied Neuromechanics Congress, Porto Alegre, Brazil, May 14
The role of muscles in musculoskeletal health

February — 9th Conference of the Swiss Society for Sport Science, Zurich, Switzerland, Feb 9-10
Optimizing sport performance through muscle mechanics

2016

November — 1st Conference of the Chilean Association for Human Movement Science, Santiago de Chile, Nov 18
The effects of botox treatments on skeletal muscle structure and function

November — Inaugural Conference of the Chilean Association for Human Movement Sciences, Santiago de Chile, Nov 16
Molecular mechanisms of muscle contraction

November — 2nd Asia-Pacific Conference on Coaching Science, Shanghai, China, November 12
Muscle mechanics for optimizing sport performance: mechanics and energetics in cross-country skiing

September — Japanese Society of Biomechanics, Osaka, Japan, September 12
Muscle mechanics and muscle properties for optimizing sport performance

June — BANCOM (Biomechanics and Neural Control Movement), Columbus, Ohio, June 13
Muscle mechanics, energetics and plasticity: knowns, unknowns and future directions

May — International Conference on Evidence-Based Exercise Medicine for the Promotion of Lifelong Health, Seoul, Korea, May 19
Risk factors, prevention and treatment of knee osteoarthritis

2015

October — Chilean Chiropractic Research Society, Santiago, Chile, October 31
Vertebral artery stresses and strains during chiropractic neck manipulation

October — Chilean Chiropractic Research Society, Santiago, Chile, October 30
The biomechanics of spinal manipulation

October — Congress of the Norwegian Chiropractic Association, Trondheim Norway, October 23
The biomechanics of spinal manipulation

October — Congress of the Norwegian Chiropractic Association, Trondheim Norway, October 23
The stresses and strains experienced by the vertebral artery during spinal manipulation of the neck

August — 53rd Meeting of the Society for Natural Philosophy, Calgary, August 20
Muscle Mechanics across Structural Levels

May — Brazilian Society of Biomechanics, Florianopolis, Brazil, May 7
The role of muscles in joint health and osteoarthritis

May — Brazilian Society of Biomechanics, Florianopolis, Brazil, May 6
Mechanisms of muscle contraction: past, present and future

2014

September — 50 Years of Orthopedics Research, University of Basel, Basel Switzerland, September 24
The roles of muscles in joint biomechanics and osteoarthritis
European Muscle Symposium, Vienna, Austria, September 22
A new model for muscle contraction
German Society for Sports Sciences, Giessen, Germany, September 19
Functional muscle mechanics in sports

August — International Calgary Running Symposium, Calgary, AB, August 14
Running Research: an Outsider's Perspective

June — Canadian Chiropractic Protection Agency Legal Conference, Toronto, ON, June 7
Myths, perceptions and facts about cervical spinal manipulations

2013

August — XXIV Biennial International Society of Biomechanics Congress, Rio Grande de Norte, Brazil, August 5
The EMG-force relationship revisited: a story that began with A.C.S. (Tony) Guimaraes

July — International Society of Biomechanics in Sports Conference, Taipei, Taiwan, July 10
Functional Muscle Mechanics in Sports: Why Should We Care?

2012

November — Interdisciplinary Conference on Early Osteoarthritis, Basel, Switzerland, Sep 16
Biomechanical Aspects of Early OA: Implications for Clinical Practice

November — International Conference on Sport Biomechanics, Porto Allegre, Brazil
Muscle Properties and Sport Performance

2011

November — The 5th Asia-Pacific Conference on Exercise and Sports Science, Shanghai, Nov 1-4
The Role of Muscles in Optimizing Sport Performance

September — International Workshop on Muscle and Tendon Injury, Barcelona, Spain, September 28
Cellular, Molecular and Sarcomeric Injuries in Skeletal Muscles During Eccentric Contractions

September — International Conference on Bio Tibology, London, UK, September 20
On Cartilage, Chondrocytes and Synovial Fluid

June — 50 Years of Biomechanics, ETH Zurich, June 17
Biomechanics – travelling through time

June — Annual Conference of the International Society of Biomechanics in Sports, Porto, Portugal, June 27-Jul 1
Understanding Muscle Properties in Sports Performance Optimization

June — 5th Kuala Lumpur International Conference on Biomedical Engineering,
Kuala Lumpur, Malaysia, June 20-23
In-vivo Cartilage Mechano-Biology: How to Make Progress in Osteoarthritis Research

2010

August — 6th World Congress on Biomechanics, Singapore, August 1-6
Revisiting Mechanisms of Muscle Contraction

August — Polish Society of Biomechanics, Warsaw, Poland, August 25-28
Insights into the Mechanisms of Muscle Contraction

June — UK Physiological Society Conference, Manchester, UK, June 30-July 2
Mechanisms of muscle contraction

June — International Society of Electrophysiology and Kinesiology, Aalborg, Denmark, June 16-19
The role of muscles in sport performance: experimental and theoretical considerations in bicycling

June — American College of Sports Medicine, Annual Meeting, Baltimore, MD, June 2-5
Presidents Lecture – The Biomechanics of Muscle Contraction

2009

November — Australia and New Zealand Society of Biomechanics, Southport, Australia, November 30-December 1
Force Enhancement and Mechanisms of Skeletal Muscle Contraction

October — 2nd International Fascia Research Congress, Amsterdam, Netherlands, October 26-30
Effects of Manipulation of the Spine

July — XXIIth International Society of Biomechanics, Cape Town, South Africa, July 2-11
Presidents Lecture: Respect Thy Elders: or Lessons Learnt from the Literature

July — Progress in Motor Control (PMC), Marseille, France, July 23-25
The biomechanics of movement control

2008

December — The 13th International Conference on Biomedical Engineering, Singapore, December 3-6
Muscle and Joint Biomechanics in the Osteoarthritic Knee

October — Chinese Association of Biomechanics in Sports (CABS), Taiyuan, China, October 14-18
The Biomechanics of Muscle Contraction

July — The 26th International Conference on Biomechanics in Sports, Seoul, Korea, July 15-18
The Biomechanics of Muscle Contraction: Optimizing Sport Performance

June — Kuala Lumpur International Conference on Biomedical Engineering, Kuala Lumpur, June 25-28
The Biomechanics of Muscle Contraction: or Firing Biomechanics Research

2007

August — Swiss Sportsorthopaedic Society (GOTS), Engelberg, Switzerland, August 31-September 2
Muscle Biomechanics: From Macro to Micro

August — 5th IASTED International Conference on Biomechanics, Honolulu, HI, August 22-25
History dependent properties of skeletal muscle sarcomeres

July — XXIth Congress of International Society of Biomechanics, Taipei, Taiwan, July 1-5
History-Dependent Properties in Skeletal Muscle Contraction

May — 2nd Congress of the Greek (Hellenic) Society of Biomechanics, Athens, Greece, May 4-6
Force Depression and Force Enhancement in Skeletal Muscle Contraction

2006

September — American Society of Biomechanics, Borelli Award, Blacksburg, Virginia, September 6-9
Of Myosins, Muscles and Mechanisms of Contraction

August — Canadian Society for Biomechanics, Career Award, Waterloo, Ontario, August 16-19
Muscle Mechanics: From Society to Cell and Back

May — 2nd Northwest Biomechanics Symposium, University of British Columbia
Vancouver, BC, Canada, May 12-13
Force Enhancement and Mechanisms of Contraction in Skeletal Muscles

2005

September — 27th Annual International Conference of IEEE Engineering in Medicine and Biology Society, Shanghai, China,
Force Enhancement and Mechanisms of Contraction in Skeletal Muscle

September — International Association of Science and Technology for Development, Bendorm, Spain
Force Enhancement and Mechanisms of Contraction in Skeletal Muscle

August — 2005 KAHPERD International Sport Science Congress, Chuncheon, Korea
Considerations on Muscle Mechanics and Sport Performance

2004

August — Canadian Society for Biomechanics, Halifax, NS

July — European Society of Biomechanics, S Hertogenbosch, Netherlands

May — European Chiropractors' Union Convention, Helsinki, Finland

2003

October — BC Chiropractic Association, Nanaimo, BC

June — Novartis Foundation Symposium 260 Osteoarthritic Joint Pain, London, UK

May — European Workshop in Movement Science, Muenster, Germany

February — International Symposium on Significance of Musculoskeletal Soft Tissue on Preoperative Planning, Surgery and Healing, Berlin, Germany

January — World Federation of Chiropractic Annual Conference, Orlando, FL

2002

March — International Conference on Arthritis Research and Rehabilitation, St. Louis, MO

September — 12th International Conference in Mechanics in Medicine and Biology, Greece

September — 2002 CE of the Assoc of Swiss Chiropractors, Switzerland

2001

June — International Society of Biomechanics in Sports, San Francisco, CA

June — Brazilian Congress of Biomechanics, Gramado, Brazil

July — European Congress of Sport Science, Cologne, Germany

September — Biomechanica, Davos, Switzerland

1999

September — The 7th International Symposium in Sport and Medicine, Frankfurt, Germany

1998

September — The 14th Conference of the Japanese Society of Biomechanics, Kofu, Japan

September — The 11th International Biomechanics Seminar, Wroclaw, Poland

January	160th Conference of the Dutch Anatomical Society, Lunteren, the Netherlands

1997

August	16th International Society of Biomechanics, Muscle Mechanics Symposium, Tokyo, Japan
September	The 10th International Biomechanics Seminar, Goetheburg, Sweden

1994

March	LACC'S 7th Interdisciplinary Symposium on the Biomechanics of the Spine, Los Angeles, CA

1992

May	Canadian Chiropractic Association Convention, Regina, SK

1990

September	Second Annual Symposium on Low Back Pain, New York City, NY
February	Research Days Canadian Memorial College of Chiropractors, Toronto, ON
January	NASA Scientific Symposium on the Influence of Gravity and Activity on Muscle and Bone, Moffett Field, CA

INVITED PRESENTATIONS

2022 (Total to date: 208)

August — University of Nebraska, Omaha, Sep 23
Reflections on mechanisms of muscle contraction: Huxley's missing filament

August — North American Conference of Biomechanics, Ottawa, Aug 22
Skeletal muscle scaling: from sarcomeres to muscles and back

July — World Congress of Biomechanics, Taipei, Taiwan, Jul 13
Evolution of knowledge in muscle mechanics: molecular mechanisms of contraction

2021

December — University of Leuven, Belgium, (Virtual), Dec 15
Planning for a Career in Academic Scientific Research

August — The Science and Environmental Studies Biotechnology & Allied Sciences Symposium, Thunder Bay OT (Virtual), August 27
The past, present and future of biomechanics

July — Congress of the International Society of Biomechanics, Stockholm, Sweden (virtual), Jul 27
Peer-review in science: Essential or just a wastet of time, money and emotional capital?

July — Congress of the International Society of Biomechanics, Stockholm, Sweden (virtual), Jul 26
The distribution problem in biomechanics and motor control: how can we measure, predict and validate in vivo muscle forces?

May — Centre of Research in Myology, Sorbonne University, Paris, France (virtual), May 3
The forgotten filament: Titin's contribution to active force production in muscle

April — McCaig Institute, University of Calgary (virtual), April 21
Muscle contraction revisited: Huxley's missing protein

March — University of Sao Paulo, Brazil, Mar 30

Muscle mechanics: from molecules to function

February — Bringham Young University, Provo, Utah, USA, Feb 11
What's Titin got to do with it: evidence of Titin's contribution to force regulation in skeletal muscle

2020

December — Federal University of Santa Catarina, Virtual Event, Florianopolis, Brazil, Dec 2
Skeletal muscle mechanics: problems, questions and possible solutions

November — Federal University of Manaus, Manaus, Brazil, Nov 27
Fundamental principles of muscle mechanics

October — Federal University of Santa Catarina, Ararangua, Brazil, Oct 27
Osteoarthritis: One disease, many causes

October — IV Regional Health Innovation Symposium, Virtual Event, Urugaiana, Brazil, Oct 23
Secrets of successful international collaborations

September — International Society of Biomechanics in Sports Seminar Series, Virtual Event, United Kingdom, Sep 10
Basic muscle mechanics and selected applications in sports

July — Chilean Association for Human Movement Science, Virtual Event, Jul 30
Obesity, exercise and musculoskeletal rehabilitation

July — Neuromechanics Live, Brazilian Society of Biomechanics, Florianopolis, Brazil, Jul 8
Science is not about papers, it is about people

2019

December — Multidisciplinary Symposium of 2018 Killam Prize Winners, University of Montreal, Dec 5
Rhythm in biomechanics: from randomness to rhythm to synchrony

October — University of Sao Paulo, Brazil, Oct 25
Reflections on an academic research career

University of Sao Paulo, Ribeirao Preto, Brazil, Oct 22
Reflections on muscle: how do muscles contract?

September — Conference of the Academy for Cerebral Palsy and Developmental Medicine, Anaheim, CA, Sep 19
Why are spastic muscles weak?
Effects of botulinum toxin Type-A on skeletal muscle

August — University of Iowa, Iowa City, Aug 8
Obesity-induced osteoarthritis

August — 27th Congress of the International Society of Biomechanics and the 43rd Annual Meeting of the American Society of Biomechanics, Calgary, Aug 2
Reflections on biomechanics and muscles

August — 27th Congress of the International Society of Biomechanics and the 43rd Annual Meeting of the American Society of Biomechanics, Calgary, Aug 1
Animal models of osteoarthritis

April — University of Calgary Biomedical Engineering Conference, Calgary, Apr 11
How serendipity shaped my career in science

April McCaig Institute, Calgary, Apr 10
Animal models of osteoarthritis

2018

November China Winter Sport Science, Beijing, China, Nov 28
Considerations on Muscle Mechanics in Sports Performance

November China Winter Sport Management Centre, Beijing, China, Nov 28
Applications of Muscle Mechanics in Cross-Country Skiing

November Norwegian University for Science and Technology, Nov 9
Basic muscle mechanics and applications in sports

October Norwegian School of Sport Sciences, Oslo, Norway, Oct 16
Optimizing sport performance through muscle mechanics

October Oslo University for Sport, Norway, Oct 15
The non-inuitive properties of eccentric muscle action

October 5th International Autumn School on Movement Science, Berlin, Oct 9
A new look at skeletal muscle contraction

October Federal University of Santa Catarina, Ararangua, Brazil, Oct 6
Molecular mechanics of residual force enhancement in skeletal muscles

October Federal University of Santa Catarina, Florianopolis, Brazil, Oct 3
Pedal Force Direction Control in Cycling

September Nike Global Research Symposium, Portland, OR, Sep 26
How to integrate science into access to sport and improvement of high performance sport outcomes

August Canadian Society for Biomechanics Conference, Halifax, Aug 14
A historical perspective on the Canadian Society for Biomechanics

June Congress on Musculoskeletal Regeneration, Berlin, June 15
Muscle degeneration and regeneration in Cerebral Palsy and Obesity

May NIKE, Portland, USA, May 16
Sport performance evaluation using deterministic models

May Queens Univerversity, Annual Meeting of CONNECT! NSERC CREATE Training Program, May 7-8
Animal models in osteoarthritis

April University of Wisconsin, Madison, April 12 11
A new paradigm for muscle contraction

2017

November VI Brazilian Congress of Chiropractic, Florianopolis, Brazil, Nov 11
The stresses and strains experienced by cervical arteries during spinal manipulative treatments of the neck

November VI Brazilian Congress of Chiropractic, Florianopolis, Brazil, Nov 10
The biomechanics of spinal manipulation

October — GaitNeT Canada Symposium, Halifax, NS, Oct 25
Joint loading in osteoarthritis research

September — 46th European Muscle Conference, Potsdam, Germany, Sep 21
Residual force enhancement in skeletal muscles: facts and fancy

August — 41st Annual Meeting of the American Society of Biomechanics, Boulder CO, Aug 11
The distribution problem in biomechanics

July — European Conference of Sport Science, Essen, Germany, July 5
Residual force enhancement: neglected property in sport and health

April — OARSI World Congress on Osteoarthritis, Apr 27, Las Vegas, NV
What can we learn from animal models to inform OA prevention

April — Schulthess Clinic, Zurich, Switzerland, Apr 11
Clinical biomechanics of the musculoskeltal system

April — Federal Technical Institute, Zurich, Switzerland, Apr 10
The role of titin in sarcomere stability, injury prevention, and muscle contraction

March — Karl-Franzens University Graz, Austria, Mar 30
The past, present and future of muscle contraction

March — Orthopedic Research Society Congress, San Diego CA, Mar 21
Musculoskeletal imaging using confocal and multi-photon excitation microscopy

March — Nike Inc., Portland, OR, Mar 14
Academic Career Planning in Biomechanics

March — Federal Technical Institute Zurich, Switzerland, Mar 1
Optimizing sport performance through muscle mechanics

February — European Mechanics Society Colloquium on Advanced Experimental Methods in Tissue Biomechanics, Burg Warberg, Germany, Feb 12-16
Titin: Unheralded giant of muscle contraction

January — International Inflammation Workshop, Banff, Alberta, Jan 26-29
The effects of obesity, metabolic disease and chronic inflammation on musculoskeletal tissues

2016

November — Federal University of Santa Catarina, Florianopolis, Brazil, Nov 21
Why is eccentric force greater than concentric?

September — Sport Science and Fitness Congress, Cologne, Germany, Sep 24-25
Joint health and osteoarthritis: muscles, cells and molecules
Novel model of muscle contraction: the 3-filament sarcomere

September — 17th International Symposium: Biomechanics of Human Movement, Jyvaskyla, Finland, Sep 22
Why is eccentric force greater than concentric force?
Muscle stiffness and extensibility: the role of titin

August — Invited Lecture Series, University of Sao Paulo, Ribeirao Preto, Brazil, Aug 29 – Sep 1
Muscle Mechanics Part 1: Muscle structure and the sliding filament and cross-bridge theories of muscle

contraction
Muscle Mechanics Part 2: Mechanical properties of skeletal muscles: force-length and force-velocity relationships
Muscle Mechanics Part 3: Residual force enhancement in skeletal muscle contraction: the Role of Titin
Muscle Mechanics Part 4: Considerations on series elasticity in skeletal muscle contraction

August — University of Auckland, Bioengineering, Auckland NZ, Aug 16
Actin-Titin-Myosin Interaction in Eccentric Muscle Contraction

August — Korea-Canada KITECH Conference on Health and Wellness, Ottawa, ON, Aug 8
Considerations on joint health

August — American Society of Biomechanics, Fellows Symposium, Raleigh, NC, USA, Aug 3
Lessons learnt in biomechanics

July — World Congress of Computational Mechanics, Seoul, Korea, July 26
The three filament model of muscle contraction

June — University of Porto, Portugal, June 7
Considerations on the future of sport science research

April — Colorado School of Mines, Denver, CO, April 26
A new paradigm of muscle contraction

March — University of Waterloo, Waterloo, Ontario, March 24
Mechanisms of muscle contraction: past, present and future

February — Annual Meeting of the Association of Academic Physiatrists, Sacramento, CA, Feb 19
Effects of botulinum toxin on contractile properties of muscle

February — University of Bochum, Bochum, Germany, February 11
Muscle mechanics in high performance sport

2015

October — Chilean Chiropractic Research Society, Santiago, Chile, October 31
The Titin revolution

October — Chilean Chiropractic Research Society, Santiago, Chile, October 30
A new paradigm for muscle contraction

October — Chilean Society of Human Movement Science, Santiago, Chile, October 28
Past, Present and Future of Human Movement Science

October — Physiology Seminar Series, University of Calgary, Calgary, Canada, October 8
Muscle mechanics in high performance sports

October — Arthritis Evening, University of Calgary, Calgary, Canada, October 8
Osteoarthritis research: of muscles and joints

July — 9th European Solid Mechanics Conference, Madrid, Spain, July 9
Stability and history-dependent properties of skeletal muscle contraction

May — University of Santa Catarina, Florianopolis, Brazil, May 5
Muscle series elasticity: does it really matter?

April — The Korean Institute for Industrial Technology, Seoul Korea, April 21
The forgotten role of muscles in joint loading and osteoarthritis disease

2014

November — Invited Lecture Series, Santa Catarina, Brazil, November 17 - 21
The sliding filament and cross-bridge theory of muscle contraction
Mechanical properties of skeletal muscles
The role of titin in eccentric muscle contraction

October — 1st International Autumn School on Movement Science, Berlin, Germany, October 21
Eccentric muscle contraction: efficiency and modelling

September — European Muscle Conference, Workshop, Vienna, Austria, September 22
Mathematical modeling in biology and physiology

July — World Congress on Biomechanics, Boston, MA, July 6-12
A new model of skeletal muscle contraction (ISB Presidents Symposium)
The distribution problem in biomechanics (ISB Motor Control Symposium)
In vivo joint biomechanics (CSB Cartilage Symposium)
Vertebral artery biomechanics during cervical spinal manipulation (Spine Biomechanics Symposium)

April — OARSI Annual Conference, Paris, France, April 24
Contributions of animal models to Osteoarthritis research

2013

November — Clinical Neuro Sciences, Physiatry Rounds, Calgary, AB, Canada, November 13
The effects of botulinum toxin type-A on muscle structure

November — Sport Science Symposium on “Active Life”, Waseda University, Japan, November 28
Optimal Use of Muscles in Sports

October — Swiss Sports Orthopedics Society Conference, St. Gallen, Switzerland, October 31
Functional Muscle Mechanics in Sports

October — Annual Fall Meeting of the Norwegian Chiropractic Association, Oslo, Norway, October 16-17
The Biomechanics of Spinal Manipulation

October — Annual Fall Meeting of the Norwegian Chiropractic Association, Oslo, Norway, October 16-17
Stresses and Strains in Cervical Arteries During Spinal Manipulative Treatments

September — Chiropractic Consortium Research Symposium, Toronto, ON, September 27
A SWOT Analysis of Chiropractic Research in Canada

June — Technical University of Lisbon, Portugal, June 24
Muscle Series Elasticity: Theoretical and Experimental Considerations

June — Technical University of Lisbon, Portugal, June 25
Reflections on Sarcomere Length non-Uniformity and Muscle Contraction

June — USRP Undergraduate Research Day, University of Calgary, June 19
Mysteries of muscle contraction

May — University of Santa Catarina, Florianopolis, Brazil, May 8
Muscle mechanics in track cycling and cross-country skiing

2012

October — Pôle Science et génie du vivant, Symposium du GRSTB, École Polytechnique de Montréal, Montreal, QC, October 10
The role of muscles in joint biomechanics and osteoarthritis

July — Technical University of Lisbon, Lisbon, Portugal, July 5
New perspective on the sliding filament and cross-bridge theory

July — Technical University of Lisbon, Lisbon, Portugal, July 5
Titin, the multifunctional giant in eccentric muscle contraction

July — Karl Franzens University in Graz, Graz, Austria, July 10
Bringing together experimentalists and theoreticians on biological models and simulations

July — European Solid Mechanics Conference, Graz, Austria, July 9-10
Force enhancement in skeletal muscles: a role for titin?

June — Canadian Society for Biomechanics, Vancouver, BC
Skeletal Muscle Research Across Structural Levels

May — T32 Training Grant, University of Minnesota, St. Paul, Minnesota
The Role of Muscular Loading on Joint Integrity and Health

April — Strength and Conditioning Conference, Canadian Sport Centre Calgary, Calgary, AB
Muscle Properties and Performance in Sport

March — Annual General Meeting of the Alberta College of Chiropractors, Red Deer, AB, March 24
The Biomechanics of Spinal Manipulation

2011

September — Consortium of Chiropractic Research, Toronto, ON, September 24
What Are Our Strengths in Biomechanical Research?

June — Annual Conference of the International Society of Biomechanics and Sport
Porto, Portugal, June 27-July 1
Muscle Series Elasticity: Theoretical and Experimental Considerations

2010

November — University of Kentucky, Lexington, Kentucky, November 9-11
Mechanisms of muscle contraction: the three myofilament story

August — University of Western Australia, Perth, Australia, August 7-10
The role of titin in regulating skeletal muscle force

June — IRM symposium, Manchester University, Manchester, June 29
Mechanics of force transmission through tendons and aponeuroses

April — University of Southern California, Los Angeles, CA, April 26
Mechanisms of muscle contraction

2009

December — Griffith University, Brisbane, Australia, December 1
The role of muscles in joint loading and osteoarthritis

November	University of Melbourne, Melbourne, Australia, November 23 *Mechanisms of muscle contraction*

2008

July	European Congress of Sports Science, Estoril, Portugal, July 6-12 *Cross-bridge memory and history-dependent passive properties In vivo aponeurosis mechanics*
April	Alberta College and Association of Chiropractors, Red Deer, AB, April 5
February	Technischen Universität München, Munich, Germany, February 18-21 *How do muscles contract? Implications for in vivo muscle function*
January	Mathematical Biosciences Institute, Columbus, OH, January 14-18 *On the mechanics of sarcomeres*

2007

November	University of Cologne, Koeln, Germany, November 12-15 *Force enhancement and mechanisms of skeletal muscle contraction*
May	University of Athens, Athens, Greece, May 4-6 *The biomechanics of joints and muscles: from molecular insight to human understanding*
April	University of Manitoba, Visiting Scientist Seminar, Winnipeg, MB, April 18 *Force enhancement in skeletal muscles and implications for the mechanisms of contraction* Highlights of current research at the Human Performance Laboratory at the University of Calgary
February	University of Southern California, Los Angeles, CA, February 21-23 *Force enhancement and mechanisms of contraction in skeletal muscles: The role of muscles in joint biomechanics and osteoarthritis*
February	Rehabilitation Aimed at Muscle Performance Forum (RAMP), Vancouver, BC, February 26-27 *Force enhancement and mechanisms of skeletal muscle contraction*

2006

February	Northwestern Health Sciences University, Minneapolis, MN, February 2-3 *Biomechanics of spinal manipulation*
February	8th Annual Orthopaedic Research Symposium, Calgary, AB, February 8 *Is quadriceps weakness an independent risk factor for knee osteoarthritis?*
April	University of Colorado, Boulder, CO, April 12-14 *Force enhancement and mechanisms of contraction in skeletal muscle*
June	Charite, Musculoskeletal Research Centre, Berlin, Germany, June 28-30 *The role of muscles in joint regeneration*
June	Canadian Arthritis Network, Restoration of Joint Function, Vancouver, BC, June 8-9 *The role of muscles in joint health and osteoarthritis*
July	11th Annual Congress of the ECSS, Lausanne, Switzerland, July 5-8 *The role of tendon and aponeurosis in force transmission in uni-pennate muscles*
July	Fifth World Congress of Biomechanics, Munich, Germany, July 29-August 4 *Passive force enhancement or not (invited symposium)*
July	Fifth World Congress of Biomechanics, Munich, Germany, July 29-August 4 *In vivo and in situ force transmission along tendon and aponeurosis (Invited symposium)*
July	Fifth World Congress of Biomechanics, Munich, Germany, July 29-August 4 *Micro-structural models of articular cartilage*
July	Fifth World Congress of Biomechanics, Munich, Germany, July 29-August 4 *Does force enhancement increase with increasing stretch magnitudes?*

October	American Physiological Society Intersociety Conference: Comparative Physiology 2006: Integrating has Diversity, Virginia Beach, VA, October 8-11 *Role of titin in history dependent properties of muscle*

2005

December	National Institutes of Health, Bethesda, MD *Muscle mechanics*
September	NCMIC Defense Council Seminar, Des Moines, IA *The biomechanics of spinal manipulation*
August	National University, Chuncheon, Korea *Considerations on force enhancement and mechanisms of contraction in skeletal muscle*
August	Chosun University, Gwangju, Korea *Considerations on force enhancement and mechanisms of contraction in skeletal muscle*
August	Yonsei University, Seoul, Korea *Considerations on force enhancement and mechanisms of contraction in skeletal muscle*
May	The Athletic Therapy Association-40th CATA conference, Calgary, AB *Muscle function in healthy and injured joints*
April	Mayo Clinic, Biomedical Engineering Seminar, Rochester, NY *Considerations on articular cartilage and joint biomechanics*
February	University of Waterloo, Waterloo, ON *Considerations on series elasticity and storage/release of mechanical energy in skeletal muscle*

2004

November	University de Montreal, Montreal, QC
September	American Society of Biomechanics, Workshop on Skeletal Muscle Mechanics, Portland, OR
August	ICSSPE, 2004 Pre-Olympic Congress, Thessaloniki, Greece
July	European Congress of Sport Science, Clermont-Ferrand, France
June	Canadian Chiropractic Protective Agency, Toronto, ON
April	Stevens' Visiting Scholar, Gainsville, FL
March	Society of Experimental Biology (Rodge Woledge Retirement Symposium), Edinburgh, UK

2003

October	College of Chiropractors Fall Convention, Banff, AB
August	World Congress on Medical Physics and Biomedical Engineering, Sydney, Australia
July	International Society of Biomechanics, Dunedin, New Zealand
June	Canadian Congress of Applied Mechanics, University of Calgary, Calgary, AB
May	World Federation of Chiropractic Annual Conference, Orlando, FL
May	University of Glamorgan, Cardiff, UK
March	Society of Experimental Biology, Southampton University, Hampshire, UK

2002

September	The International Conference on Spinal Manipulation, Toronto, ON
August	World Congress of Biomechanics
June	The Calgary Chiropractic Society, Calgary, AB

2001

March	University of Waterloo, Waterloo, ON

2000

October	Calgary Chiropractic Society, Calgary, AB
October	Consortium of Canadian Chiropractic Research Centers, Toronto, ON
July	European College of Sport Sciences, Jyvaskyla, Finland
June	Canadian Chiropractic Association, Toronto, ON
June	American College of Sports Medicine, Indianapolis, IN
March	Society of Experimental Biology, Exeter University, UK

1999

November	5th World Congress on Sports and Sciences, Sydney, Australia
September	Federal Technical Institute in Zurich, Switzerland
June	Vrije University of Amsterdam, the Netherlands
March	University of California, Davis, CA
	LifeWest Chiropractic College, San Francisco, CA

1998

July	Technical University, Harburg, Germany
July	2nd International Conference on Spinal Manipulation, Vancouver, BC
August	World Conference of Biomechanics, Sapporo, Japan
May	Western States Chiropractic College, Portland, OR
April	The Canadian Bar Association, Calgary, AB
January	Department of Veterinary Medicine, University of Utrecht, Utrecht, The Netherlands
January	Sulzer Orthopaedics, Winterthur, Switzerland

1997

November	Physiology, Medicine, and Rehabilitation Departments, University of Manitoba, Winnipeg, MB
October	Third Spinal Pain Conference, Toronto, ON
August	International Society of Biomechanics, Muscle Mechanics Workshop, Tokyo, Japan

1996

August	Chairperson at the Canadian Society for Biomechanics Conference
	Skeletal Muscle Models Symposium
May	Musculoskeletal and Neuromuscular Seminars, University of Innsbruck, Austria
	Visiting Scientist Programme
April	Rehabilitation Institute of Chicago, IL
	Distinguished Lecture Series
March	Federal University of Rio Grande do Sul, Porto Alegre, Brazil
	Musculoskeletal Seminars

1995

September	Third IOC World Congress on Sport Sciences
June	CCA Centennial Research Award lecture, Toronto, ON

1994

November	Annual Convention of the Chiropractors of Saskatchewan
September	College of Chiropractors of Alberta, Fall Convention, Red Deer, AB
July	Second World Congress of Biomechanics, Amsterdam, the Netherlands

1993
October The Motor Vehicle Accident, the Law, and You, Calgary, AB

1992
October College of Chiropractors of Alberta, Annual Meeting, Jasper, BC
February Clinical Neurosciences Research Day, Calgary, AB

1991
October College of Chiropractors of Alberta, Banff, AB
April IEEE, Calgary Chapter, Calgary, AB
February University of Iowa, Iowa City, IA

1990
September First World Congress of Biomechanics, San Diego, CA

1989
November University of Iowa City, IA
June Canadian Federation of Biological Societies, Calgary, AB

1988
November IEEE Engineering in Medicine and Biology Society, New Orleans, LA
March Annual Meeting of the Alberta Chiropractic Association, Calgary, AB
February Research Days, Canadian Memorial Chiropractic College, Toronto, ON

1987
August Department of Kinesiology, University of California, Los Angeles, CA
May Department of Kinesiology, University of California, Los Angeles, CA
March Annual Meeting of the Alberta Chiropractic Association, Edmonton, AB
March Department of Medical Physiology, University of Calgary, Calgary, AB

1986
May Department of Surgery, University of Calgary, Calgary, AB
March Annual Meeting of the Alberta Chiropractic Association, Calgary, AB

1985
November Department of Surgery, University of Calgary, Calgary, AB
October Faculty of Medicine, University of Saskatchewan, Saskatoon, SK

1984
December Hawkeye Sports Medicine Symposium, Iowa City, IA
April Annual Riverfest Race Seminar, Iowa City, IA

PRESENTATIONS

2021 (Total to date: 78)
May Canadian Society for Biomechanics 2021
Mechanical response of human vertebral arteries to ex-vivo failure testing
(Gorrell L, Sawatsky A, Edwards BW, Herzog W/presenter)

2016	
December	ICSS International Congress on Science and Skiing, St. Christoph, Austria *Considerations on the cost of transport in cross-country skiing*
2015	
April	25th Congress of the International Society of Biomechanics *Deformation patterns of cracked articular cartilage under compression* *Early in situ site-specific changes in chondrocyte biomechanical responses due to a partial meniscectomy in the lateral compartment of the mature rabbit knee joint* *In vivo static and dynamic deformation of articular cartilage*
2014	
July	7th World Congress of Biomechanics, Boston, MA *Cartilage biomechanics: what really happens inside a joint?*
2013	
September	American Society of Biomechanics Conference, Omaha, Nebraska *Modulation of titin elasticity in working muscle to minimize energy loss in passive stretch-shorting cycles*
August	XXIV Congress of the International Society of Biomechanics, Natal, Brazil *Changes in protein concentration in murine knee joints with muscular contraction*
April	UofC Killam and Vanier Scholarship Recipients, “Excellence at Lunch” Presentation *Success through connections and collaborations*
2012	
August	American Society of Biomechanics, Gainsville, FL *Memorial Tribute to Prof. David Winter, PhD, PEng (June 1930-2012)*
June	Canadian Society for Biomechanics, Vancouver, BC *Energy cost of skeletal muscle force production is reduced in the force enhanced state (muscle)*
2011	
August	American Society of Biomechanics, Long Beach, CA
2010	
August	6th World Congress of Biomechanics, Singapore
2008	
September	Kerby Centre Health Fair, Calgary, AB *Bone and Joint Disease*
2007	
August	American Society of Biomechanics, Stanford, CA
July	International Society of Biomechanics, Taipei, Taiwan
2006	
July	5th World Congress of Biomechanics, Munich, Germany

2005	
August	American Society of Biomechanics, Cleveland, OH
August	2005 KAHPERD International Sport Science Congress, Chuncheon, Korea
February	Biophysical Society 49th Annual Meeting, Long Beach, CA
2004	
August	International Council of Sport Science and Physical Education, Aristotle University
August	Thirteenth Biennial Conference, Canadian Society for Biomechanics, Halifax, NS
July	European Society of Biomechanics Congress, S Hertogenbosch, The Netherlands
July	Annual Congress of the ECSS, Clermont-Ferrand, France
March	Annual Main Meeting of the Society for Experimental Biology
May	European Chiropractors' Union Convention, Helsinki, Finland
2003	
September	American Society of Biomechanics, Toledo, OH
August	World Congress on Medical Physics and Biomedical Engineering, Sydney, Australia
February	Biophysical Society, San Antonio, CA
February	Orthopaedic Research Society, New Orleans, CA
2002	
August	Banff Symposium on Skeletal Muscle, Banff, AB
April	Society of Experimental Biology, Swansea, UK
2001	
August	International Society of Biomechanics, Zurich, Switzerland
July	American Society of Biomechanics, San Diego, CA
May	World Conference of Chiropractic, Paris, France
April	Society for Experimental Biology, Canterbury, UK
2000	
October	Consortium of Canadian Chiropractic Research Centers, Toronto, ON
August	Canadian Society for Biomechanics, Montreal, QC
June	Canadian Orthopaedic Research Society, Edmonton, AB
1998	
August	North American Conference of Biomechanics, Waterloo, ON
August	The University of Utrecht, Faculty of Veterinary Medicine, Holland
August	3rd World Congress of Biomechanics, Sapporo, Japan
July	2nd International Workshop on Spinal Manipulation, Vancouver, BC
1997	
August	International Society of Biomechanics, Tokyo
April	Arthritis 2000 Conference, Montreal, QC
1996	
August	The Canadian Society for Biomechanics, Vancouver, BC
May	The Canadian Orthopaedic Research Society, Winnipeg, MB

1995	
November	The College of Chiropractors of Alberta
August	The Whitaker Foundation Conference, Salt Lake City, UT
July	International Society of Biomechanics, Finland
1993	
August	International Union of the Physiological Societies, Glasgow, Scotland
July	International Society of Biomechanics, Paris, France
May	Canadian Orthopaedic Research Society, Montreal, QC
April	International Conference on Spinal Manipulation, Montreal, QC
1992	
August	North American Conference on Biomechanics, Chicago, IL
May	International Conference on Spinal Manipulation, Chicago, IL
1991	
December	International Society of Biomechanics, Perth, Australia
October	Combined Meeting of the Orthopaedic Research Societies of the USA, Japan and Canada
May	World Federation of Chiropractic Meeting, Toronto, ON
April	International Conference on Spinal Manipulation, Washington, DC
1990	
August	Canadian Society for Biomechanics, Quebec City, QC
May	International Conference on Spinal Manipulation, Washington, DC
1989	
August	American Society of Biomechanics, Burlington, VT
June	International Society of Biomechanics, Los Angeles, CA
March	College of Chiropractors of Alberta, Edmonton, AB
March	International Conference on Spinal Manipulations, Washington, DC
1988	
November	Canadian Memorial Chiropractic College, Toronto, ON
November	University of Toronto, Toronto, ON
October	University of Waterloo, Waterloo, ON
September	American Society of Biomechanics, Urbana-Champaign, IL
August	Canadian Society for Biomechanics, Ottawa, ON
1987	
September	American Society of Biomechanics, Davis, CA
July	International Society of Biomechanics, Amsterdam, The Netherlands
January	International Olympic Committee, Medical Commission, Calgary, AB
1986	
August	North American Conference on Biomechanics, Montreal, QC
July	Novel Approaches to the Study of Motor Systems, Banff, AB

1985

June International Society of Biomechanics, Umea, Sweden

STUDENT AND POSTDOCTORAL AWARDS (SUPERVISOR: W. HERZOG)

2022

Bryan Yu	Winner, Young Investigator Award, Sport Innovation Summit, Vancouver
Riya Kalaga	Winner, Best Poster Presentation, McCaig Summer Student Symposium, Calgary
Chris Thiessen	2nd Place Poster Presentation, McCaig Summer Student Symposium, Calgary
Dhairy Desai	Winner, Best Presentaion in Biomechanics, BME summer student Symposium, Calgary
Baaba Otoo	Winner, CSB Graduate New Investigator Award – Doctoral Level, NACOB, Ottawa, August 2022
Sarah Abramovic	Finalist, CSB Graduate New Investigator Award – Master's Level, NACOB, Ottawa, August 2022

2021

Heron Medeiros	Winner, Young Investigator Award, Brazilian Society for Biomechanics Congress
Seong-won Han	Finalist, New Investigator Award, CSB, Montreal, Canada

2020

Jeff Ilg	Winner, Best Presentation in Biomechanics, BME Summer Student Symposium, Calgary, Canada

2019

Jeff Ilg	Winner, Podium Presentation, McCaig Summer Student Symposium, Calgary, Canada
Baaba Otoo	Winner, David Winter Young Investigator Award (Poster), ISB, Calgary, Canada
Kevin Boldt	Finalist, David Winter Young Investigator Award (Poster), ISB, Calgary, Canada
Kevin Boldt	Finalist, American Society of Biomechanics Journal of Biomechanics Award, ASB, Calgary, Canada
Jaqueline Rios	Winner, J. B. Hyne Research Innovation Award
Eng Kuan Moo	Winner, Promising Young Scientist Award, ISB, Calgary, Canada

2018

Sadhiq Nazeer	Winner, Faculty of Kinesiology Award, UofC Undergraduate Research Symposium
Nathaniel Morris	Winner, Gord Sleivert Young Investigator Award, SPort INnovation Summit, Montreal
Sherry Mahmood	Winner, Canadian Society for Biomechanics Best Biomechanics Poster, 19th Alberta Biomedical Engineering Conference, Banff, AB
Louise Neave	Winner, Best Oral Presentation in Biomechanics, 12th Annual Biomedical Engineering Undergraduate Summer Research Symposium, Calgary AB
Sherry Mahmood	Winner, Best Presentation, Session 1, McCaig Undergraduate Student Symposium, Calgary, AB
Jaqueline Rios	Winner, David Winter Doctoral Young Investigator Award, CSB, Halifax, NS
Kevin Boldt	Student Representative of the 2018-2020 Executive Council of the Canadian Society for Biomechanics
Scott Sibole	BME Graduate Program Director Leadership Award

2017

S.C. Jones	Poster Award for Schulich School of Engineering, SU UofC Undergraduate Symposium
K. Wu	Canadian Society of Biomechanics Best Oral Presentation Award, 18th Alberta Biomedical Engineering Conference, Banff, AB

S-w. Han	Finalist, David Winter Young Investigator Award, ISB, Brisbane, Australia
K. Boldt	Finalist, David Winter Young Investigator Award, ISB, Brisbane, Australia
J.L. Rios	3rd Place Poster Award, BJH SCN Obesity Workshop, Leduc, AB
Z. Abusara	Winner Meniscus Section Member Poster Award, ORS, San Diego CA
K. Collins	Winner Best Poster Award, 10th Banff International Inflammation Workshop, Banff, AB

2016

L. Ko	Winner Best Podium Presentation Award, 17th Annual Alberta Biomedical Engineering Conference, Banff, AB
A. Fukutani	Young Investigator Award, Japanese Society of Biomechanics, Osaka, Japan
G. MacDonald	Best Poster Award, CSB, Hamilton, ON
K. Collins	J. B. Hyne Research Innovation Award
K. Boldt	Finalist of NDI Masters Student Award Competition at CSB Hamilton, ON

2015

K. Boldt	Certified Member Presentation Award, CSEP, Hamilton, ON
E.K. Moo	Finalist of New Investigator Recognition Award at ORS Las Vegas, USA
K. Kaiser	David Winter Young Award, Podium Presentation at ISB Glasgow, UK
G. Power	Finalist for David Winter Young Award, Poster Presentation at ISB Glasgow, UK
R. Fortuna	J. B. Hyne Research Innovation Award
M. Jordan	Young Investigator Award for Sport Innovation Summit at Toronto, ON

2014

G. Power	Banting Postdoctoral Award and Honorary Killam Laureate
K. Powers	First Place, Podium Presentation Award for the 2014 AB BME Conference, Banff, AB
R. Fortuna	Second Place, Podium Presentation Award for the 2014 AB BME Conference, Banff, AB
M. Engel	UofC Clearest Message Poster Award at the 2014 AB BME Conference, Banff, AB
K. Johnston	CSB Poster Prize at the 2014 AB BME Conference, Banff, AB
K. Johnston	CSB 2014 MSc Young Investigator Award, WCB, Boston, MA
K. Powers	CSB 2014 PhD Young Investigator Award, WCB, Boston, MA
V. Wang	Outstanding Presentation Award at the National Undergraduate Kinesiology Research Conference, Toronto, Ontario, presentation

2013

S. Crooks	Graduate Students' Association Award 2013, presentation
E.K. Moo	David Winter Young Investigator Award at the ISB Congress 2013, presentation
B. Hisey	David Winter Young Investigator Award at the ISB Congress 2013, poster
G. Power	Emerging Scientist Award at the ISB Congress 2013, presentation
G. Power	Banting Postdoctoral Fellowship University of Calgary Finalist
C. Michelutti	BME Undergraduate Award for Originality, Presentation and Scientific Content
C. Tang	Finalist for ISB's Clinical Biomechanics Award 2013
K. Collins	Student Representative of the 2013-2015 Executive Council of the International Society of Biomechanics
M. Yamamoto	Winner of Best Physiology Presentation Award at the National Undergrad Symposium, Toronto
M. Yamamoto	Winner of the Institute of Engineering and Technology Competition for the Calgary Region, representing the Calgary Region at the North American Final in Toronto in August 2013

2012

M. DuVall PhD	First Place in the Institute of Engineering and Technology Competition Semi Finals
B. Hisey PhD	Acceptance into the Leader's in Medicine Program
R. Fortuna PhD	Finalist for the ASB Clinical Biomechanics Award

A. Panchangam PhD	Winner of the CSB New Investigator Award
M. Yamamoto	Winner of the CSB Young Investigator Award
J. Herzog	Finalist for the CSB Young Investigator Award
Z. Abusara PhD	Finalist for the CSB New Investigator Award
R. Madden MSc	Finalist for the Biomedical Engineering Award
N. Abughazaleh MSc	Finalist for the Biomedical Engineering Award

2011

T. Leonard PhD	Winner of the 2010-2011 WAGS/UMI Innovation in Technology Award
M. Yamamoto	Alumni Award- Excellence in Research, 6th Annual Undergraduate Research Symposium Undergraduate
S.K. Han PDoc	Journal of Biomechanics Award – 35th Annual Meeting of the American Society of Biomechanics,
A. Leumann PDoc	Michael-Jaeger Award (2nd place) Swiss Orthopedics Congress for "The 12 Year Natural History of Osteoarthritis in the ACL Transected Cat Knee"
Z. Abusara PDoc	Finalist for the Young Investigator Award of the XXIIIrd Congress of the International Society of Biomechanics
T. Leonard PhD	J.B. Hyne Research Innovation Award, University of Calgary
R. Madden MSc	Winner of the best research presentation award, AHFMR OA Team grant meeting

2010

M Yaraskavitch	Poster prize runner up for Leaders in Medicine Conference
C Tang MSc	Finalist for the NDI Young Investigator Award of the Canadian Society for Biomechanics

2009

B Hisey PhD	Winner of the Clearest Message poster award at the 10th Annual Alberta Biomedical Engineering Conference
C Logan	Winner of the Most Creative poster award at the 10th Annual Alberta Biomedical Engineering Conference

2008

A Sawatsky Undergrad	Finalist for the Journal of Biomechanics Award of the North American Congress on Biomechanics
E-J Lee PhD	Finalist for the NDI New Investigator Award of the North American Congress on Biomechanics
E Szabo MSc	Finalist for the NDI New Investigator Award of the North American Congress on Biomechanics
M Yaraskavitch MSc	Finalist for the NDI New Investigator Award of the North American Congress on Biomechanics
SK Han PhD	Finalist for the NDI New Investigator Award of the North American Congress on Biomechanics
V Joumaa PDoc	Winner of the NDI New Investigator Award of the North American Congress on Biomechanics
T Leonard PhD	Winner of the NDI New Investigator Award of the North American Congress on Biomechanics
B Hisey MSc	Winner of the NDI New Investigator Award of the North American Congress on Biomechanics

2007

N Austin MSc	Winner of the Student's Union Undergraduate Research Symposium, Provost's Award
M Blaauboer	Winner of The Organon Young Talent Award
V Joumaa PDoc	Finalist for the Journal of Biomechanics award of the American Society of Biomechanics
S Federico PDoc	Winner of the Postdoctoral Young Scientist Award of the American Society of Biomechanics

2006

SK Han PhD	Canadian Society for Biomechanics award for Best Poster at the Biomedical Engineering Conference, Banff, AB

D Bourne PhD	Canadian Society for Biomechanics award for best podium presentation at the Biomedical Engineering Conference, Banff, AB
T Leonard MSc	2nd place winner for the 6th International Muscle Energetics Conference, Banff, Poster competition
A Mehta MSc	2nd place winner for the 6th International Muscle Energetics Conference, Banff, Poster competition
V Joumaa PDoc	Finalist for the CSB Young Investigator Award
R Korhonen PDoc	Finalist for the CSB Young Investigator Award
D Bourne PhD	Finalist for the CSB Young Investigator Award
EJ Lee PhD	Kinesiology Graduate Student Science Presentation Award

2005

T Butterfield PhD	Winner of the National Athletic Trainers' Association Award for outstanding doctoral dissertation
EJ Lee PhD	Winner of the Journal of Biomechanics Award of the International Society of Biomechanics

2004

D Peterson PhD	Winner of the New Investigator's Award of the Canadian Society for Biomechanics
T Leonard MSc	Winner of the New Investigator's Award of the Canadian Society for Biomechanics
D Longino MSc	John Smith and Laura May Gardner Memorial Endowment Award given at the 22nd Annual Surgeons' Day for best Basic Science Research

2003

HD Lee PhD	Winner of the J.B. Hyne Research Innovation Award for Excellence in Scientific Research
T Butterfield PhD	Finalist for the Journal of Biomechanics Award of the American Society of Biomechanics
S Craig MSc	2nd place in the Young Investigator's Award of the International Society of Biomechanics
M Kaya PhD	Finalists for the Young Investigator's Award of the International Society of Biomechanics
S Craig MSc	Finalists for the Young Investigator's Award of the International Society of Biomechanics
D Corr	Finalists for the Young Investigator's Award of the International Society of Biomechanics

2002

R Schachar MSc	Winner of the Young Investigator's Award of the Canadian Society for Biomechanics

2000

J Archambault PhD	Winner of the New Investigator's Award of the Canadian Society for Biomechanics, PDoc/PhD category
A Clark PhD	Finalists for the New Investigator's Award of the Canadian Society for Biomechanics
M Kaya PhD	Finalists for the New Investigator's Award of the Canadian Society for Biomechanics
S Couillard MSc	Finalists for the New Investigator's Award of the Canadian Society for Biomechanics
J Wu PDoc	Winner of the American Society of Biomechanics postdoctoral young scientist award

1999

A Clark PhD	Finalist of the Young Investigator Award of the International Society of Biomechanics
W Carvalho MSc	Finalist of the Young Investigator Award of the International Society of Biomechanics
S Craig MSc	Canadian Society for Exercise Physiology Undergraduate student award for excellence in research project

1998

T Koh PhD	Finalist of the New Investigator Award of the North American Conference of Biomechanics

HD Lee MSc	Finalist of the New Investigator Award of the North American Conference of Biomechanics

1996

E Hasler PhD	Finalist of the New Investigator Award of the Canadian Society for Biomechanics

1995

B Prilutsky PDoc	Winner of the post-doctoral young scientist award of the American Society of Biomechanics

1994

JG Brooks MSc	Winner of the New Investigator Award of the Canadian Society for Biomechanics
T Allinger PhD	Finalist of the New Investigator Award of the Canadian Society for Biomechanics

FUNCTIONS IN FEDERAL GRANT REVIEW BOARDS

2012-2014	Chair, CIHR Movement & Exercise Review Committee
2011-2012	Member, CIHR Movement & Exercise Review Committee
2008-2010	Chair, CIHR Biomedical Engineering Review Committee
2005-2008	Member-CIHR Biomedical Engineering Review panel
1995-1998	Member, Medical Research Council of Canada (MRC)-Biomedical Engineering Grant Review Committee
1996-1999	Member, Natural Sciences and Engineering Research Council (Natural Sciences and Engineering Research Council) - Scholarships and Fellowships Selection Committee for the Life Sciences and Psychology

MEMBERSHIP AND FUNCTIONS IN PROFESSIONAL ORGANIZATIONS

Present

2018- present	Strategic Committee for the Interdisciplinary Science and Innovation Centre (ISIC) project, managed by Campus Facilities Development
2012-present	Rintoul Chair Advisory Committee, Cumming School of Medicine, University of Calgary
2013-present	Arthritis Society Chair in Rheumatic Disease/Rheumatology Advisory Committee, Cumming School of Medicine, University of Calgary
2019-present	International Society of Electrophysiology and Kinesiology
2018-present	Co-Leader Human Mobility Group, Biomedical Engineering Calgary Initiative
2017-present	Chair, SUPPORT: Training and Professional Development, University of Calgary
2017-present	Member, Brazilian Society of Biomechanics
2016- present	Elected Honorary Member, Chilean Association for Human Movement Science
2014-present	Member, Osteoarthritis Research Society International
2013-present	Fellow, Royal Society of Canada
2013-present	Member, European College of Sport Science
2012-present	Member, University Strategic Biomedical Engineering Committee, University of Calgary
2010-present	Member, American Physiological Society
2004-present	Founder and Selection Chair, Jim Hay Memorial Award, American Society of Biomechanics (Career Award for Biomechanics in the Exercise and Sports Sciences Field)
2004-present	Member, European Society of Biomechanics
2000-present	Member, International Society of Biomechanics
2000-present	Member, Orthopaedic Research Society, American Academy of Orthopaedic Surgeons
1995-present	Member, Biophysical Society
1993-present	Member, American Association for the Advancement of Science
1987-present	Member, Canadian Society for Biomechanics

1983-present	Member, American Society of Biomechanics

Past

2016-2022	Member, Nike Sport Research Advisory Board
2017-2021	Vice-Chair, Motor Control Group, International Society of Biomechanics
2021	External Review Committee Member, Faculty of Movement Science, University of Leuven, Belgium
2015-2019	Member, McCaig Institute for Bone and Joint Health Executive Council
2014-2019	Member, Regional Advisory Council for Germany, University of Calgary's International Strategy Team
2012-2019	Member, Grant Submission SUPPORT Team, University of Calgary
2014-2019	Member, Executive Committee of UCARE, Animal Resources Committee
2016-2019	External Assessor, Biomedical Engineering Program at the University of Malaya
2011-2018	International Advidory Board, CIPER (Interdisciplinary Centre for the Study of Human Performance), University of Lisbon
2014-2017	NAU Keck Foundation, Program Committee Member
2013-2017	Member, Faculty Promotion Committee & Research and Scholarly Leave Committee, UofC
2015-2016	Chair, Program Advisory Committee for NSERC CREATE SUPPORT
2014-2016	Faculty Counsil Representative, The Office of the Chancellor and Senate, UofC
2016	International Evaluation Team, Federal Technical Institute, Zurich (Dept. of Health Science and Technology)
2015	Member, ISB-EDC Congress Travel Grant Committee
2014-2015	Director, Benno Nigg Chair Committee
2015	Member, ASB Fellows Nomination Committee
2014-2015	Member, BME Interim Steering Committee, University of Calgary
2014-2015	Member, Graduate Education Committee, University of Calgary
2014	Member, Strategic Research and Innovation Committee, University of Calgary
2014	Member, Program Advisory Committee NSERC CREATE Program, Dr. D. Rancourt
2011-2014	External Assessor, Biomedical Engineering Program at the University of Malaya
2014	Member, Nomination Committee of the World Congress on Biomechanics
2014	Reviewer, EMBC 2014 Annual Conference Paper Reviewer
2014	Advisor, EU Research Programme, Horizon2020, entitled ALTER-AGEING
2014	Member, Borelli Award Selection Committee for ISB 2015
2014	Scientific Committee Member of the International Conference of the Polish Society of Biomechanics 2014, Lodz, Poland
2014	Track Chair and Organizer for the Muscle and Motor Control Sessions, World Congress of Biomechanics 2014, Boston
2012-2014	Member, GFC Steering Committee, University of Calgary
2011-2014	Member, Life and Environmental Sciences Animal Care Committee (LESACC)
2012-2013	Member, Salary Anomalies Advisory Committee (SAAC), University of Calgary
2013	Elected Fellow, Kinesiology Faculty Representative for Education, University of Calgary
2013	Chair, 2013 ISB Scientific Program Coordinator
2013	Reviewer, 2013 ASB Clinical Biomechanics Award
2013	Member, International Advisory Board for the 15th ICBME Meeting, Singapore
2013	Member, Bidding Committee Member for the ESB2016 in Lyon
2013	Member, International Congress on Sports Science Research Committee
2013	Mentor, ISBS Student Mentor Program (SMP) 2013
2013	Reviewer, ISBS 2013 Scientific Judging Committee
2012	Scientific Committee Member, The 19th European Society of Biomechanics Congress
2012	Reviewer, CSB 2012 President's Award for best poster
2012	Reviewer, ESMC 2012, Oral Young Researcher Award

2012	Member, American Society of Biomechanics Annual Meeting Review and Program Committee
2012	Referee, Engineering in Medicine and Biology Conference Management System for EMBC ‘12
2012	Member, Research Overhead and Indirect Costs Policy Team, University of Calgary
1999-2011	Executive Board Member, International Society of Biomechanics
2011	Rintoul Chair in Bone & Joint Research, University of Calgary, Selection committee
2011	Faculty of Graduate Studies, University of Calgary, Council representative
2011	Markin USRP in Health and Wellness, Vitamin D Debate, Chairperson
2011	International Advisory Board, Interdisciplinary Centre for the Study of Human Performance, Faculty of Human Kinetics, Technical University of Lisbon, Portugal
2010	Member, International Review Committee, Federal Technical Institute, Zurich (Biology Dept)
2010	Member, Advisory Search Committee, Provost and Vice-President (Academic), University of Calgary
2010	Member, The American Physiological Society
2009	Member, Exercise Physiology Selection Committee, University of Calgary
2009-2013	Advisory Review Committee Member, Arthritis Society Chair in Rheumatic Diseases/Rheumatology
2009	Member, Internal grant review committee, Natural Sciences and Engineering Research Council CREATE, University of Calgary
2008-2009	Member, Steering Committee, BME Grad Program, University of Calgary
2008	Member, Selection Committee, Faculty of Veterinary Medicine, Assistant professors
2008	Member, Selection Committee for Faculty of Kinesiology, Biostatistician position
2008	Executive Committee Member of the Biomedical Engineering Initiative, University of Calgary
2008	Member, American Society of Biomechanics Awards committee
2007	External Examining Committee Member, Department of Chiropractic, Durban University of Technology, Durban, South Africa
2007	Member, External Advisory Panel, University of Iowa
2007-2008	President, International Society of Biomechanics
2007-2008	Member, Advisory Review Committee, Arthritis Society Chair in Rheumatic Diseases/Rheumatology
2007	Conference Chair, IASTED International Conference on Biomechanics, Honolulu
2007	Member, International Society of Biomechanics Clinical Biomechanics Award Committee
2007	Member, External Advisory Board, NIH
2006	Chair, Olympic Oval Endowment Fund
2006	Chair, CFI Leading Edge and New Initiatives Funds (LEF and NIF)
2006	Member, Calgary Health Research Advisory Committee
2006	Chair, NIH Leading Edge and New Initiatives Fund
2005	Member, Alberta Heritage Foundation for Health Research Studentship Advisory Committee
2005	Member, External Advisory Panel, NIH
2005	Member, LSRS Committee, University of Calgary
2005	Member, Steering Committee for Skeletal Muscle Research, CIHR/IMHA
2005-2007	President-Elect, International Society of Biomechanics
2004-2005	Member, Selection Committee for Dean, Faculty of Kinesiology
2004-2006	Member, Scientific Organizing Committee, 5th World Congress of Biomechanics
2004-2005	Scientific Committee Member, European Workshop on Movement Science
2004-2005	Past-President, American Society of Biomechanics
2003-2006	Advisory Board, Singapore Fitness Professionals Federation
2003-2004	President, American Society of Biomechanics
2003	Member, International Review Committee, ISB Congress 2003
2002-2003	President Elect, American Society of Biomechanics
2004	Member, University Veterinarian Advisory Selection Committee
2004	Member, Scientific Steering Committee for the Microscopy and Imaging Facility (MIF)

2004	Member, International Program Committee for IASTED International Conference on Biomechanics, Honolulu
2004	Member, European Society of Biomechanics
2004	Member, Review committee for Assist Prof position, Kinesiology, University of Calgary
2002	Academic Review Committee Member, D. Paskevich
2002	Member, World Council of Biomechanics
2001-2003	Izaak Walton Killam Memorial Scholarship Committee Member, University of Calgary
2000-2002	Scientific Programme Chair, World Conference of Biomechanics, Calgary, 2002
2001-2002	Conference Chair, Banff Symposium on Skeletal Muscle, Banff, AB, 2002
2001	Programme Policy Review Committee, Killam Trust
2001	CIHR Circle Member
2001-2002	Partnership Programme Advisory Committee, University of Calgary
2000-2001	Scientific Programme Chair, American Society of Biomechanics Conference 2001
1993-2000	Member, Medical Science Graduate Education Committee, the University of Calgary
1991-2000	Board Member, Olympic Oval Endowment Fund
1999-2000	Selection Committee, Department Head in Physics and Astronomy, University of Calgary
1999-2000	Member, Scientific Committee of the combined conference of the Societé de Biomechanique and the Canadian Society for Biomechanics, Montréal 2000
1999-2002	Executive Board Member, American Society of Biomechanics
1998-2002	Member, University Grants Review Committee
1998-2001	Member, Biomedical Engineering Curriculum Review Committee
1998	Jury Member, World Biomechanics Promotie prijs
1982-1993	Member, American College of Sports Medicine
1987-1993	Member, Sports Medicine Society of Calgary
1990-1996	Member, Universities Coordinating Council
1991-1992	Secretary Treasurer, Canadian Society for Biomechanics
1992	Chairman, New Investigator's Award Committee, Canadian Society for Biomechanics
1992-1994	Conference Chair, Biannual Meeting of the Canadian Society for Biomechanics
1993-1995	Member, Research Policy Committee, The University of Calgary
1995-1997	Past Conference Chair, Canadian Society for Biomechanics
1995-1997	President, Canadian Society for Biomechanics
1997-1999	Past President, Canadian Society for Biomechanics
1995-1998	Member, Task Force on chiropractic research in Canada
1996-1997	Member, Task Force on chiropractic research in the United States
1996-2001	Member, Life and Environmental Sciences Animal Care Committee, University of Calgary
1996	Jury Member, World Biomechanics Promotieprijs
1996-1999	Scientific Chair, XVII Conference of the International Society of Biomechanics
1997-1998	Member of Nominating Committee, The Arthritis Society of Canada (by merit of top ranking in the annual grant competition)
1997-1998	Organizer, Symposium on Muscle Mechanics and Movement Control, World Conference, Sapporo, Japan

REFEREEING FOR SCIENTIFIC JOURNALS

Present

2022-2024	Editorial Board, Brazilian Journal of Motor Behavior
2019-present	Editorial Board, BMC Biomedical Engineering
2016-present	Editorial Board, Chiropractic & Manual Therapies
2016-present	Advisory Board, German Journal of Exercise and Sport Research

2016-2024	Associate Editor, International Journal of Molecular Sciences
2015-present	Editorial Board, Current Issues in Sport Science (CISS)
2015-present	Editorial Board, Journal of Functional Morphology and Kinesiology
2015-present	Editorial Board, Biomechanics and Modeling in Mechanobiology
2015-present	Advisory Board, German Journal of Sport Sciences
2015-present	Editorial Board, International Journal of Mechanical and Materials Engineering
2015-present	Advisory Board, Sportwissenschaft Journal
2011-present	Founding Editor and Co-Editor in Chief, Journal of Sport and Health Science
2010-present	Editorial Board, Muscles, Ligaments and Tendons Journal
2006-present	International Board Member, Sportorthopädie-Sporttraumatologie
2005-present	Editorial Board, Sports-Orthopaedics and Sports-Traumatology
2005-present	Editorial Board, Molecular and Cellular Biomechanics
2004-present	Associate Editor, Exercise and Sports Science Reviews
2002-present	Associate Editor, IEEE Transactions in Neural Systems and Rehabilitation Engineering
2002-present	Editorial Board, Journal of Biomechanics
1997-present	Editorial Board, Journal of Electromyography and Kinesiology
1990-present	Editorial Board, Journal of Manipulative and Physiological Therapeutics
1990-present	Editorial Board, Journal of the Canadian Chiropractic Association
1995-present	Editorial Board, Sportverletzung Sportschaden

Past

2015	Reviewer, Best Paper Prize for IJMS
1999-2013	International Consultant and Member of Advisory Board, Brazilian Journal of Biomechanics
2011-2012	Guest Editor, PLoS Computational Biology
2011	Editor in Chief, International Journal of Exercise and Health Sciences
2008	Editorial Board, International Journal of Molecular Sciences
2000-2007	Associate Editor, The Spine Journal
2003-2005	Field Editor Biomechanics, Encyclopedia Reference of Neuroscience
1999-2002	Editorial Consultant, Journal of Biomechanics
1993-2000	Associate Editor, Journal of the Neuromusculoskeletal System
1995-1998	Reviewer, Australasian Chiropractic and Osteopathy
1991-1993	Editorial Board, Journal of Applied Biomechanics
	Medicine and Science in Sports and Exercise
	Journal of Neuroscience Methods
	Journal of Orthopaedic Research
	Journal of Biomedical Engineering
	Clinical Journal of Sport Medicine
	Journal of Biomechanical Engineering
	Journal of Applied Physiology
	Human Movement Science
	Journal of Neurophysiology
	European Journal of Physiology
	Journal of Experimental Biology
	Microscopy and Microanalysis
	Proceedings of the Royal Society (London)
	Transactions of the Royal Society (London)

REFEREEING FOR GRANTING INSTITUTIONS

Present

Reviewer, National Killam Selection Committee, Killam Prize and Dorothy Killam Fellowship (2022 -2024)
Chairperson, CIHR Biomedical Engineering Grant Review Committee (2021 – present)
Reviewer, Natural Sciences and Engineering Research Council of Canada (1990-present)
Reviewer, CIHR College of Reviewers (2017- present)

Past

Reviewer, CIHR Foundation Grant Program (2017)
Chairperson, CIHR Movement & Exercise Grants ReviewCommittee (2008-2011)
Chairperson, CIHR Biomedical Engineering Grant Review Committee (2011-2014)
Reviewer, Israel Science Foundation
Review Board Member, National Institutes of Health
Chair of the Benno Nigg Chair Search Committee (2014-2015)
Reviewer, Natural Sciences and Engineering Research Council of Canada (2013)
Committee Member, Movement and Exercise, Canadian Institutes of Health Research (2011-2013)
Grant Review Committee, Alberta Ingenuity New Faculty Award, University of Calgary (2009)
Committee Member, University of Calgary Olympic Oval Endowment Fund (1990-2009)
Grant Review Committee, Biomedical Engineering, Canadian Institutes of Health Research (2005-2008)
Advisory Committee, Alberta Heritage Foundation for Medical Research Studentship (2003-2005)
Graduate Student Scholarship Selection Committee, University of Calgary (2000-2003)
Chairman, University of Calgary Research Grants Committee (1991-1992)
Committee Member, University of Calgary Research Grants Committee (1990-1991)
Committee Member, Alberta Paraplegic Foundation (1990-1991)
Reviewer, Sport Canada Applied Sport Research Program
External Reviewer, Canadian Fitness and Lifestyle Institute
Reviewer, Alberta Heritage Foundation for Medical Research
Reviewer, Medical Research Council of Canada
Reviewer, International Science Foundation
Reviewer, Foundation for Chiropractic Education and Research
National Health Research and Development Program (NHRDP)
National Organization of Sport Sciences

SCIENTIFIC CONFERENCES ORGANIZED

2023

Conference Chair, 5th Rocky Mountain Muscle Symposium, Canmore AB, Jun 19-21, 2023

2022

Scientific Committee Member, Congress of International Society of Biomechanics/Japanese Society of Biomechanics, Fukuoka, Japan, July 30-Aug 3, 2021 (2021-2023)
Career Award Committee, Canadian Society for Biomechanics, NACOB, Ottawa, Aug 2022
Scientific Chair, Active Muscle Mechanics: Bone and Soft Tissue, World Congress of Biomechanics, July 10-14, 2022, Taipei, Taiwan

2021

Chair, Hay Award Session, American Society of Biomechanics, Atlanta, Georgia, USA, Aug 10-13, 2021 (virtual)
Chair, Dyson Lecture, International Society of Biomechanics in Sports, Canberra, Australia, Sep 3-7, 2021 (virtual)
Co-organizer (with Drs. Paola Contessa and James Richards), International Symposium on Motor Control in Biomechanics, in conjunction with the 7th International Foot and Ankle Congress, Sao Paulo, Brazil (virtual) April 11, 2021
Career Award Committee, Canadian Society for Biomechanics, Montreal, QC, May 2021 (postponed from August 2020)

2020

International Scientific Committee Member, IUPESM World Congress on Medical Physics and Biomedical Engineering 2021 (WC2021), Singapore
Scientific Committee Member, European Society of Biomechanics Congress, Warsaw, Poland (2019-2022)
Scientific Advisory Board Member, International Congress on Science and Skiing (ICSS), Austria, 2022

2019

Young Investigator Award Committee Member, International Society in Science and Sports, Vuokatti, Finland, March 2019
Conference Chair, International Society of Biomechanics Conference, Calgary AB, July-August 2019 (2016-2019)
Conference Chair, 4th Rocky Mountain Muscle Symposium, Canmore AB, July 2019

2018

David Winter Young Investigator Award Committee Member, Canadian Society for Biomechanics, Halifax, NS, August 2018
Scientific Reviewer / Scientific Chair for Session of Locomotion and Human Movement, World Congress of Biomechanics, Dublin, Ireland, July 2018
Chair, Muscle and Force Session, International Society of Electrophysiology and Kinesiology, Dublin, Ireland, June-July 2018

2017

Founders Awards Committee Member, American Society of Biomechanics Conference, Boulder CO, August 2017
Scientific Committee Member for the EUROMECH Colloquium, Italy, April 2017

2016

Scientific Reviewer, 19th Biennal Meeting of the Canadian Society of Biomechanics, Hamilton ON, July 2016
Scientific Chair of Locomotion and Human Movement for the 8th World Congress of Biomechanics in Dublin, Ireland, July 2018
Scientific Committee Member for Canadian Society of Biomechanics Conference in Hamilton, ON, July 2016
Scientific Advisory Board Committee member for the European Society of Biomechanics Conference in Lyon, France, July 2016
Student Award Committee member for the European Society of Biomechanics Conference in Lyon, France, July 2016
Jim Hay Memorial Award Committee Member for the American Society of Biomechanics Conference, Raleigh NC, August 2016
Borelli Career Award Committee Member for the American Society of Biomechnics Conference, Raleigh NC, August 2016
International Scientific Committee Member for the 16th International Conference on BioMedical Engineering, Singapore, December 2016

2015

European Society of Biomechanics Congress 2015, Prague (Scientific Committee Member)

2013
International Scientific Advisory Board for the ISB 2013, Natal, Brazil (Board Member)

2012
European Solid Mechanics Conference, Graz, Austria (Symposium Organizer)
International Conference of the Polish Society of Biomechanics (Scientific Committee member)
European Society of Biomechanics Congress, Lisbon, Portugal (Scientific Committee member)

2011
International Society of Biomechanics in Sports Conference, Portugal (member of the Scientific Commission)
5th International Conference on Biomedical Engineering, Kuala Lumpur (International Advisory Board/Technical Programme Committee)
23rd Congress of the International Society of Biomechanics, Brussels (Scientific Reviewer)

2010
6th World Congress on Biomechanics, Singapore
(International Advisory Committee member and Track Chair)

2009
2nd International Joint Conference on Biomedical Engineering Systems and Technologies
(BIOSTEC-2009, Scientific Program Committee)

2008
International Conference on Biomedical Engineering, Singapore
North American Congress on Biomechanics (Scientific Program Committee, Advisory Committee Member)
16th Congress of the European Society of Biomechanics (Scientific Program Committee)
Kuala Lumpur International Conference on Biomedical Engineering (International Advisory Board member)

2006
IASTED Biomech 2006 IASTED (International Program committee)
American Society of Biomechanics (Awards Committee member)
Orthopaedic Research Society (Scientific Program Committee)
World Congress of Biomechanics (Scientific Chair for Musculoskeletal Biomechanics)
6th Muscle Energetics Conference (Scientific Program Committee)

2005
27th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (Theme Chair in Neuromusculoskeletal mechanics)
IASTED Biomech 2005 (International Program Committee)

2002
World Conference of Biomechanics (Scientific Chair)
Banff Symposium on Skeletal Muscle (Conference Chair)
American Society of Biomechanics (Conference Chair)

2001
American Society of Biomechanics (Scientific Chair)

1999
International Society of Biomechanics (Scientific Chair)
Canmore Symposium on Skeletal Muscle (Conference Chair)

1998
Inaugural Conference of the Canadian Chiropractic Association (Conference Chair)

1994
Canadian Society for Biomechanics (Conference Chair)

FINANCIAL SUPPORT

Principal Investigator – Current Support

Year	Grant Agency Date	Comments Grant Number	Amount per Year
2020-2025	Natural Sciences and Engineering Research Council April 1, 2020 – March 31, 2025	10028815	$ 138,000
2020-2023	The Arthritis Society January 1, 2020 – December 31, 2022 (no fund extension until December 31, 2023)	10027555	$ 120,000
2013-2023	Canadian Chiropractic Research Foundation September 1, 2013 – June 30, 2023 (average amount)	RT691362	$ 48,535
2011-2023	Killam Memorial Chair July 1, 2011-June 30, 2021 (no fund extension until June 30, 2023)	10001203	$ 150,000
2001-2023	Canada Research Chair-CIHR November 1, 2001 - October 31, 2022 (no fund extension until October 31, 2023)	RT730101	$ 200,000
2015-2023	CIHR Foundation Scheme July 1, 2015 – June 30, 2022 (no fund extension until June 30, 2023)	10013332	$ 345,834
2020-2023	Private Donation (Hart) for Myofibril Research Jan 1, 2020 – Dec 31, 2023	10027682	**$ 70,000**
2022-2027	Canadian Institutes of Health Research Jul 1, 2022 – Jun 30, 2027 (postponed start date)	PJT-178168	$ 199,918
2021-2026	Engineered Air Resman Holdings Community Services Dr. Benno Nigg Chair in Biomechanics Jul 1, 2021 – Jun 30, 2026	RT751928	$ 150,000
2022-2027	Canadian Institutes of Health Research Oct 1, 2022 – Sep 30, 2027	PJT-183834	$ 266,220
2022	Catalyst Grant, VP Research, U Calgary Oct 1, 2022 – Mar 31, 2023	10038414	**$ 12,750**

Principal Investigator – Past Support

Year	Grant Agency Date	Comments Grant Number	Amount per Year
Operating Grants			
2018-2021	Alberta Spine Foundation (total award amount) Oct 1, 2018 – Mar 31, 2021	10022659	**$ 75,000**
2018-2020	Private Donation (Hart) for Obesity Research Oct 1, 2018 – Sep 30, 2020	10022988	$ **20,000**

2018-2020	Private Donation (Vaz) for Rabbit Bed Rest Research Nov 1, 2018 – Oct 30, 2020	10022981	$ **30,000**
2013-2018	Natural Sciences and Engineering Research Council April 1, 2013-March 30, 2018	RT690577	$ 115,200
2017-2018	Private Donation (Hart) for Muskuloskeletal Research January 1, 2017 – March 31, 2018	10016648	$ 40,000
2016	Metabolic Industries Inc. June 20, 2016 – October 20, 2016	10014224	$ 50,448
2016	Korea Institute of Technology January 1, 2016 – December 31, 2016	10013332	$ 40,691
2013-2016	NSERC Accelerator Grant April 1, 2013-March 30, 2016	10004659	$ 40,000
2011-2015	Canadian Institutes of Health Research October 1, 2011 – June 30, 2015	10000427	$ 111,935 [1]
2011-2015	Canadian Institutes of Health Research January 1, 2011-June 30, 2015	RT736475	$ 105,687 [2]
2013-2015	Canadian Institutes of Health Research September 1, 2013-June 30, 2015	RT736163	$ 108,010 [3]
2009-2015	Natural Sciences and Engineering Research Council CREATE, April 1, 2009 - August 31, 2015	RT735134	$ 300,000
2011-2014	Canadian Institutes of Health Research – CHRP April 1, 2011 – March 30, 2014	RT736571	$ 93,788
2011-2014	Natural Sciences and Engineering Research Council-CHRP April 1, 2011 – March 31, 2014	RT736573	$ 93,787
2009-2013	Canadian Chiropractic Protective Agency April 1, 2009-March 31, 2011	RT735444	$ 39,320
2011-2013	Cerebral Palsy International Research Foundation December 1, 2011 – November 30, 2013	10000871	$ 50,000
2010-2013	National Science Foundation July 15, 2010 – June 30, 2013	RT736345	$ 10,000
2010-2013	Canadian Institutes of Health Research October 1, 2010 - September 30, 2013-MOP106597	RT736163	$ 83,824
2008-2013	Natural Sciences and Engineering Research Council April 1, 2008 - March 31, 2013	RT690577	$ 60,000
2012-2013	Intra-Project OA Team Grant April 1, 2012-March 30, 2013		$ 15,000
2009-2012	Canadian Chiropractic Research Foundation January 1, 2009 - December 31, 2012	RT691362	$ 30,000
2009-2011	Canada Council for the Arts - Killam Fellowship September 1, 2009-August 31, 2011	RT739652	$ 70,000
2008-2011	Canadian Institutes of Health Research April 1, 2008-March 31, 2011-MOP79258	RT732998	$ 102,183
2006-2010	Canadian Institutes of Health Research October 1, 2006-September 30, 2010-MOP64347	RT731367	$ 103,674

[1] rolled into CIHR Foundation Scheme as of July 1, 2015
[2] rolled into CIHR Foundation Scheme as of July 1, 2015
[3]rolled into CIHR Foundation Scheme as of July 1, 2015

2005-2010	Canadian Institutes of Health Research October 1, 2005-September 30, 2010-MOP42493	RT694392	$ 163,059
2006-2008	Canadian Institutes of Health Research February 1, 2006-January 31, 2008	RT733008	$ 54,122
2006-2008	Canadian Institutes of Health Research	RT732998	$ 69,629
2003-2008	Natural Sciences and Engineering Research Council	RT690577	$ 59,050
2003-2006	Canadian Institutes of Health Research	RT731376	$ 55,714
2003-2006	Canadian Institutes of Health Research	RT731367	$ 75,604
2002-2003	Canadian Memorial Chiropractic College	RT693097	$ 10,000
2002-2004	Canadian Institutes of Health Research-MOP12489	RT691622	$ 110,892
2002	President's Circle Award		$ 5,000
2001-2002	Canadian Memorial Chiropractic College		$ 10,000
2001-2003	Natural Sciences and Engineering Research Council	RT696197	$ 149,780
2001-2004	Canadian Foundation for Innovation	RT780145	$ 123,078
2001-2004	Canadian Institutes of Health Research-MOP45948	RT698963	$ 56,700
2001-2004	The Arthritis Society of Canada		RT698918 $ 60,000
2000-2005	Canadian Institutes of Health Research-MOP42493	RT694392	$ 138,000
2000	The University of Calgary short-term grants		$ 5,939
2000	The Olympic Oval Endowment Fund		$ 15,000
1999-2008	Canadian Chiropractic Research Foundation	RT691362	$ 60,000
1999-2002	The Arthritis Society of Canada		$ 65,000
1998-2003	Natural Sciences and Engineering Research Council	RT690577	$ 44,000
1997-2002	Medical Research Council of Canada		$ 96,000
1997-2000	The Arthritis Society of Canada		$ 59,970
1996-1998	The Arthritis Society of Canada		$ 59,400
1995	University of Calgary		$ 6,270
1994-1998	Natural Sciences and Engineering Research Council		$ 29,000
1994-1997	Medical Research Council of Canada		$ 45,775
1994	The University of Calgary		$ 11,100
1993-1996	The Arthritis Society of Canada		$ 51,280
1993-1996	The Whitaker Foundation		$ 54,400
1991-1994	Natural Sciences and Engineering Research Council		$ 27,500
1991-1993	Arthritis Society of Canada		$ 47,000
1991	Olympic Oval Fund		$ 4,465
1990-1996	College of Chiropractors of Alberta		$ 51,074
1990	Canadian Memorial Chiropractic College		$ 15,000
1989	Government of Alberta - Matching Grant		$ 19,507
1989	Natural Sciences and Engineering Research Council		$ 5,500
1988-1991	Natural Sciences and Engineering Research Council		$ 22,715
1988-1989	Foundation for Chiropractic Education and Research		$ 33,896
1987-1996	Chiropractic Foundation for Spinal Research		$ 11,000
1987	Natural Sciences and Engineering Research Council		$ 5,000

Equipment Grants

2020-2022	Natural Sciences and Engineering Research Council RTI	10028571	$ **121,330**
2019-2021	Natural Sciences and Engineering Research Council RTI	10025393	$ **150,000**

2015-2017	Natural Sciences and Engineering Research Council RTI	10010458	$ **147,042**
2007	Natural Sciences and Engineering Research Council	RT733871	$ 143,452
2002-2004	Alberta Heritage Foundation for Medical Research	RT716018	$ 61,539
2002-2005	Alberta Science and Research Investments Program	RT780145	$ 123,078
2002	Alberta Heritage Foundation for Health Research		$ 61,000
2000	Alberta Heritage Foundation for Health Research		$ 40,000
2000	Natural Sciences and Engineering Research Council		$ 58,113
1997	The Olympic Oval Endowment Fund		$ 10,000
1993	The University of Calgary		$ 700
1993	University of Calgary		$ 5,138
1992	The Olympic Oval Endowment Fund		$ 3,850
1992	The University of Calgary		$ 4,000
1991	Natural Sciences and Engineering Research Council		$ 11,694
1990	University of Calgary		$ 15,000
1989	Alberta Heritage Foundation for Health Research		$ 15,200

Conference Grants

2022	University of Calgary, VP Research, 5th Rocky Mountain Muscle Symposium	$ 3,000
2019	University of Calgary, VP Research, 4th Rocky Mountain Muscle Symposium	$ 5,000
2019	University of Calgary, VP Research, ISB/ASB Calgary	$ 5,000
2002	Alberta Heritage Foundation for Health Research-Banff Muscle Symposium	$ 4,000
2002	The Olympic Oval Endowment Fund	$ 5,000
2002	The Whitaker Foundation	$USD 3,000
2002	Canadian Institutes of Health Research-Banff Muscle Symposium	$ 5,000
2002	Noraxon - Banff Muscle Symposium - Sponsorship	$ 1,000

Travel Grants

2003	The University of Calgary	$ 1,500
1993	Alberta Heritage Foundation for Health Research	$ 1,980

Visiting Scholar Grants

2000	Alberta Heritage Foundation for Health Research visiting scholar grants (6)	$ 9,875

Co-Applicant

Year	**Grant Agency** **Date**	**Co-applicant**	**Amount[4]**
2020-2023	POSNA Research Grant (Amount in USD)	Dr. Jason Howard	$ **29,296**
2019-2023	NSF/NIH DMS/NIGMS subgrant from UC Davis (year 1) Worcester Polytechnik Institute (years 2-4)	Dr. Sam Walcott	**$ 247,899**
2019-2020	American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) Pedal-with-Pete Foundation (Total grant USD 25,000) subgrant USD	Dr. Jason Howard	**$ 7,100**
2015-2022	CONNECT! NSERC CREATE – Soft Tissue Engineering (Funds transferred to us: $ 118,416.66)	Dr. Brian Amsden	**$ 1,800,000**
2013-2018	CFI Leading Edge Fund	Dr. Steven Boyd	**$ 4,739,000**

[4] Bold values are the total award amount all other values are per year.

2014-2015	AIHS Osteoarthritis Team Grant Extension	Dr. Linda Woodhouse	$ 475,000
2013-2014	AIHS Osteoarthritis Team Grant Extension	Dr. Cy Frank	$ 1,000,000
2008-2013	Alberta Heritage Foundation for Medical Research	Dr. Cy Frank	$ 1,000,000
2004-2009	Canadian Institutes of Health Research	Dr. M. Amrein	$ 92,000
2002-2005	Canadian Foundation for Innovation Osteoarthritis Infrastructure	Dr. D Hart	**$ 4,300,000**
2001-2003	Innovation and Science Infrastructure Programme		$ 3,256,000
2000-2002	Canadian Foundation for Innovation Kinesiology Expansion	R. Gravel	**$ 3,256,000**
1999-2000	National Institutes of Health	E. Suter	**$ 65,590**
1996	The Olympic Oval Endowment Fund	E. Hasler	$ 5,000
1996	Alberta Heritage Foundation for Health Research	R. Zernicke Equipment	$ 100,000
1995-1996	University of Calgary	P. Dorotich	**$ 1,500**
1995-1996	The Olympic Oval Endowment Fund	R. Young	**$ 15,000**
1995-1996	The Olympic Oval Endowment Fund	E. Suter	**$ 10,000**
1994-1996	The Olympic Oval Endowment Fund	P. Dorotich	**$ 18,000**
1993-1996	The Olympic Oval Endowment Fund	T. Koh	**$ 8,547**
1993-1996	Sport Canada	R. Jackson	$ 22,833
1993-1996	Natural Sciences and Engineering Research Council	Y. T. Zhang	$ 18,500
1992	Olympic Oval fund	Y. T. Zhang	$ 12,000
1992	The Olympic Oval Endowment Fund	M. Maitland	$ 6,800
1988	Natural Sciences and Engineering Research Council	B. M. Nigg	$ 3,000
1987-1990	Alberta Chiropractic Association and Canadian Memorial College of Chiropractors	B. M. Nigg	$ 45,000
1985-1986	Alberta Chiropractic Association	B. M. Nigg	$ 24,500

STUDENT FINANCIAL SUPPORT

Year	Grant Agency Date	Student Awarded	Amount[5]
2023	BME Research Excellence Award	Hannah Smith	**$ 5,000**
2022	VPR Recognition Animal Welfare Program	Hannah Smith	**$ 1,000**
2022-2023	Vera Ross Graduate Scholarship	Esthevan Machado	**$ 11,000**
2022-2024	Arthritis Society Canada PhD Salary Award	Nada Abughazaleh	**$ 35,000**
2022	International Graduate Tuition Award	Mauricio Delgado	**$ 1,000**
2022	Kinesiology Presentation Award	Mauricio Delgado	$ **1,250**
2022	Alberta Graduate Excellence Scholarships (AGES)	Hannah Smith	$ **11,000**
2022	Alberta Graduate Excellence Scholarships (AGES)	Shuyue Liu	**$ 11,000**
2022	Kinesiology Presentation Award	Meng Li	$ **1,250**
2022	Kinesiology Presentation Award	Franziska Onasch	$ **1,250**
2022	Kinesiology Presentation Award	Bryan Yu	$ **1,250**
2022	Kinesiology Presentation Award	Shuyue Liu	$ **1,000**
2022	Women in STEM Scholarship	Nada Abughazaleh	$ **2,500**
2022	Kinesiology Graduate Student Scholarship	Nathan Boon-van M.	$ **5,000**
2022-2025	Government of Chile	Mauricio Delgado	$ 34,329
2021	Kinesiology PhD Scholarship	Shuyue Liu	$ **1,000**

2021	Kinesiology Presentation Award	Shuyue Liu	$	**2,000**
2021	Kinesiology Leadership Scholarship	Nathan Boon-van M.	**$**	**3,000**
2021	BME Graduate Program Entrance Prize	Hannah Smith	$	**1,500**
2021	BME Graduate Program Academic Top Up Award	Nada Abughazaleh	$	**1,000**
2021-2022	Cy Frank Trainee Award for Bone and Muscle Health	Hannah Smith	$	**15,750**
2021-2022	Alberta Graduate Excellence Scholarships (AGES)	Franziska Onasch	$	**15,000**
2021-2022	Alberta Graduate Excellence Scholarships (AGES)	Shuyue Liu	$	**15,000**
2021	BME Research Scholarship Award	Baaba Otoo	$	**1,000**
2020 – 2022	MITACS Accelerate Award	Isabel Aldrich-Witt	$	45,000
2019 - 2021	Chinese Skating Association	Meng Li	$	92,000
2021	Kinesiology Presentation Award	Meng Li	**$**	**665**
2021	UofC FGS Scholarship	Drew Lawson	$	**5,000**
2020	Alberta Graduate Excellence Scholarship (AGES)	Lindsay Gorrell	$	**15,000**
2020	Kinesiology Research Travel Award	Seong-won Han	$	**5,000**
2020-2022	Cy Frank Doctoral Scholarship	Nada Abugazaleh	$	17,250
2019-2020	Eyes High International Doctoral Scholarship	Seong-won Han	$	**15,000**
2019-2020	Kinesiology Leadership Award	Seong-won Han	$	**5,000**
2019	Kinesiology Presentation Award	Kevin Boldt	$	**1,250**
2019	Alberta Graduate Excellence Scholarship (AGES)	Drew Lawson	$	**11,000**
2019-2020	FGS Transformative Internship Scholarship	Nathaniel Morris	$	**8,000**
2019-2020	FGS Transformative Internship Scholarship	Drew Lawson	$	**8,000**
2019-2021	CONNECT! NSERC CREATE Doctoral Scholarship	Seong-won Han	$	13,000
2019	JB Hyne Research Innovation Award	Jaqueline Lourdes Rios	$	**500**
2019	Kinesiology Presentation Award	Seong-won Han	$	**2,000**
2019	Kinesiology Leadership Award	Kevin Boldt	$	**7,000**
2019-2020	Kinesiology Dean's Doctoral Scholarship	Lindsay-Gorrell	$	**15,000**
2017-2019	Izaak Walton Killam Doctoral Scholarship	Scott Sibole	$	3,000
2019	Kinesiology Leadership Scholarship	Bryan Yu	$	**3,000**
2019	Kinesiology Presentation Award	Nathaniel Morris	$	**1,250**
2019	Kinesiology Presentation Award	Jaqueline Rios	$	**2,000**
2018-2019	Eyes High International Doctoral Scholarship	Seong-won Han	$	**3,000**
2018-2019	Own the Podium CSI MSc Award	Drew Lawson	$	**15,000**
2018-2019	Vera A Ross Graduate Scholarship	Drew Lawson	$	**8,500**
2018	Own the Podium CSI Msc Award	Nathaniel Morris	$	**14,000**
2018	Sports Innovation Summit Award	Nathaniel Morris	$	**1000**
2018	McCaig Institute, STOF Award	Jaqueline Rios	$	**3,000**
2018	Kinesiology Presentation Award	Lindsay Gorrell	$	**2,000**
2018	Kinesiology Outstanding Presenter Award	Jaqueline Rios	$	**1,000**
2018	Kinesiology Presentation Award	Alexander Chen	$	**1,250**
2018	Kinesiology Presentation Award	Graham MacDonald	$	**1,250**
2018-2019	Eyes High International Doctoral Scholarship	Linsday Gorrell	$	**11,000**
2018-2019	Kinesiology Dean's Doctoral Scholarship	Lindsay-Gorrell	$	**15,000**
2018	Kinesiology Outstanding Presenter Award	Seong-won Han	$	**1,000**
2018	Kinesiology Merit Scholarship	Nathaniel Morris	$	**3,000**
2018	Kinesiology Merit Scholarship	Alexander Chen	$	**2,000**
2018	Kinesiology Merit Scholarship	Lindsay Gorrell	$	**1,000**
2017-2018	BME Differential Fee Scholarship	Baaba Otoo	$	2,116
2017	Dr. Benno Nigg Distinguished Faculty Achievement Graduate Scholarship	Lindsay Gorrell	$	**800**

2017-2018	Eyes High Doctoral Recruitment Scholarship	Graham MacDonald	$	**25,000**
2017-2021	CONNECT! NSERC CREATE Doctoral Scholarship	Baaba Otoo	$	13,000
2017-2018	Alberta Innovates Graduate Studentship	Jaqueline Rios	$	12,000
2017-2020	CIHR Vanier Canada Graduate Scholarship	Kevin Boldt	$	50,000
2015-2019	AIHS graduate Studentship	Scott Sibole	$	30,000
2015-2019	Kinesiology Dean's Doctoral Scholarship	Seong-won Han	$	23,000
2015-2019	CAPES, Brazil (amount plus tuition)	Jaqueline Rios	$	30,500
2016-2017	Eyes High International Doctoral Scholarship	Lindsay Gorrell	$	12,000
2017	Kinesiology Presentation Award	Franziska Onasch	$	1,000
2017	U of C Faculty of Graduate Studies Scholarship	Lindsay Gorrell	$	**10,000**
2017	Kinesiology Merit Scholarship	Shuyue Liu	$	**1500**
2017	Allan Markin Doctoral Scholarship	Lindsay Gorrell	$	**5,000**
2014-2017	AIHS Doctoral Clinician Scholarship	Graham MacDonald	$	70,000
2015-2017	Eyes High Doctoral Recruitment Scholarship	Graham MacDonald	$	8,000
2016-2017	AIHS Doctoral Clinician Scholarship	Kevin Boldt	$	70,000
2015-2017	Izaak Walton Killam Pre-Doctoral Scholarship	Krysta Powers	$	1,500
2016-2017	AIHS Graduate Studentship	Kelsey Collins	$	12,000
2015-2017	CIHR Doctoral Scholarship Award	Kelsey Collins	$	30,000
2015-2017	AIHS Graduate Studentship	Matt Jordan	$	30,000
2016-2017	Izaak Walton Killam Pre-Doctoral Scholarship	Matt Jordan	$	**3,000**
2016-2017	NSERC Graduate Scholarship	Alexander Chen	$	**17,500**
2014-2017	AITF Doctoral Scholarship	Krysta Powers	$	31,500
2014-2016	AIHS Master's Clinicial Scholarship	Kevin Boldt	$	70,000
2016	OARSI Collaborative Scholarship	Kelsey Collins	$	5000
2016	UofC BME Reseach Scholarship Award (declined)	Scott Sibole	$	15,000
2016	FGS Presentation Award	Jaqueline Rios	$	1,000
2016	FGS Presentation Award	Shuyue Liu	$	250
2016	Kinesiology Merit Scholarship	Lindsay Gorrell	$	**1000**
2016	Kinesiology Merit Scholarhsip	Shuyue Liu	$	**1,500**
2016	Kinesiology Merit Scholarship	Alexander Chen	$	**1,500**
2016	CIHR CGS-MSFSS award	Kelsey Collins	$	**6,000**
2015	CAPES, Brazil	Rafael Fortuna	$	23,000
2015	Vera A. Ross Graduate Scholarship	Alexander Chen	$	**4,125**
2015	Queen Elizabeth II Award	Alexander Chen	$	**10,800**
2015	Izaak Walton Killam Pre-Doctoral Scholarship	Matt Jordan	$	33,000
2015	J.B. Hyne Research Innovation Award	Rafael Fortuna	$	500
2015	Allan Markin Doctoral Scholarship	Kevin Boldt	$	**5,000**
2015	Izaak Walton Killam Pre-Doctoral Scholarship	Kelsey Collins	$	**3,000**
2015	FGS Presentation Award	Rafael Fortuna	$	**1,000**
2015	Kinesiology Differential Fee Scholarship	Shuyue Liu	$	**3,000**
2015	Kinesiology Differential Fee Scholarship	Seong-won Han	$	**3,000**
2014	CAPES, Brazil	Rafael Fortuna	$	23,000
2014	CAPES, Brazil (amount plus tuition)	Jaqueline Rios	$	10,200
2014	UofC Eyes High Leadership PhD Scholarship	Kelsey Collins	$	**4,000**
2014	NSERC CREATE Master's Scholarship	Scott Sibole	$	17,300
2014	NSERC CREATE Master's Scholarship	Kaleena Johnston	$	17,300
2014	Team OA Postdoctoral Award	Eng Kuan Moo	$	**10,000**
2014	NSERC CREATE Postdoctoral Award	Mohsen Maleki Karyak	$	**10,000**
2014	NSERC CREATE Postdoctoral Award	Eng Kuan Moo	$	**10,000**

2014	Queen Elizabeth II Award	Maria Yamamoto	$	**10,800**
2014	Killam Doctoral Scholarship	Kelsey Collins	$	33,000
2014	Eyes High Doctoral Recruitment Scholaship (Declined)	Graham MacDonald	$	(25,000)
2014	UofC Faculty of Graduate Studies Scholarship	Matt Jordan	$	**10,000**
2014	UofC Dean's Doctoral Scholarship	Matt Jordan	$	**15,000**
2014	CIHR Masters Scholarship (Declined)	Kevin Boldt	$	(17,500)
2014	Faculty of Graduate Studies (FGSS)	Kaleena Johnston	$	**3,000**
2014	Queen Elizabeth II Master's Scholarship	Kevin Boldt	$	**10,800**
2013	CAPES, Brazil			
2013	AITF Master's Scholarship	Kaleena Johnston	$	**26,500**
2013	TENET Medical Engineering Graduate Scholarship	Kelsey Collins	$	**2,600**
2013	NSERC CREATE Master's Award	Anthony Killick	$	17,300
2013	NSERC CREATE Doctoral Award	Krysta Powers	$	**13,000**
2013	Eyes High Doctoral Studentship Award	Matt Jordan	$	**15,000**
2013	UofC BME Research Scholarship Award	Krysta Powers	$	**3,000**
2013	Eyes High Doctoral Studentship Award	Krysta Powers	$	**12,000**
2013	Eyes High Doctoral Studentship Award	Kelsey Collins	$	**15,000**
2013	AIHS OA Team Grant Studentship Award	Kelsey Collins	$	**5,000**
2013	CIHR Training Program Studentship Support	Sigrun Matthiasdottir	$	20,000
2013	UofC BME Graduate 15th Anniversary Prize	Nada Abughazaleh	**$**	**3,000**
2013	UofC BME Graduate 15th Anniversary Prize	Ryan Madden	**$**	**3,000**
2013	UofC BME Graduate 15th Anniversary Prize	Michael DuVall	**$**	**3,000**
2013	UofC BME Graduate 15th Anniversary Prize	Scott Sibole	**$**	**3,000**
2013	UofC BME Graduate Recruitment Prize	Scott Sibole	**$**	**10,000**
2013	UofC BME Research Scholarship Award	Scott Sibole	$	**10,000**
2012	CAPES	Rafael Fortuna	$	23,000
2012	Institute of Engineering and Technology, winner/runner up	Michael DuVall	$	**920**
2012-2013	Emerging Leaders in the Americas Program (ELAP)	Markus Von Kossel	$	**10,000**
2012-2013	NSERC CREATE Studentship Award	Anthony Killick	$	17,300
2012	NSERC CREATE Incentive Award	Ryan Madden	**$**	**1,000**
2012-2013	AIHS OA Team Grant Studentship Award	Kelsey Collins	$	20,000
2012-2013	AIHS OA Team Grant Studentship Award	Ryan Madden	$	20,000
2012	UofC GSA Bursary	Nada Abughazaleh	**$**	**1,500**
2012	QE II Graduate Scholarship	Kaleena Johnston	**$**	**7,200**
2012	Dean's Entrance Scholarship	Kaleena Johnston	**$**	**3,000**
2012	Canadian Scholarship Trust Found., Peter Wright Award	Kaleena Johnston	**$**	**7,500**
2012	National Science Foundation	Krysta Powers	$	15,000
2012	QE II Graduate Scholarship	Brandon Hisey	$	**5,000**
2012	Alberta Graduate Citizenship Award	Kelsey Collins	**$**	**2,000**
2012	Alberta Graduate Student Scholarship	Kelsey Collins	**$**	**3,000**
2012	AIHS OA Team Grant Studentship Award	Andrew Sawatsky	$	11,666
2012	Alberta Graduate Student Scholarship	Andrew Sawatsky	**$**	**3,000**
2012	Emerging Leaders in the Americas Program (ELAP)	Markus von Kossel	**$**	**10,000**
2012	Alberta Graduate Student Scholarship	Ryan Madden	**$**	**3,000**
2011-2012	AHFMR OA Team Grant Studentship award	Nada Abughazaleh	$	20,000
2011-2014	Alberta Innovates Incentive Award	Michael Duvall	$	6,300
2011-2014	NSERC PGS D Award (2011/05/01-2014/04/30)	Michael Duvall	$	21,000
	Alexander Graham Bell			
2009-2012	Natural Sciences and Engineering Research Council	Brandon Hisey	$	35,000

2011	Faculty of Graduate Studies Graduate Studies Scholarship	Andrew Sawatsky	$	**500**
2011	Faculty of Graduate Studies Graduate Studies Scholarship	Conrad Tang	$	**500**
2011	AHFMR OA Team Grant Studentship award	Andrew Sawatsky	$	20,000
2011	Faculty of Graduate Studies Scholarship	Anthony Killick	$	**3,600**
2011	Alberta Graduate Student Scholarship	Conrad Tang	$	**3,000**
2010-2011	AHFMR OA Team Grant Studentship award	Ryan Madden	$	20,000
2010-2011	Alberta Innovates – Health Solutions Incentive	Michael Duvall	$	12,000
2010	Faculty of Graduate Studies Queen Elizabeth II Scholarship	Andrew Sawatsky	$	7,200
2010	Faculty of Graduate Studies Graduate Studies Scholarship	Rafael Fortuna	$	5,500
2010	Government of Canada Emerging Leaders in the Americas Program	Debora Cantergi	$	10,000
2010	Alberta Innovates – Health Solutions Summer Studentship	Marie Armstrong	$	5,200
2010	Natural Sciences and Engineering Research Council CREATE Undergraduate Summer Studentship Programme	Anthony Killick	$	6,000
2010	Natural Sciences and Engineering Research Council CREATE Undergraduate Summer Studentship Programme	Esther Chan	$	6,000
2010	Natural Sciences and Engineering Research Council Undergraduate Student Research Award	Erica Woo	$	6,000
2010	Government of Canada Emerging Leaders in the Americas Program	Fernando Lemos	$	10,000
2009-2011	University of Calgary FGS Dean's Research Allowance	Brandon Hisey	$	2,000
2009	University of Calgary FGS Dean's Entrance Scholarship	Brandon Hisey	$	**6,000**
2009	Alberta Heritage Foundation for Health Research Team Grant scholarship	Lin-Lin Liu	$	20,000
2009	Alberta Heritage Foundation for Health Research Studentship Award	Aliaa Youssef	$	21,500
2009	Canadian Institutes of Health Research (Frederick Banting & Charles Best)	Michael Duvall	$	17,500
2009	Natural Sciences and Health Research Council Undergraduate Student Research Award	Erica Giles	$	5,625
2009	Natural Sciences and Health Research Council CREATE Summer Studentship	Caitlin Logan	$	6,000
2009	Program for Undergraduate Research Experience Alexander Graham Bell	Caitlin Logan	$	6,000
2009	Natural Sciences and Engineering Research Council Alexander Graham Bell	Neal Austin	$	17,500
2008	Faculty of Graduate Studies Scholarship	Brandon Hisey	$	8,000
2008	Undergraduate Student Research Program, Studentship	Michael DuVall	$	2,000
2008	Faculty of Graduate Studies, GRS	Brandon Hisey	$	2,050
2008	Faculty of Graduate Studies, GRS	Eun-Jeong Lee	$	500
2007-2008	Natural Sciences and Engineering Research Council September August/08	Megan Yaraskavitch	$	17,300
2007	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Doug Bourne	$	6,000

2007	Faculty of Graduate Studies, Kinesiology Graduate Program Award	Eun-Jeong Lee	$	4,100
2006-2007	Alberta Ingenuity September-August/07	Megan Yaraskavitch	$	7,000
2006-2008	Natural Sciences and Engineering Research Council	Eva Szabo	$	20,000
2006-2007	Natural Sciences and Engineering Research Council	Megan Yaraskavitch	$	25,000
2006-2007	Ralph Steinhauer	Megan Yaraskavitch	$	15,000
2006	Faculty of Graduate Studies, Dean's Research Excellence Award	Megan Yaraskavitch	$	3,000
2006	Faculty of Graduate Studies, Kinesiology Graduate Program Award	Eun-Jeong Lee	$	1711.41
2006	Faculty of Graduate Studies Kinesiology Graduate Program Award	Aliaa Youssef	$	5888.96
2006	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Doug Bourne	$	3,000
2005-2009	Government of Egypt	Aliaa Youssef	$	35,000
2005-2006	Faculty of Graduate Studies, Leaders in Medicine Scholarship	Danny Peterson	$	12,788
2005	Faculty of Graduate Studies, Dean's Research Excellence Award	Danny Peterson	$	3,000
2005	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health (Travel Allowance)	Andrew Betik	$	2,000
2005	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Doug Bourne	$	40,000
2004 2008	Alberta Heritage Foundation for Medical Research	Doug Bourne	$	20,000
2004 2008	Alberta Ingenuity	Sang-Kuy Han	$	22,000
2004 2007	Alberta Ingenuity	Karyn Weiss Bundy	$	20,000
2004-2005	Canadian Institutes of Health Research	Andrew Betik	$	22,500
2004-2005	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Danny Peterson	$	20,000
2004-2005	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Tim Butterfield	$	20,000
2004	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Doug Bourne	$	12,078
2004	Olympic Oval Endowment Fund	Eun-Jeong Lee	$	5,000
2004	Natural Sciences and Engineering Research Council Dean's Research Excellence Award	Danny Peterson	$	3,000
2004	Natural Sciences and Engineering Research Council Dean's Research Excellence Award	Andrew Betik	$	3,000
2004	Graduate Research Scholarship Award	Tim Butterfield	$	4,100
2004	Graduate Research Scholarship Award-Eun-Jeong Lee		$	8,200
2004	Alberta Provincial Canadian Institutes of Health Research Training Program in Bone and Joint Health	Andrew Betik	$	20,000
2003-2004	Alberta Ingenuity Fund	Jolene Lepp	$	7,000
2003-2004	Natural Sciences and Engineering Research Council Postgraduate Scholarship	Jolene Lepp	$	19,100
2003-2004	Alberta Heritage Foundation for Medical Research	Jolene Lepp	$	20,000
2003-2004	Canadian Chiropractic Protective Agency	Bruce Symons	$	50,000
2003-2004	Alberta Heritage Foundation for Medical Research	Andrea Clark	$	20,000

2002-2004	The University of Calgary	Andrew Betik	$	3000
2002-2004	Natural Sciences and Engineering Research Council	Andrew Betik	$	19,200
2002-2003	Natural Sciences and Engineering Research Council Postgraduate Scholarship	Jolene Lepp	$	
2002-2003	University of Calgary-Department of Surgery	David Longino	$	20,000
2001-2005	Government of Iran	Ali Oskouei	$	20,000
2001	William H. Davis	Andrea Clark	$	4,000
2000-2002	The University of Calgary	Hae-Dong Lee	$	5,000
2000-2001	CCPA	Bruce Symons	$	25,000
1998-2003	MRC	Andrea Clark	$	15,200
1998-2001	Natural Sciences and Engineering Research Council	Sylvain Couillard	$	17,000
1998-2001	Alberta Heritage Foundation for Health Research	Motoshi Kaya	$	17,500
1997-2000	Alberta Heritage Foundation for Health Research	Joanne Archambault	**$**	**17,500**
1997-1999	Alberta Heritage Foundation for Health Research	Wendy Carvalho	$	15,000
1995-1997	The Killam Foundation	Tim Koh	$	18,000
1995-1997	Natural Sciences and Engineering Research Council	Joanne Archambault	$	17,400
1994-1996	Natural Sciences and Engineering Research Council Sunity International	Ming-Ming Liu	$	10,500
1994-1996	FCER, University of Calgary	Greg Kawchuk	**$**	**9,400**
1994	William H. Davis	Grant Brooks	$	4,000
1993-1996	Sport Canada	Paul Dorotich	$	15,000
1993-1995	Natural Sciences and Engineering Research Council	Joanne Archambault	$	15,000
1992-1996	Federal Sports Committee (ESK), Switzerland	Evelyne Hasler	$	21,000
1992-1996	CAPES, Universidade Federal do Rio Grande do Su, Brazil	Marco Vaz	$	18,000
1992-1995	Alberta Heritage Foundation for Health Research	Tim Koh	$	15,000
1991-1995	Sport Medicine Centre, University of Calgary	Murray Maitland	$	24,000
1991-1993	University of Calgary	Grant Brooks	**$**	**7,688**
1991-1992	University of Calgary	Murray Maitland	**$**	**2,100**
1990-1993	Alberta Heritage Foundation for Health Research	Todd Allinger	$	15,000
1990-1992	Federal Sports Committee (ESK), Switzerland	Evelyne Hasler	$	15,000
1989-1993	CAPES, Universidade Federal do Rio Grande do Su, Brazil	Antonio Guimaraes	$	18,000
1988	Natural Sciences and Engineering Research Council	Lynda Read	$	12,500

Other Student Funding

2022	NSERC USRA	Dhairya Desai	summer
2022	NSERC USRA	Wejdaan Faridi	summer
2022	BME-Schulich Summer Studentship	Chris Tiessen	summer
2022	BME-McCaig Summer Studentship	Riya Kalaga	summer
2022	Alberta Spine Foundation Summer Studentship	Torri Heiser	summer
2022-2023	Kinesiology Undergraduate Research Scholarship	Ireland Lawson	summer
2021	Faculty of Science/BME Summer Studentship	Asmi Multani	summer
2020	R. R. Singleton Summer Studentship (McCaig)	Faizan Syed	summer
2020	NSERC USRA	Jeff Ilg	summer
2020	PURE	Shabit Hassan	summer
2020	CONNECT! NSERC CREATE	Muzammil Nasir	summer
2020	CONNECT! NSERC CREATE	Darius Ramratten	summer
2019	HYRS	Asmi Multani	summer
2019	CONNECT! NSERC CREATE	Sadhiq Nazeer	summer
2019	CONNECT! NSERC CREATE	Muzammil Nasir	summer

2019	R.R. Singleton Summer Studentship (McCaig)	Jeff Ilg	summer
2019	Markin USRP	Taylor Pigott	summer
2018	PURE	Maria Hernandez	summer
2018	CIHR Summer Studentship	John Michaiel	summer
2018	R.R. Singleton Summer Studentship (McCaig)	Ross Crichton	summer
2018	R. R. Singleton Summer Studentship (McCaig)	Jeff Shin	summer
2018	CONNECT! NSERC CREATE	Matteo Biglioli	summer
2018	CONNECT! NSERC CREATE	Neum Jelani	summer
2018	ELAP	Nicolas Collao Alonso	winter-summer
2017-2018	TUBITAK	Faruk Örtes	fall-fall
2017	HYRS	Curtis Ostertag	summer
2017	R. R. Singleton Summer Studentship (McCaig)	John Michaiel	summer
2017	Alberta Innovates Summer Studentship	Carissa Chung	summer
2017	Markin USRP	Kalvin Wu	summer
2017	CIHR Summer Studentship	Michael Moroz	summer
2017	CIHR Summer Studentship	Jenice Ma	summer
2016	Alberta STEP Program	Loretta Ko	summer
2016	Alberta STEP Program	James Mather	summer
2016	Markin USRP	Sophia Poscente	summer
2016	AIHS Summer Studentship	Charlie Wang	summer
2016	NSERC USRA	Tabitha Hawes	summer
2016	NSERC USRA	Michael Moroz	summer
2015	CIHR Summer Studentship	Anthony Issler	summer
2015	Markin USRP	Sonja Waeckerlin	fall/winter
2015	USRA	Craig Martis	summer
2015	NSERC CREATE CUSP	Dening Wang	summer
2015	NSERC CREATE CUSP	Jennifer O'Reilly	summer
2015	NSERC CREATE CUSP	Myles Borthwick	summer
2015	AIHS Summer Studentship	Paul Riek	summer
2015	AIHS Summer Studentship	Si (David) Yong Kim	summer
2015	MARKIN-USRP	Sudeepta Aurka	summer
2015	PURE	Svetlana Kuznestova	summer
2015	USRA	Thomas Zhang	summer
2015	NSERC CREATE CUSP	Tristan McSwiney	summer
2015	NSERC CREATE CUSP	Jahaan Ali	summer
2014	USRA	Alexis Jones	summer
2014	O'Brien Centre Summer Studentship	Charmi Dholakia	summer
2014	NSERC CREATE CUSP	Violet Campbell	summer
2014	NSERC CREATE CUSP	Jens Herzog	summer
2014	NSERC CREATE CUSP	Vivian Wang	summer
2014	NSERC CREATE CUSP	Alex Li	summer
2014	NSERC CREATE CUSP	Svetlana Kuznetsova	summer
2014	PURE	Sean Crooks	summer
2014	AIHS	Hilda Antwi-Nsiah	summer
2013	NSERC-USRA	Kevin Boldt	summer
2013	NSERC-USRA	Violet Campbell	summer
2013	Markin-USRP	Vivian Wang	summer
2013	AIHS Summer Undergraduate Award	Sean Crooks	summer
2013	NSERC - CREATE CUSP	Cory Meeuwisse	summer

2013	NSERC - CREATE CUSP	Jens Herzog		summer
2012	Markin – USRP	Stephanie Vetsch		summer
2011	NSERC – CREATE CUSP	Haakon Lenes		summer
2011	NSERC – CREATE CUSP	Sean Crooks		summer
2010	HYRS	Chelsea Saltys		summer
2010	NSERC – CREATE CUSP	Anthony Killick		summer
2010	NSERC – USRA	Erica Woo		summer
2010	NSERC – CREATE CUSP	Esther Chan		summer
2010	Alberta Innovates	Marie Armstrong		summer
2010	Markin –Flanagan	Marie Armstrong		summer
2009	HYRS	Sarah Holub		summer
2009	ELAP	Fernando Lemos		spring
2009	NSERC – CREATE CUSP	Caitlin Logan		summer
2009	PURE	Mike Duvall		summer
2009	Markin – USRP	Michael Duvall		
2009	NSERC – USRA	Erica Giles		summer
2008	NSERC – USRA	Andrew Wu		summer
2008	NSERC – USRA	Jena Hall		summer
2008	NSERC – USRA	Dianne Ikeda		summer
2008	NSERC – USRA	Mike Duvall		summer
2007	Markin – USRP	Neal Austin		summer
2007	Markin – USRP	Neil Austin		summer
2006	Markin – USRP	Caitlin Logan		summer
2006	Markin – USRP	Summer Students		
2004	Markin – USRP	Laura E. Hinz		winter
2003	Markin – USRP	Robert A. Mutch		fall
2003	Markin – USRP	Robert A. Mutch		summer
2003	Markin – USRP	Summer Students		
2002	Markin – USRP	Keith P. Barrett		summer
2002	Markin – USRP	Graeme M. Campbell		summer
2002	Markin – USRP	Emily X. Zhang		summer
2002	Markin – USRP	Summer Students		
2002	Markin – USRP	Emily X. Zhang		fall
2002	Markin-Flanagan Summer Studentships	Summer Students	$	3,000
1999	Natural Sciences and Engineering Research Council	Summer Students	$	5,200
1997	Alberta Heritage Foundation for Health Research	Summer Students	$	5,200
1996	Alberta Heritage Foundation for Health Research	Summer Students	$	5,200
1995	Alberta Heritage Foundation for Health Research and Natural Sciences and Engineering Research Council	Summer Students	$	16,600
1994	Alberta Heritage Foundation for Health Research	Summer Students	$	5,200
1992	Natural Sciences and Engineering Research Council	Summer Students	$	7,200
1991	University of Calgary-SEED	Summer Student	$	2,380
1991	Natural Sciences and Engineering Research Council	Summer Students	$	6,400
1990	Natural Sciences and Engineering Research Council and STEP	Summer Students	$	5,835
1989	Natural Sciences and Engineering Research Council	Summer Students	$	8,677
1988	Summer Employment/Experience Development	Summer Student	$	2,736
1987	Summer Temporary Employment Program	Summer Student	$	7,700

POSTDOCTORAL FELLOW FINANCIAL SUPPORT

Current

Year	Grant Agency Date	Student Awarded	Amount per year
2022 – 2024	ACHRI Postdoctoral Fellowship	Stephanie Ross	$ 25,000

Past

Year	Grant Agency Date	Student Awarded	Amount[6]
2020 – 2022	Swiss National Science Foundation (1.5 years)	Fransiska Bossuyt	$ **125,000**
2017 – 2021	CIHR Postdoctoral Award	Ian Smith	$ 40,000
2017 – 2019	Alberta Innovates	Amin Komeili	$ 50,000
2018 – 2019	Alberta Innovates – Health Solutions	Eng Kuan Moo	$ 50,000
2016 - 2018	AIHS Incentive Award	Eng Kuan Moo	$ 15,000
2015 - 2018	CIHR Postdoctoral Award	Eng Kuan Moo	$ 40,000
2016 – 2018	Japanese Society for the Promotion of Science	Atsuki Fukutani	$ 56,700
2015 - 2017	Alberta Innovates – Health Solutions	Ian Smith	$ 50,000
2015 – 2018	Alberta Innovates – Health Solutions	Kelly Kaiser	$ 70,000
2015 - 2017	Alberta Innovates – Health Solutions	Mohsen Maleki-Karyak	$ 50,000
2015 - 2017	Eye High Postdoctoral Award	Amin Komeili	$ 50,000
2014 – 2015	NSERC CREATE Postdoctoral Fellowship	Eng Kuan Moo	$ 10,000
2014 – 2015	Banting Award	Geoff Power	$ 70,000
2014 – 2015	Alberta Innovates – Health Solutions	Geoff Power	$ 10,000
2014 – 2015	University of Calgary Banting Award VP Award	Geoff Power	$ 15,000
2014	OA Team Grant Studentship	Eng Kuan Moo	$ 10,000
2012 - 2012	Alberta Innovates – Health Solutions	Ziad Abusara	$ 80,000
2011 - 2011	Alberta Innovates – Health Solutions	Ziad Abusara	$ 35,000
2011 – 2012	Alberta Innovates	Hadi Mohammadi	$ 50,000
2010 - 2011	Alberta Innovates – Health Solutions	Hadi Mohammadi	$ 35,000
2009 - 2011	Natural Sciences and Engineering Research Council CREATE-October 2009-September 2011	Appaji Panchangam	$ 20,000
2009 - 2010	Alberta Heritage Foundation for Medical Research OA Team Grant-February 2009-March 2011	Ziad Abusara	$ 22,500
2007-2008	Alberta Heritage Foundation for Health Research	Salvatore Federico	$ 35,000
2005-2007	Alberta Heritage Foundation for Health Research	Rami Korhonen	$ 35,000
2004-2007	Alberta Heritage Foundation for Health Research	Sharon Bullimore	$ 35,000
2004-2006	Alberta Ingenuity	Salvatore Federico	$ 48,000
2004-2005	Natural Sciences and Engineering Research Council	Kevin Forrester	$ 40,000
2003-2004	Universidade Federal do Rio Grande do Su, Brazil	Marco Vaz	$ 44,000
2002-2004	Alberta Ingenuity	David Corr	$ 40,000
2002-2004	Alberta Heritage Foundation for Health Research	LePing Li	$ 40,000
2002	Canadian Memorial College of Chiropractors	Janice Drover	$ 30,000
2000	Canadian Memorial College of Chiropractors	Mirjam Baechler	$ 30,000
1998-1999	Pacific Institute of Mathematical Science-R	Ait-Haddou	$ **10,000**
1998	Canadian Memorial College of Chiropractors	Jill Hayden	$ 30,000

[6] Bold values are the total award amount all other values are per year.

1997-2000	Alberta Heritage Foundation for Health Research	John Wu	$	37,800
1997	Sport Medicine Centre, University of Calgary	Richard Young	$	30,000
1996-1997	Swiss National Foundation	Esther Suter	$	**40,000**
1995-1996	Olympic Oval Endowment Fund	Richard Young	$	**15,000**
1994-1996	Canadian Chiropractic Association	Esther Suter	$	28,000
1993-1995	Alberta Heritage Foundation for Health Research	Boris Prilutsky	$	33,730
1992-1993	University of Calgary	Boris Prilutsky	$	27,600
1991-1993	Canadian Chiropractic Association	Julianna Gál	$	25,000

SUPERVISION

Postdoctoral Fellows

Current

2022 Stephanie Ross (start Sep 1, 2022)
2022 Michael Baggaley (start Oct 1, 2022)

Past

2020-2022 Fransiska Bossuyt (Aug 1, 2020 – Apr 30, 2022, visiting from Switzerland)
2020 Seong-won Han (Sep 1, 2020 – Dec 31, 2021)
2014-2021 Ian Smith (April 28, 2014 -Sep 30, 2021)
2020 Kotaybah Hashlamoun (May 1 – Aug 30, co-supervised with S. Federico)
2014-2020 Eng Kuan Moo (May 15, 2014 – Mar 31, 2020)
2015-2019 Amin Komeili (April 1, 2015 – Nov 15, 2019)
2016-2018 Atsuki Fukutani (April 6, 2016 – April 5, 2018, visiting from Japan)
2012-2018 Kelly Kaiser (September 1, 2012 – March 17, 2018, maternity leave Mar 9, 2016 – Mar 8, 2017)
2016-2017 Rafael Fortuna (Oct 1, 2016 – Sept 30, 2017)
2013-2017 Chris Waters (August 1, 2013 – Jul 31, 2017)
2014-2017 Mohsen Maleki Karyak (January 1, 2014- Jan 30, 2017, co-supervised with S. Federico)
2013-2015 Geoff Power (January 1, 2013 – Oct 15, 2015)
2014-2015 Atsuki Fukutani (April 1, 2014-March 30, 2015, visiting from Japan)
2014 Anas Atieh (January 1, 2014)
2012 Christian Egloff (January 5, 2012-December 31, 2012)
2010-2012 Hadi Mohammadi (July 1, 2010)
2008-2012 Appaji Panchangam (October 1, 2008)
2005-2011 Venus Joumaa (June 1, 2005-August 31, 2011)
2009-2011 Sang-Kuy Han (September 1, 2009–April 29, 2011)
2010-2010 Monika Horisberger (January 6, 2010–December 31, 2010)
2009-2010 Jack Chieslar (July 15, 2009–July 15, 2010)
2009 Andre Leumann (January 1, 2009–December 31, 2009)
2007-2008 Gudrun Schappacher, Universitat Graz, Austria
2007 Samer Adeeb
2005-2007 Rami Korhonen
2004-2007 Sharon Bullimore
2004-2006 Salvatore Federico
2002-2007 LePing Li
2005-2006 Ali Oskouei
2004-2006 Kevin Forrester
2003-2004 Marco Vaz

2002-2004	David Corr
2002-2002	Janice Drover
2001-2005	Dilson Rassier
2001-2002	Joanne Archambault
2000	Mirjam Baechler
1998-2006	Rachid Ait Haddou
1998	Rick Neptune
1998	Jill Hayden
1997-1998	Jack Chieslar
1996-1997	Julianna Gál
1995-1997	Richard Young
1994-2000	John Wu
1994-1997	Esther Suter
1994	Hans Savelberg
1992-1995	Boris Prilutsky
1991-1993	Julianna Gál

Students Graduated (up to 2021, 35 MSc and 33 PhD)

2018-2022	Bryan Yu, MSc, Kinesiology *In vivo vastus lateralis excursion during speed skating imitation*	Supervisor
2016-2022	Scott Sibole, PhD, Biomedical Engineering *Toward understanding metriscale articular cartilage mechanics*	Supervisor
2021	Sarah Abramovic, MSc, Kinesiology (visiting from ETH Zurich for MSc Project) *The non-intuitive, in-vivo behavior of aponeuroses in a unipennate muscle*	Supervisor
2018-2021	Drew Lawson, MSc, Kinesiology *Evaluation of the lower body strength and landing strategy of elite athletes after anterior cruciate ligament reconstruction with hamstring autograft*	Supervisor
2016-2020	Lindsay Gorell, PhD, Kinesiology *Musculoskeletal biomechanical and electromyographical responses associated with spinal manipulation*	Supervisor
2016-2020	Kevin Boldt, PhD, Kinesiology *Exercise and dietary interventions in a rat model of cardiac adaptation*	Supervisor
2015-2020	Seong-Won Han, PhD, Kinesiology *Changes in patellofemoral joint mechanics in the presence of quadriceps muscle imbalance*	Supervisor
2017-2020	Nathaniel Morris, MSc, Kinesiology *Neuromuscular deficits following anterior cruciate ligament reconstruction with hamstring autograft: implications for rehabilitation and return to sport testing*	Supervisor
2014-2019	Jaqueline Lourdes Rios, PhD, Kinesiology *Exercise and dietary interventions in a rat model of metabolic knee osteoarthritis*	Supervisor
2012-2017	Kelsey Collins, PhD, Biomedical Engineering *Diet-induced obesity and musculoskeletal health: Studies in a rat model*	Supervisor
2015-2017	Shuyue Liu, MSc, Kinesiology *The origin of force increase in actively stretched single muscle fibres*	Supervisor
2012-2017	Krysta Powers, PhD, Biomedical Engineering *A proposed mechanism for enhanced Titin-based force during Ca^{2+} - activation*	Supervisor
2012-2017	Matt Jordan, PhD, Medical Science *Neuromuscular function and performance in alpine ski racers with anterior cruciate ligament reconstruction: a return to sport framework*	Supervisor
2009-2016	Brandon Hisey, MD/PhD, Biomedical Engineering	Supervisor

	Mechanics of amphibian skeletal muscle at long lengths	
2013-2016	Maria Engel (Yamamoto), MSc, Biomedical Engineering	Supervisor
	The effects of increased muscle stimulation on serial sarcomere number	
2013-2016	Kevin Boldt, MSc, Kinesiology	Supervisor
	Contractile properties of cardiac muscle following increasing doses of chronic exercise training and overtraining in rats	
2013-2016	Scott Sibole, MSc, Kinesiology	Supervisor
	pyCellAnalyst: Extensive software for three-dimensional analysis of deforming cells	Supervisor
2014-2015	Hendrik Enders PhD	
	Conticomuscular contributions to the control of rhythmic movement in humans	Co-Supervisor
2009-2015	Rafael Fortuna PhD	Supervisor
	Acute and chronic effects of Botulinum toxin type-A on the structure and function of the quadriceps femoris muscles of New Zealand white rabbits	
2010-2015	Mike DuVall PhD	Supervisor
	Titin regulation of active and passive force in skeletal muscle	
2011-2015	Heiliane Fontana PhD	Co-Supervisor
	In-vivo vastus lateralis force-length and force-velocity relationships at the fascicle and muscle tendon unit level	
2012-2015	Kaleena Johnston MSc	Supervisor
	An Examination of Sarcomere Length Non-uniformities in Actively Stretched Muscle Myofibrils	
2012-2014	Eng Kuan Moo, PhD, Kinesiology	Supervisor
	In situ and in vitro chondrocyte biomechanics	
2011-2014	Sigrun Matthiasdottir MSc	Supervisor
	Muscle and Fascicle Excursion in CP Children	
2011-2014	Nada Abughazaleh MSc	Supervisor
	The Influence of Maximal and Submaximal Cyclic Concentric and Eccentric Exercise on Chondrocyte Death and Synovial Fluid Proteins in the Rabbit Knee	
2010-2014	Anthony Killick MSc	Supervisor
	Metabollically Optimal Gait Transitions in Cross-Country Skiing	
2010-2014	Conrad Tang MSc	Supervisor
	A Prospective Study Evaluating the Effects of Manual Therapy on the Treatment of Patellofemoral Pain	
2010-2013	Ryan Madden MSc	Supervisor
	In Situ Chondrocyte Mechanics and Mechanobiology	
2010-2013	Andrew Sawatsky MSc	Supervisor
	The Effect of Vastus Medialis Transection on Patellofemoral Contact Pressure and Patellar Tracking	
2008-2012	Audree McKenzie MSc	Supervisor
	Passive cardiac properties and titin expression in dilated cariomyopathy	
2004-2011	Doug Bourne PhD	Supervisor
	Chondrocyte viability after in vivo muscular and impact loading	
2005-2010	Aliaa Rehan Youssef PhD	Supervisor
	The development of botulinum type-A toxin-induced muscle weakness model of OA	
2004-2010	Tim Leonard PhD	Supervisor
	Force production in lengthened myofibrils and single sarcomeres	
2008-2009	Neal Austin MSc	Supervisor
	In vivo skeletal muscle fiber function	
2005-2009	Sang-Kuy Han PhD	Supervisor
	In situ chondrocyte mechanics and numerical modeling	
2007-2009	Brandon Hisey MSc	Supervisor
	New observations on residual force enhancement in cat soleus	

2006-2008	Eva Szabo MSc	Supervisor
	Muscle adaptation in patients with joint injury and disease	
2006-2008	Megan Yaraskavitch MD/MSc-LIM	Supervisor
	Changes in passive muscle properties and titin in spastic cerebral palsy	
2006-2008	Matthew Gotch MSc	Co-Supervisor
	Department of Mechanical and Manufacturing Engineering	
	The effect of anterior knee joint loading on hamstrings muscle stiffness	
2005-2008	Ashi Mehta MSc	Supervisor
	Cross-bridge mechanics	
2002-2008	Eun-Jeong Lee PhD	Supervisor
	History dependent force production in single skeletal muscle fibres	
2002-2006	Gholamreza Rouhi PhD	Co-Supervisor
	Theoretical aspects of bone remodeling process	
2001-2005	Ali Oskouei PhD	Supervisor
	History dependence of skeletal muscle force production in sub-maximal voluntary contractions of human adductor pollicis muscle	
2001-2005	Daniel Peterson PhD	Supervisor
	Selected mechanical properties of amphibian skeletal muscle	
2001-2005	Timothy Butterfield PhD	Supervisor
	Sarcomere number following strain injury in skeletal muscle	
1999-2004	Robson Lemos PhD	Co-Supervisor
	Modeling the deformation of skeletal muscle contraction	
1998-2004	Andrea Clark PhD	Supervisor
	Heterogeneous patellofemoral articular cartilage mechanical and biological response to compression and anterior cruciate ligament transection	
1998-2003	Motoshi Kaya PhD	Supervisor
	Coordination of cat hindlimb muscles	
2001-2003	Sean Craig MSc	Supervisor
	Effects of in-vivo joint loading on articular cartilage chondrocyte viability	
2000-2003	Sang-Kuy Han MSc	Co-supervisor
	Articular cartilage modeling in the 3-D patellofemoral joint contact	
2002-2003	David Longino MSc	Supervisor
	Botulinum toxin and a new animal model of muscle weakness	
1999-2003	Hae-Dong Lee PhD	Supervisor
	History-dependent properties of force production in in-situ and in-vivo skeletal muscle	
1999-2002	Rachel Schachar MSc	Supervisor
	Effects of active length changes on steady-state force production in mammalian skeletal muscle	
1997-2002	Azim Jinha MSc	Supervisor
	Analyses of Muscle Force Predictions Based on Optimization	
1999-2002	Sylvain Couillard MSc	Supervisor
	Cartilage deformation of the feline patellofemoral joint obtained from laser scanning	
1999-2000	Salvatore Federico MSc	Co-Supervisor
	Biomechanical analysis of articular cartilage in joint contact	
1995-2000	Joanne Archambault PhD	Supervisor
	Induction of matrix metalloproteinases in tendon	

1997-2000	Wendy Carvalho MSc *Structural changes of unipennate skeletal muscle during isometric contractions*	Supervisor
1997-1999	Hae-Dong Lee MSc *Force depression during contractions*	Supervisor
1994-1997	Ming-Ming Liu MSc *Dynamic muscle force predictions from EMG signals using Artificial Neural Networks*	Supervisor
1992-1997	Tim Koh PhD *Regulation of sarcomere number in the growing rabbit tibialis anterior*	Supervisor
1994-1997	Jason Karp MKin *Motor unit recruitment order for isometric, concentric and eccentric voluntary contractions*	Supervisor
1991-1996	Murray Maitland PhD *Longitudinal measurement of tibial motion relative to the femur during passive displacements and femoral nerve stimulation in the ACL-deficient cat model of osteoarthritis*	Supervisor
1990-1996	Evelyne Hasler PhD *In-vivo knee loading before and after ACL transection in an animal model of osteoarthritis*	Supervisor
1992-1996	Marco Vaz PhD *Mechanism of muscle vibrations during stimulated and voluntary isometric contractions of mammalian skeletal muscle*	Supervisor
1993-1995	Greg Kawchuk MSc *The characterization of functional tissue compliances in the human lumbar spine*	Supervisor
1990-1995	Todd Allinger PhD *Stability and the descending limb of the force length relation in mouse skeletal muscle-A theoretical and experimental examination*	Supervisor
1993-1995	Joanne Archambault MSc *Clinical aspects of overuse tendon injury and experimental aspects of tendon properties*	Supervisor
1989-1993	Antonio Guimaraes PhD *The EMG-force relation of the cat soleus muscle*	Supervisor
1987-1990	Lynda Read MSc *A 2D knee model applied to alpine skiing*	Supervisor

Graduate Students

Present

2023	Darsh Tripathi, MSc, Kinesiology	Supervisor
2022	Esthevan Machado dos Santos, MSc, Kinesiology	Supervisor
2022	Faizan Syed, MSc, Biomedical Engineering	Supervisor
2022	Armaan Sekhon, MSc, Biomedical Engineering	Supervisor
2022	Mauricio Delgado, PhD, Kinesiology	Supervisor
2021	Daryl Chamber, MSc, Kinesiology	Co-Supervisor
2021	Nathan Boon-van Mossel, MSc, Kinesiology	Supervisor
2021	Hannah Smith, MSc, Biomedical Engineering	Supervisor
2022	Ashna Subramanium, PhD, Kinesiology	Supervisory Committee
2020	Ainsley Smith, MSc, Biomedical Engineering	Supervisory Committee
2020	Shuyue Liu, PhD, Kinesiology	Supervisor

2020	Matthew Zukowkski, MSc, Kinesiology	Supervisor
2020	Nada Abughazaleh, PhD, Biomedical Engineering	Supervisor
2019	Tim van der Zee, PhD, Biomedical Engineering	Supervisory Committee
2019	Margaret (Meng) Li, MSc, Kinesiology	Supervisor
2017	Baaba Sekyiwaa Otoo, PhD, Biomedical Engineering	Supervisor
2016	Franziska Onasch, PhD, Kinesiology	Supervisor
2015	Amir Hamedzadeh, PhD, Biomedical Engineering	Supervisory Committee

Past

2018-2022	Bryan Yu, MSc, Kinesiology	Supervisor
2018-2022	Michael Baggaley, PhD, Kinesiology	Supervisory Committee
2020-2022	Isabel Aldrich-Witt, MSc, Kinesiology	Supervisor
2016-2022	Scott Sibole, PhD, Biomedical Engineering	Supervisor
2019-2022	Sophia Poscente, MSc, Kinesiology	Supervisory Committee
2017-2022	Arash Khassetarash, PhD, Kinesiology	Supervisory Committee
2020-2021	Natalie Yeung, MSc, Kinesiology	Supervisory Committee
2019-2021	Anupriya Singh, PhD, Biomedical Engineering	Supervisory Committee
2014-2021	Graham MacDonald, PhD, Kinesiology	Supervisor
2020-2021	Ashna Subramanium, MSc, Kinesiology	Co-Supervisor
2018-2021	Drew Lawson, MSc, Kinesiology	Supervisor
2019-2021	David Yang, MSc, Medical Science	Supervisory Committee
2016-2020	Kevin Boldt, PhD, Kinesiology	Supervisor
2016-2020	Lindsay Gorell, PhD, Kinesiology	Supervisor
2015-2020	Seong-Won Han, PhD, Kinesiology	Supervisor
2017-2020	Nathaniel Morris, MSc, Kinesiology	Supervisor
2016-2020	Austyn Matheson, PhD, Biomedical Engineering	Supervisory Committee
2016-2020	Kotaybah Hashlamoun, PhD Biomedical Engineering	Supervisory Committee
2014-2019	Jaqueline Lourdes Rios, PhD, Kinesiology	Supervisor
2015-2018	Alexander Chen, MSc, Kinesiology	Supervisor
2014-2018	Maurice Mohr, MSc, Kinesiology	Supervisory Committee
2010-2018	Ryan Lewinson, MD/PhD, Biomedical Engineering	Supervisory Committee
2013-2017	Yasir Al-Saffar, PhD, Kinesiology (U. Malaysia, visiting)	Co-Supervisor
2015-2017	Shuyue Liu, MSc, Kinsiology	Supervisor
2012-2017	Kelsey Collins, PhD, Kinesiology	Supervisor
2009-2017	Brandon Hisey, MD/PhD, Medicine/Biomedical Engineering	Supervisor
2012-2017	Krysta Powers, PhD, Kinesiology	Supervisor
2012-2017	Matt Jordan, PhD, Medical Science	Supervisor
2014-2016	Baaba Skyiwa Otoo, MSc, Biomedical Engineering	Co-Supervisor
2013-2016	Maria Engel (Yamamoto), MSc, Biomedical Engineering	Supervisor
2013-2016	Kevin Boldt, MSc, Kinesiology	Supervisor
2013-2016	Scott Sibole, MSc, Biomedical Engineering	Supervisor
2014-2015	SungYong (Kevin) Shin, MSc	Supervisory Committee
2014-2015	Hendrik Enders, PhD, Kinesiology	Co-Supervisor
2009-2015	Rafael Fortuna, PhD, Kinesiology	Supervisor
2010-2015	Mike DuVall, PhD, Kinesiology (Biomedical Engineering)	Supervisor
2012-2015	Kaleena Johnston, MSc, Kinesiology	Supervisor
2014-2015	Sam Dorosz, MSc, Biomedical Engineering	Supervisory Committee
2015	Heiliane Fontana, PhD, Kinesiology	Co-Supervisor
2010-2014	Kaveh Pourakbar Saffar, PhD, Mechanical & Manufacturing Eng	Supervisory Committee

2012-2014	Eng Kuan Moo, PhD, Kinesiology	Supervisor
2011-2014	Nada Abughazaleh, MSc, Biomedical Engineering	Supervisor
2011-2014	Anthony Killick, MSc, Kinesiology	Supervisor
2010-2014	Sigrun Matthiasdottir, MSc, Kinesiology (Biomedical Engineering)	Supervisor
2009-2014	Conrad Tang, MSc, Kinesiology	Supervisor
2010-2013	Ryan Madden, MSc, Kinesiology (Biomedical Engineering)	Supervisor
2010-2013	Andrew Sawatsky, MSc, Kinesiology	Supervisor
2009-2010	Mike Duvall, MSc, Kinesiology	Supervisor
2006-2012	Audree McKenzie, MSc, Kinesiology	Supervisor
2008-2011	Lin Liu, MSc, Engineering	Co-Supervisor
2005-2010	Aliaa Youssef, PhD, Kinesiology	Supervisor
2004-2011	Doug Bourne, PhD, Kinesiology	Supervisor
2009	Debora Cantergi, Universidade Federal do Rio Grande do Su Brazil, MSc	Co advisor
2009	Jared Fletcher, PhD, Kinesiology	Supervisory Committee
2008-2010	Helen Buie, PhD, Mechanical & Manufacturing Eng	Supervisory Committee
2007-2009	Brandon Hisey, MSc, Kinesiology	Supervisor
2007-2009	Neal Austin, MSc, Kinesiology	Supervisor
2007-2010	Sarah Manske	Supervisory Committee
2007	Jackie Thurston, MSc	Supervisory Committee
2007	Tiffany Edgecombe	Supervisory Committee
2006-2008	Matt Gotch, MSc Biomedical Engineering	Co-Supervisor
2006-2008	Megan Yaraskavitch, MSc, Kinesiology	Supervisor
2006-2008	Eva Szabo, Msc, Engineering	Supervisor
2006	Murray Heber, MSc, Medical Science	Supervisory Committee
2005-2008	Ashi Mehta, MSc, Engineering	Supervisor
2005	Sam Walcott, PhD, Cornell University	Supervisory Committee
2004-2010	Tim Leonard, PhD, Kinesiology	Supervisor
2004	Michael Butcher	Supervisory Committee
2003-2009	Sang Kuy Han, PhD, Engineering	Supervisor
2003-2007	Karen Weiss-Bundy, MSc, Kinesiology	Supervisor
2002-2008	Eun-Jeong Lee, PhD Kinesiology	Supervisor
2002-2006	Gholamreza Lemraasky	Co-Supervisor
2002-2005	Prism Schneider	Supervisory Committee
2002-2004	Andrew Betik, PhD	Supervisor
2002-2004	Jolene Lepp, PhD	Supervisor
2001-2005	Tim Butterfield, PhD	Supervisor
2001-2005	Danny Peterson, PhD	Supervisor
2001-2005	Ali Oskouei, PhD	Supervisor
2000-2004	Sabina Bruehlmann	Supervisory Committee
1998-2004	Andrea Clark PhD	Supervisor
1998-2003	Motoshi Kaya PhD	Supervisor
2001-2003	Sean Craig MSc	Supervisor
2000-2003	Sang-Kuy Han MSc	Co-supervisor
2002-2003	David Longino MSc	Supervisor
1999-2003	Hae-Dong Lee PhD	Supervisor
1999-2002	Rachel Schachar MSc	Supervisor
1997-2002	Azim Jinha MSc	Supervisor
1999-2002	Sylvain Couillard MSc	Supervisor
1999-2000	Salvatore Federico MSc	Co-Supervisor

1995-2000	Joanne Archambault PhD	Supervisor
1997-2000	Wendy Carvalho MSc	Supervisor
1997-1999	Hae-Dong Lee MSc	Supervisor
1994-1997	Ming-Ming Liu MSc	Supervisor
1992-1997	Tim Koh PhD	Supervisor
1994-1997	Jason Karp MKin	Supervisor
1991-1996	Murray Maitland PhD	Supervisor
1990-1996	Evelyne Hasler PhD	Supervisor
1992-1996	Marco Vaz PhD	Supervisor
1993-1995	Greg Kawchuk MSc	Supervisor
1990-1995	Todd Allinger PhD	Supervisor
1993-1995	Joanne Archambault MSc	Supervisor
1989-1993	Antonio Guimaraes PhD	Supervisor
1987-1990	Lynda Read MSc	Supervisor

External Examiner/Examining Committee Activity

2022	Patrick Bakenecker *Mechanical determinants affecting eccentric force enhancement within the human quadriceps*
2022	Geoffrey Gelley (PhD, University of Manitoba, External Examiner) *Motor performance of participants with chronic neck pain and asymptomatic participants pre- and post-spinal manipulation uding separate eye and neck movement Fitts' tasks*
2022	Michael Baggaley (PhD, Kinesiology, Supervisory Committee Member) *Musculoskeletal loading during graded running*
2022	Sophia Poscente (MSc, Kinesiology, Supervisory Committee Member) *Modulation of voluntary behaviour and responses to mechanical perturbations reflect the accuracy demands of upperlLimb reaching*
2022	Arash Khassetarash (PhD, Kinesiology, Supervisory Committee Member) *Repeated bout effects and musculoskeletal boading during prolonged downhill running*
2021	Natalie Yeung (MSc, Kinesiology, Examination Committee Member) *Feedback responses must disengage from postural control to initiate rapid movements*
2021	David Yang (MSc, Medical Sciences, Examination Committee Member) *Contracture and spacticity: mechanisms of activity-based training and objective assessment in cerebral palsy*
2020	Michael Esposito (MSc, Biomedical Engineering, Examination Committee Member) *Effects of midsole cushioning stiffness of Achilles tendon stretch during running*
2020	Inaihá Benincá (MSc, Rehabilitation Sciences, Federal University of Santa Catarina, Araranguá) *The effects of immersion depth and speed on the ground reaction forces for walking and running in water*
2020	Austyn Matheson (PhD, Biomedical Engineering, Supervisory Committee Member) *Proteoglycan-4 concentration and biomechanical function in equine joint disease, exercise, and in vitro cartilage repair*
2020	Kotaybah Hashlamoun (PhD, Biomedical Engineering, Supervisory Committee Member) *On the permeability and diffusivity of articular cartilage*
2020	Keenan Barry MacDougall (MSc, Kinesiology, Supervisory Committee Member) *Additional in-series compliance does not affect the length dependence of activation in rat medial gastrocnemius*
2019	Tim Davison (PhD, Computer Science, External Examiner) *LifeBrush: Dynamic Illustration for the Bimolecular Mesoscale*
2019	Gustavo Morais (MSc, University of Sao Paulo, Riberao Preto School of Physical Education and Sport, External Examiner)

Eccentric exercise: mechanical loading of the knee joint and its contribution to osteoarthritis in mice.

2019 Rachel Sondergaard (PhD, Neuroscience, Cumming School of Medicine, External Examiner)
Cerebellar dysfunction as a core pathophysiologic mechanicsm of idiopathic dystonia

2019 Collen Chemerka (BSc, Medical Engineering, University of Applied Sciences, Koblenz, Germany, External Reviewer)
Effects of overtraining on the knee joint in mice

2019 Olli Ohtonen (PhD, Sport and Health Sciences, University of Jyväskylä, Finland, External Reviewer)
Biomechanics in cross-country skiing skating technique, measurement techniques of force production and ski properties

2018 Jørgen Danielsen (PhD, Medicine and Health Sciences, Norwegian University of Science and Technology, External Examiner)
Energetics and dynamics of double poling cross country skiing

2017-2018 Caroline Göpfert (PhD, Sport and Health Sciences, University of Jyväskylä, Finland, External Reviewer)
Biomechanics of speed adaptation and functionality of arm swing in cross-country skiing

2014-2018 Maurice Mohr (PhD, Kinesiology, Supervisory Committee Member)
Lower extremity muscle activation following a previous knee injury: implications for post-traumatic knee osteoarthritis

2010-2018 Ryan Lewinson (MD/PhD, Biomedical Engineering, Supervisory Committee Member)
Prescription of specialized footwear for individuals with knee osteoarthritis

2018 Guomin Ren (PhD, Cumming School of Medicine, Examination Committee Member)
Inflammatory profiling in early osteoarthritis

2017 Caroline Göpfert (PhD, Faculty of Sport and Health Sciences, University of Jyväskylä)

2017 Robert Csapo, PhD (Habilitation, Sport Science, Leopold-Franzens-University Innsbruck, Expert)

2016 Scott Seamone (PhD, Biological Science, Candidacy, Internal/External Examiner)
Elasmobranch muscle structure and mechanical properties 4 P

2016 Baaba Skyiwa Oto (MSc, Biomedical Engineering, Examination Committee Member)
Impact of knee joint loading on site-specific cartilage gene expression in a porcine model

2016 Parth Iyer (MSc, Mechanical Engineering, Internal/External Examiner)
Development of a real-time performance measurement system for sprint starts

2016 Daniel Comaduran-Marquez (MSc, Biomedical Engineering, Internal/External Examiner
Design and development of a multichannel current-EMG system for coherence analysis

2016 Aleen Pangka (PhD, Kinesiology, Internal/External Examiner)
Biomechanical measures of the muscle-bone unit in postmenopausal females

2016 George Lawrence Powell (PhD, Biological Sciences, Internal/External Examiner)
Evolution of dermatocranial shape in horned lizards (phrynosoma)

2014-2015 SungYong (Kevin) Shin (MSc, Kinesiology, Committee Member)
Integrin alpha1beta1 protects against signs of PTOA in the articular cartilage of the knee through a mechanism that involves EGFR Signalling

2015 Sam Dorosz (MSc, Biomedical Engineering, Committee Member)
Effect of Synovial Fluid on Boundary Lubrication at a Meniscus – Cartilage Biointerface

2015 Ryan Lewinson (PhD, Biomedical Engineering, Committee Member)
Prescription of specialized footwear for individuals with knee osteoarthritis

2015 Joanna Weber (PhD, Mechanical & Materials Engineering, Queens University, External Examiner)
Mechanical stimulation of chondrocytes and intracellular calcium signaling

2015 Tuomo Silvast (PhD, Applied Physics, University of Eastern finland, External Examiner)
Contrast enhances computed tomography of articular cartilage

2015 Benjamin Hoffman (PhD, Human Mvmt Studies and Nutritional Sciences, External Examiner)
A biomechanical analysis of exercise-induced muscle damage in humans

2015 Stephen Cull (PhD, Mechanical and Manufacturing Engineering Candidacy, External Examiner)

Application of a continuum model to bone

2015 Leah Sparrow (MSc, Veterinary Medicine, External Examiner)

2010-2014 Kaveh PourAkbar Saffar (PhD, Biomedical Engineering, Committee Member)
Biomechanical aspects of carbon nanotube as a reinforcing scaffold for bone tissue

2014 Kate Jones (MSc, Chiropractic, External Examiner)
The effect of sacroiliac manipulation lumbar extensor muscle endurance in asymptomatic individuals

2014 Lindsay Gorrell (MRes, External Examiner)
Dose optimisation of cervical spinal manipulative therapy and its effect on mechanical neck pain

2013 Nathan Murray Solbak (MSc, Kinesiology, Neutral Chair)
Quantifying biomarkers of osteoarthritis in normal sheep synovium - a baseline

2009-2012 Alex Hume (MSc, Biological Sciences, Committee Member)

2012 Stefan Hoerzer (PhD, Kinesiology, Internal/External Examiner)
Functional groups in running biomechanics

2011 Andrey Melnikov (PhD, Mechanical and Manufacturing Engineering, Examining Committee)
Continuum mechanical model of the cardiac muscle

2011 Derek Rutherford (PhD, Biomedical Engineering, Dalhousie University, External Examiner)
Factors affecting knee joint muscle activation patterns during gait in individuals with knee osteoarthritis

2011 Kathleen Faccia (PhD, Archaeology, External Examiner)
Exploring age and activity related changes in prehistoric cis-baikal hunter-gatherer fisheries: A micro-CT analysis of cortical canal microstructure

2011 Wolfgang Seiberl (PhD, Technischen Universitat Munchen, External Examiner)

2010 John Holash (PhD, Kinesiology, Examining Committee)

2010 Sharifah SS Shikh (MSc, University of Malaysia, March)
Development of an alternative prosthetic socket fabrication method: the hydrostatic cast system

2010 Marcus J Freeman (PhD, University of Guelph, External Examiner, July)
Longitudinal sarcomere dynamics of skeletal muscle

2010 Pete Rizun (PhD, Dept of Physics, Examining Committee)

2009 Soraya Janet Bailey (M.Sc, Civil Engineering, External Examiner, April)
The effects of long-term fatigue and creep loading on healing ligaments at normal physiologic loads

2009 Zainisha Vasanji (PhD, Kinesiology, Neutral Chair/Candidacy)

2009 Ni Diao (MSc, Cardiovascular/Respiratory Sciences, External Examiner)

2008 Tamara Glen, (MSc, Gastrointestinal Sciences, Medicine, External Committee Member)

2007 Daniel Hahn (PhD, Technische Universität München, November)

2007 David Rouffet (PhD, Universite Claude Bernard Lyon 1, June) *Study of muscular activation using surface electromyography methodological considerations for human movement analysis*

2006 Elizabeth Kelly (MSc, Program of Biomedical Engineering, External Examiner)
Functional gap junction communication and its mechanobiological role in the outer annulus fibrosus

2006 Michelle Zec (MD, PhD, External Examiner)
In vitro characterization of fatigue damage in the medial collateral ligament of the knee

2005 Victor Valderrabano (PhD, Kinesiology, Neutral Chair)
Ankle Osteoarthritis – Biomechnical and orthopaedic aspects

2005 David Bereznick (PhD, University of Waterloo, External Examiner)
Lumbar manipulation: quantification and modification of the external kinetics affecting the presence and site of cavitation

2005 Nathan James B. Kendrick (MSc, Internal/External Examiner)
Human observation and computer analysis of human running gaits

2004 Yichun Sun (PhD, Internal/External Examiner)
Wave-intensity analysis of right ventricular diastolic suction

2004	Marije van der Werf (MSc, Internal/External Examiner) Colloquiam *Linear cell arrays and cell isolation in the inner and outer annulus fibrosu*s
2000	Eric Snively (MSc, Examining Committee) *Functional Morphology of the Tyrannosaurid Arctometatarsus*
1998-2006	Rachid Ait-Haddou, PhD *Molecular ratchets in biology*

External Referee for Promotion/Tenure/Nomination

2021

Dr. Jenna Monroy, Promotion to Associate Professor	Claremont Colleges
Dr. Michael Hahn, Promotion to Professor	University of Oregon
Dr. Matthew Gage, Promotion to Professor	University of Massachusetts Lowell

2020

Dr. Jing Xian Li, Promotion to Professor	University of Ottawa
Dr. Anja Niehoff, Promotion to Adjunct Professor	University of Cologne

2019

Dr. Alex Scott, Promotion to Professor	University of British Columbia
Dr. Joe Quadrilatero, Promotion to Professor	University of Waterloo
Dr. Kharma Foucher, Promotion to Associate Professor	University of Illinois at Chicago, IL
Dr. Mark King, Personal Title of Chair	Loughborough University, UK
Dr. Matthew Tresch, Promotion to Professor with Tenure	Northwestern University, IL

2018

Dr. Ross Miller, Promotion to Professor with Tenure	University of Maryland
Dr. Jonas Rubenson, Promotion to Professor with Tenure	Penn State University

2017

Dr. Silvia Blemker, Promotion to Professor with Tenure	University of Viginia
Dr. Joanna Wakefield-Scurr, Promotion to Professor with Tenure	University of Portsmouth, UK

2016

Dr. Anne Silverman, Promotion to Associate Professor with Tenure	Colorado School of Mines
Dr. Johnny Huard, Promotion to Professor with Tenure	UT Health, Texas

2015

Dr. Bradley Davidson, Promotion to Associate Professor with Tenure	University of Colorado, Denver
Dr. Noor Asuan Abu Osman, Promotion to Professor	University of Malaya
Dr. Kenton Kaufman, Promotion to Distinguished Mayo Clinic Investigato	Mayo Clinic

2014

Dr. David Altman, Promotion with Tenure	Willamette University
Dr. Yingxin Gao, Promotion to Associate Professor with Tenure	Cornell University
Dr. Christopher Powers, Promotion to Professor with Tenure	University of Southern California
Dr. Stephen Waldman, Promotion to Professor	Ryerson University
Dr. Loren Chiu, Promotion to Associate Professor with Tenure	University of Alberta

2013

Dr. Scott McLean, Promotion to Associate Professor with Tenure	University of Michigan

Dr. Noor Azuan Abu Osman, Promotion to Professor	University of Malaya
Dr. Peter Keir, Promotion to Professor with Tenure	McMaster University
Dr. Edward (Ned) Debold, Promotion to Associate Professor with Tenure	University of Massachusetts

2012

Dr. Blaine Hoshizaki, Promotion to Full Professor	University of Ottawa
Dr. Rami Korhonen, Associate Professor with Tenure	University of Oulu
Dr. Chunfeng Zhao, Promotion to Professor	Mayo Clinic
Dr. Belinda Murphy, Promotion to Associate Professor	University of Malaya
Dr. Fatimah Ibrahim, Promotion to Professor	University of Malaya

2011

Dr. Thomas Quinn, Promotion to Professor	McGill University
Dr. Fluck, Review of Faculty Position	University of Zurich
Dr. Wendy Murray, Promotion to Associate Professor	Northwestern University
Dr. Joel Lenovaz, Promotion to Assistant Professor	University of Saskatchewan
Dr. Kornelia Kulig, Promotion to Professor	University of Southern California
Dr. Kenton Kaufman, Distinguished Mayo Clinic Investigator	Mayo Clinic
Dr. Darryl Thelen, Promotion to Professor	University of Wisconsin
Dr. Hanspeter Frei, Promotion to Associate Professor	Carleton University
Dr. Gongbing Shan, Promotion to Professor	University of Lethbridge
2014Dr. Larry Holt, Professor Emeritus	Dalhousie University

2010

Dr. Joan Sanders, Promotion to full Professor	University of Washington
Dr. Dan Ferris, Promotion to full Professor	University of Michigan
Dr. Sylvia Blemker, Promotion to Associate Professor	University of Virginia
Dr. Richard Neptune, Promotion to full Professor	The University of Texas at Austin
Dr. Antonio Preito Veloso, Promotion to full Professor	University of Lisbon
Dr. Heidi-Lynn Ploeg, Promotion to Associate Professor	The University of Wisconsin
Dr. Cheryl Kozey, Research Professorship Nomination	Dalhousie University

2009

Dr. Kornelia Kulig, Catherine Worthingham Fellows Nomination	University of Southern California
Dr. Susan Brooks, Promotion to Associate Professor	University of Michigan
Dr. Benjamin J. Fregly, Promotion to Professor	University of Florida
Dr. Lesley Brown, Promotion to Professor	University of Lethbridge

2008

Dr. S. Waldman, Promotion to Associate Professor	Queen's University
Dr. John Runciman, Promotion to Professor	University of Guelph
Dr. David Pierotti, Promotion to Professor	Northern Arizona University
Dr. Steve Kautz, Promotion to Professor	University of Florida
Dr. Peter McCarthy, Promotion to Professor	University of Glamorgan

2007

Dr. John Barden	University of Regina
Dr. Greg Cutlip NIOSH	
Dr. Kenton Kaufam, Distinguished Alumni	South Dakota State University
Dr. John Bertram	University of Calgary

2006

Dr. Joan Bechtold	University of Minnesota

2005

Dr. Daniel P. Ferris	University of Michigan
Dr. Steve Lehman	University of California, Berkley
Dr. Christopher Jacobs	Stanford University
Dr. Chunfeng Zhao	Mayo Clinic College of Medicine

2004

Dr. David Sanderson	University of British Columbia
Dr. Kenton Kaufman	Mayo Clinic College of Medicine
Dr. Richard Neptune	The University of Texas at Austin
Dr. Keith Williams	University of California, Davis

2003

Dr. Jack Dennerlein	Harvard University
Dr. John Chow	Florida University
Dr. Danny Pincivero	University of Toledo

Summer Students and Special Projects

2023 winter-Spring	Haonan Wang	Chinese Visiting PhD Student, Jan 1 – Jun 30
2022 fall-winter	Nikhil Srivalsan	Webber Academy Research Internship, Sep 1 – Aug 31
2022 fall-winter	Wejdaan Faridi	Undergraduate Research Studentship Oct 1 – Apr 30
2022 fall-winter	Ajibola Anifowose	Undergraduate Honours Student, Sep 1 – Apr 30
2022 summer	Nikhil Srivalsan	HYRS Summer Student, July 1 – Aug 31
2022 summer	Dhairya Desai	NSERC USRA Summer Studentship, May 1 – Aug 31
2022 summer	Wejdaan Faridi	NSERC USRA Summer Studentship, May 1 – Aug 31
2022 summer	Chris Tiessen	BME-Schulich Summer Studentship, May 1 – Aug 31
2022 summer	Riya Kalaga	BME-McCaig Summer Studentship, May 1 – Aug 31
2022 summer	Torri Heiser	Alberta Spine Foundation Summer Studentship, May 1 – Aug 31
2022 summer-2023 winter	Ireland Lawson	Kinesiology Undergraduate Research Scholarship, May 1 – Feb 28
2022 summer	Claire Timmermann	Summer Student, May 1 – Feb 28
2022 summer	Gavin Thomas	PURE Summer Studentship, May 1 – Aug 31
2021 fall-winter	Elaine Nguyen	Undergraduate Honours Student, Sep 1 – Apr 30
2021 fall-winter	Darsh Tripathi	Undergraduate Honours Student, Sep 1 – Apr 30
2021 fall	Heron Medeiros	ELAP Brazilian Undergraduate Exchange Student, Sep 1 – Dec 31
2021 summer	Sarah Abramovic	Swiss Visiting MSc Student, May 1 – Dec 31
2021 summer	Armaan Sekhon	Volunteer, May 1, 2021 – Apr 30, 2022
2021 summer	Maria Hernandez	Summer Volunteer, May 1 – Aug 31
2021 summer	Torri Heiser	Summer Student, May 1 – Aug 31
2021 summer	Sara Housh	Summer Student, May 1 – Aug 31
2021 summer	Patricia Sharleen	Summer Student, May 1 – Aug 31
2021 summer	Maleeka Malik	BME/Faculty of Science Summer Studentship, May 1 – Aug 31
2021 summer	Wejdaan Faridi	PURE Summer Studentship, May 1 – Aug 31
2021 summer	Asmi Multani	BME/Faculty of Science Summer Studentship, May 1 – Aug 31
2021 summer	Jason Xie	HYRS Summer Student, July 1 – Aug 31
2021 summer	Erica Yakubu	HYRS Summer Student, July 1 – Aug 31
2020 fall-winter	Daniyya Chaudry	Undergraduate Honours Student, Sep 1 – Apr 30

2020 fall-winter	Taylor Pigott	Undergraduate Honours Student, Sep 1 – Apr 30
2020 fall-winter	Jeff Ilg	Undergraduate Honours Student, Sep 1 – Apr 30
2020 fall-winter	Tanya Cherppukaran	Undergraduate Honours Student, Sep 1 – Apr 30
2020 fall-winter	Spencer Ames	Undergraduate Honours Student, Sep 1 – Apr 30
2020 fall-winter	Darius Ramrattan	Undergraduate Honours Student, Sep 1 – Apr 30
2020 summer	Jeff Ilg	NSERC USRA Summer Studentship, May 1 – Aug 31
2020 summer	Shabit Hassan	PURE Summer Studentship, May 1 – Aug 31
2020 summer	Muzammil Nasir	CONNECT! NSERC CREATE Summer Studentship, May 1 -Aug 31
2020 summer	Darius Ramrattan	CONNECT! NSERC CREATE Summer Studentship, May 1 -Aug 31
2020 summer	Faizan Syed	McCaig Institute R. R. Singleton Summer Student, May 1 – June 30
2020 summer	Ty Moline	Summer Student, May 1 – Aug 31
2020 winter	Jonas Schmidt	German Visiting Undergraduate, Feb 24 – Jun 26
2019 fall	Armaan Sekhon	Undergraduate Honours Student, Sep 1 – Apr 30
2019 summer	Asmi Multani	HYRS Summer Student, July 1 – Aug 31
2019 summer	Muzammil Nasir	CONNECT! NSERC CREATE Summer Student, May 1 – Aug 31
2019 summer	Sadhiq Nazeer	CONNECT! NSERC CREATE Summer Student, May 1 – Aug 31
2019 summer	Jeff Ilg	McCaig Institute R. R. Singleton Summer Studentship, May 1 – Aug 31
2019 summer	Taylor Pigott	Markin USRP Summer Studentship, May 1 – Aug 31
2019 winter	Helen Adam	German Visiting Undergraduate, Mar 11 – Jul 29, 2019
2019 winter	Robert Graichen	German Visiting Undergraduate, Mar 1 – Sep 1, 2019
2018 fall	Viviane Frasson	Brazilian Visiting PhD Student, Sep 1, 2018 – Aug 31, 2019
2018 fall	Kale Weigel	Undergraduate Honours Student, Biochemistry, Sep 1, 2018 – Apr 30, 2019
2018 fall	Stephanie Crites	Undergraduate Honours Student, Kinesiology, Sep 1, 2018 – Apr 30, 2019
2018 summer	Julia Beaumont	HYRS Summer Student, July 1 – Aug 31
2018 summer	Sherry Mahmood	Undergrad. Honours Student, Health Sciences, May 1, 2018 – April 30, 2019
2018 summer	Brennan O'Yeung	Biomedical Engineering Undergradudate Student, volunteer, May 1 – Aug 31
2018 summer	Maria Hernandez	PURE Summer Studentship, May 1 – Aug 31
2018 summer	John Michaiel	CIHR Summer Studentship, May 1 – Aug 31
2018 summer	Ross Crichton	McCaig Institute R. R. Singleton Summer Studentship, May 1 – Aug 31
2018 summer	Jeff Shin	McCaig Institute R. R. Singleton Summer Studentship, May 1 – Aug 31
2018 summer	Matteo Biglioli	CONNECT! NSERC CREATE Summer Student, May 1 – Aug 31
2018 summer	Neum Jelani	CONNECT! NSERC CREATE Summer Student, May 1 – Aug 31
2018 winter	Colleen Chemerka	German Visiting Undergraduate Student, Apr 1 – Sep 30
2018 winter	Daiani de Campos	Brazilian Exchange Undergraduate Student, Jan 10 – Jul 9
2018 winter	Gustavo Paroschi de Morais	MSc, Brazilian Visiting MSc Student, Mar 1 – Aug 31
2018 winter	Nicolas Collao Alonso	ELAP, Chilean Visiting MSc Student, Jan 25 – Jul 25
2017 fall	Faruk Örtes	Turkish Visiting PhD Student, Nov 14, 2017 – Nov 30, 2018
2017 fall	Tobias Göcking	German Visiting MSc Student, Oct 2 – Dec 20
2017 fall	Victoria Armstrong	Undergraduate Honours Student, Kinesiology, Sept 1 – Apr 30
2017 fall	Michael Moroz	Undergraduate Honours Student, Biomedical Sciences, Sept 1 – Apr 30
2017 fall	Lars Kooijman	Dutch Visiting MSc Student, Sep 1 – Nov 13
2017 fall	Elske Kranenburg	Dutch Visiting Undergrad Student, Sep 4 – Dec 21
2017 summer	Curtis Ostertag	HYRS Summer Student, July 1 – Aug 31
2017 summer	Madeleine McKenzie	Science Undergraduate Student, Concordia U., volunteer, May 1 – Aug 31
2017 summer	Saad Luqman	Biomedical Engineering Undergraduate Student, volunteer, May 1 – Aug 31
2017 summer	Shaelyn Jones	Biomedical Engineering Undergraduate Student, volunteer, May 1 – Aug 31
2017 summer	Kalvin Wu	Markin USRP Summer Studentship, May 1 – Aug 31
2017 summer	Carissa Chung	Alberta Innovates Summer Studentship, May 1 – Aug 31
2017 summer	Michael Moroz	CIHR Summer Studentship, May 1 – Aug 31

2017 summer	Jenice Ma	CIHR Summer Studentship, May 1 – Aug 31
2017 summer	John Michaiel	McCaig Institute R. R. Singleton Summer Studentship, May 1 – Aug 31
2017 summer	Hannah Kirchhübel	German Visiting Undergrad Student, May 1 - Jun 11
2016 fall/winter	Tanja Höpfl	German Visiting Undergrad Student, Sep 19 - Mar 30
2016 fall	Koen Wishaupt	Dutch Visiting Undergrad Student, Aug 29 – Dec 9
2016 fall	Martin Gröber	German Visiting MSc Student, Aug 8 – Oct 7
2016 summer	Alina Arvisais	HYRS Summer Student, July 1 – Aug 31
2016 summer	James Mather	Alberta STEP Program, May 1 – Aug 31
2016 summer	Loretta Ko	Alberta STEP Program, May 1 – Aug 31
2016 summer	Sophia Poscente	Markin USRP Summer Studentship, May 1 – Aug 31
2016 summer	Charlie Wang	AIHS Summer studentship, Jul 1 – Aug 31
2016 summer	Tabitha Hawes	NSERC USRA Summer Studentship, May 1 – Aug 31
2016 summer	Anthony Issler	CIHR Summer Studentship, May 1 – Aug 31
2016 summer	Michael Moroz	NSERC USRA Summer Studentship, May 1 – Aug 31
2016 Summer	Jahaan Ali	Summer Studentship, May 1 – Jul 31
2016 winter	Stefan Bastings	Dutch Visiting Undergrad Student, IEC, Feb 16 - Jul 8
2016 winter	Anouk Weemaes	Dutch Visiting MSc Student, Feb 3 – Jun 17
2016 winter	Ellis van der Sanden	Dutch Visiting MSc Student, Feb 3 – Jun 17
2016 winter	Francisco Cuenca Fernandez	Spanish Visiting PhD Student, Jan 7 – Apr 20
2015 fall	Sven Friese	German Visiting Undergrad Student, Sept 15 – Oct 21
2015 fall	Manja van Wissen	Dutch Visiting Undergrad Student, Aug 26 – Nov 16
2015 fall	Susanne Ellens	Dutch Visiting Undergrad Student, Aug 26 – Nov 16
2015 fall	Mikko Finnilae	Finnish Visiting Postdoc, Aug 24 – Dec 16
2015 fall	Simo Ojanen	Finnish Visiting PhD Student, Aug 24 – Dec 16
2015 fall	Sonja Waeckerlin	Markin USRP Student, Sept 1 – Feb 28
2015 summer	Craig Martis	USRA Summer Studentship, May 1 – Aug 31
2015 summer	Dening Wang	NSERC CREATE CUSP Student, May 1 – Aug 31
2015 summer	Jennifer O'Reilly	NSERC CREATE CUSP Student, May 1 – Aug 31
2015 summer	Myles Borthwick	NSERC CREATE CUSP Student, May 1 – Aug 31
2015 summer	Paul Riek	AIHS Summer Studentship, May 1 – Aug 31
2015 summer	Si (David) Yong Kim	AIHS Summer Studentship, May 1 – Aug 31
2015 summer	Sudeepta Aurka	Markin USRP Student, May 1 – Aug 31
2015 summer	Svetlana Kuznestova	PURE Summer Studentship, May 1 – Aug 31
2015 summer	Thomas Zhang	USRA Summer Studentship, May 1 – Aug 31
2015 summer	Tristan McSwiney	NSERC CREATE CUSP Student, May 1 – Aug 31
2015 summer	Nordan Flaaten	Summer Student, May 1 – Aug 31
2015 summer	Jahaan Ali	NSERC CREATE CUSP Student, May 1 – Aug 31
2015 spring	Ester Mende	German Visiting MSc Student, Mar 30 – May 31
2015 spring	Franziska Onasch	German Visiting MSc Student, May 19 – July 23
2015 winter	Andrea Zignoli	Italian Visiting Student, Mar 22- Sept 19
2015 winter	Fanny Bertram	IFMA Visiting Student, Mar 9 – Aug 7
2015 winter	Heiliane Fontana	Brazilian Visiting PhD Student (ELAP), Jan 3 – May 3
2014 fall	Noah (Jiabin) Yu	Chinese Visiting Student,Nov 13, 2014 – Nov 13, 2015
2014 fall	Jesus Sanchez	Brazilian Visiting Student, Oct 14 – Dec 31
2014 fall	Stef van der Hoorn	MSc student, Netherlands, Sept 1 – Nov 15
2014 fall	Jarno Senz	MSc student, Netherlands, Sept 1 – Nov 15
2014 summer	Paul Riek	HYRS Summer Student, July 1 – Aug 31
2014 summer	Wolfgang Sieberl	Academic Advisor, August 16 - Oct 1
2014 summer	Jonas Fischer	Switzerland, June 11 - July

2014 summer	Alexis Jones	URSA Summer Studentship, May 1 – Aug 31
2014 summer	Svetlana Kuznetsova	NSERC CREATE CUSP Student, May 1 – Aug 31
2014 summer	Hilda Antwi-Nsiah	AIHS Summer Studentship, May 1 – Aug 31
2014 summer	Alex Li	NSERC CREATE CUSP Student, May 1 – Aug 31
2014 summer	Jens Herzog	NSERC CREATE CUSP Student, May 1 – Aug 31
2014 summer	Vivian Wang	NSERC CREATE CUSP Student, May 1 – Aug 31
2014 summer	Sean Crooks	PURE Summer Studentship, May 1 – Aug 31
2014 summer	Violet Campbell	NSERC CREATE CUSP Student, May 1 – Aug 31
2014 summer	Charmi Dholakia	OCSS Summer Studentship, May 1 – Aug 31
2014 spring	Aline Tambourindeguy	Brazil, March 1 – September 30
2014 spring	Remi Vin	IFMA Visiting Student, Mar 1 – Aug 31
2014 winter	Jan Stutz	Visiting Student, Switzerland, Jan 15 – Apr 30
2013 fall	Vaclav Cibera	Visiting PhD student, Czech Republic, Sept 1 – June 30
2013 fall	Robert Rockenfeller	Visiting Student, Germany, Sept 1 – Sept 30
2013 fall	Robbin Romijnders	Visiting Undergraduate Student, Netherlands, Sept 1 – Nov 30
2013 fall	Machiel Smits	Visiting Undergraduate Student, Netherlands, Sept 1 – Nov 15
2013 fall	Joeri Kerssies	Visiting Undergraduate Student, Netherlands, Sept 1 – Nov 15
2013 summer	Cory Meeuwisse	NSERC CREATE CUSP Student, May 1 – Aug 31
2013 summer	Violet Campbell	NSERC USRA Student, May 1 – Aug 31
2013 summer	Kevin Boldt	NSERC USRA Student, May 1 – Aug 31
2013 summer	Sean Crooks	AIHS Summer Undergraduate Student, May 15 – Aug 15
2013 summer	Vivian Wang	Markin USRP Student, May 1 – Aug 31
2013 summer	Jens Herzog	NSERC CREATE CUSP Student, May 1 – Aug 31
2013 summer	Yasir Al-Saffar	Visiting PhD Student, University of Malaya, Malaysia, Jun 3 – May 2014
2013 spring	Martina Chrastkova	Visiting PhD Student, Czech Republic, May 21 – Jun 30
2013 winter	James Fick	Visiting Scholar, University of Kuopio, Finland, Jan 16 – Mar 25
2013 winter	Stefan Stoek	Visiting Undergraduate Student, Netherlands, Jan 16 - Jun
2013 winter	Nicole Stappers	Visiting Undergraduate Student, Netherlands, Jan 16 - Jun
2013 winter	Heiliane Fontana	Visiting PhD student, Brazil, Jan 14 - Sept
2012 fall	Markus von Kossel	Brazilian ELAP Student, Oct 11 – March 30
2012 fall	Fatemeh Aslanzadeh	Turkish Exchange Student, Oct 11- Sept 30
2012 fall	Atsuki Fukutani	Visiting Japanese Student, Sept 7 – August 5
2012 summer	Steven Piper	CMCC Visiting Student, Jul 3 – Aug 31
2012 summer	Hilda Antwi-Nsiah	Summer AHS - HYRS student, Jul 5 – Aug 16
2012 summer	Maria Yamamoto	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	Stephanie Vetsch	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	Vivian Wang	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	James Samson	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	Kerri MacGowan	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	Jens Herzog	Visiting Undergraduate Student, May 1 – Aug 31
2012 summer	Sean Crooks	Visiting Undergraduate Student, May 1 – Aug 31
2012 winter	Elsa Vulliez	IFMA Visiting Student, Mar 19 – Aug 31
2012 winter	Roos van der Wijdeven	Visiting undergraduate student, Feb 13 – June 30
2012 winter	Ivo Buil	Visiting undergraduate student, Feb 13 – June 30
2012 winter	Krysta Lynn Powers	National Science Foundation, Visiting PhD Student, Jan 9 – Aug 31
2011 fall/winter	Eng Kuan Moo	University of Malaysia, Visiting PhD student, Sept – Apr 30
2011 fall/winter	Agnes Cochet	IFMA Visiting student, Sept 1 – Dec 31
2011 fall/winter	Raquel Lupion	Federal University of Rio Grande do Sol, Visiting undergraduate, Aug 1 – Feb 28
2011 summer	Cristina Michelutti	Volunteer, May – Aug 31

2011 summer	Christine Patterson	Volunteer, June 20 – Aug 31
2011 summer	Katrina Easton	University of Western Australia Visiting postdoc, June 26 – July 23
2011 summer	Davide Croci	University of Basel Visiting Medical Student, July 9 – Aug 5
2011 summer	Haakon Lenes	NSERC CREATE summer studentship ½, May 2 – June 30
2011 summer	Sean Crooks	NSERC CREATE summer studentship, May 1 – Aug 31
2011 summer	Maria Yamamoto	NSERC CREATE summer studentship ½, May 2 – Jun 30
2011 summer	Jens Herzog	May 1 - Aug 31
2011 winter	Cyril Decaix	Visiting student, IFMA, Feb 1 – Jul 31
2010 fall/winter	Anthony Killick	Volunteer, Sept 1 - Dec 31
2010 fall/winter	Debora Cantergi	Visiting Student, Brazil, ELAP, Oct 19 – Apr 18
2010 summer	Chelsea Saltys	HYRS, Alberta Heritage Foundation for Health Research, July 9 – Aug 18
2010 summer	Eng Kuan Moo	Visiting Student, University of Malaysia, May 18-Nov 18
2010 summer	Maria Yamamoto	Undergraduate student volunteer, May 1-Dec 31
2010 summer	Anthony Killick	NSERC CREATE summer studentship, May 1–Aug 31
2010 summer	Jens Herzog	summer studentship, May 1-Aug 31
2010 summer	Erica Woo	NSERC USRA summer studentship, May 1–Aug 31
2010 summer	Esther Chan	NSERC CREATE summer studentship, May 1–Aug 31
2010 summer	Marie Armstrong	AIHS summer studentship, May 1-Aug 31
2010 winter	Robert van der Straaten	Visiting student, University Zuyd, Netherlands, Mar 23-July 3
2010 winter	Martijn Koevoets	Visiting student, University Zuyd, Netherlands, Mar 23-July 3
2010 winter	Robert van der Marel	Visiting Student, Netherlands, Feb 1-Dec 31
2010 winter	Fernando Lemos	Visiting student from Brazil, ELAP, Jan 4 - June 30
2009 fall/winter	Siru Turunen	University of Kuopio, Finland, Visiting MSc student, Nov
2009 fall/winter	Marie Armstrong	Markin-Flanagan Summer studentship
2009 fall	Clemence Barraud	IFMA, Aug 31-Dec 18
2009 summer	Sarah Holub	HYRS Alberta Heritage Foundation for Health Research, July 6-Aug 13
2009 summer	Erica Giles	NSERC USRA, University of Victoria, May 1-Aug 31
2009 summer	Caitlin Logan	NSERC CREATE, University of Calgary, May 1-Aug 31
2009 summer	Mike Duvall	PURE, University of Calgary, May 1-Aug 31
2009 winter	Lena Zastrow	PhD Visiting Student, Universita Rome TRe, Apr 14-May 1
2009 winter	Corinne Wiederkehr	Visiting Student, Zurich, Feb-June
2009 winter	Wim Wouters	Visiting Student, Eindhoven University of Technology, Feb15-June 23
2009 winter	Jonas Rubenson	Visiting Professor, University of Western Australia, Jan 19-Jan 30
2009 winter	Daniela Emmenegger	Visiting Student, ETH Zurich, Feb.-July 30
2008 fall	Daan Baars, Walter-Neils Luitwieler	Visiting Students, The Hague University, Aug 1- Nov 29
2008 fall	Rafael Fortuna	Visiting Student, Porto Alegre, Brazil, Aug 18 - Dec 31
2008 summer	Shermin Kazemkhani	PhD Visiting Student, Tehran, Iran, May 26 - Feb 28
2008 summer	Andrew Wu	NSERC USRA, Yale University, May 1 - Aug 31
2008 summer	Jena Hall	NSERC USRA, Queen's University, May 1 - Aug 31
2008 summer	Dianne Ikeda	NSERC USRA, University of Calgary, May 1 - Aug 31
2008 summer	Mike Duvall	NSERC USRA, University of Calgary, May 1-Aug 31
2008	Kevin Chi Kwan Wong	Engineering Internship Program-Academic Mentor
2008 winter	Yunus Arslan	PhD Visiting Student, Istanbul University, Feb 4-July 31
2008 winter	Rachel Nilwik	MSc Visiting Student, University of Maastricht, Feb 4 – July 4
2007 fall	Simon Steib	German Student, Internship, Friedrich-Alexander-Universitaet Erlangen-Nuernberg, Sept 17-May 8
2007 summer	Duhi Yu	Visiting Student, Tokyo, Japan
2007 summer	Guillermo Rey Ley and Javier Fresan	Undergraduate Visiting Students-Spain
2007 summer	Sarah Jardine	Canadian Memorial College of Chiropractors Sports Resident

2007 winter	Marjolein Blaauboer	Amsterdam Graduate Student, Jan 1-Sept 2007
2007 winter	Tim Kieran and Chris Weiland	Netherland Student Trainees, Human Kinetic Technology, Jan 1- Sept
2006 fall	Michiel Punt and Diederik Postuiterweer	Netherland Student Trainees
2006 summer	Caitlin Logan	Markin-Flanagan Summer Studentship
2006 summer	Jamie Benham	NSERC Undergraduate Research Award
2006 summer	Mustaali Raj	NSERC Undergraduate Research Award
2006 winter	Quentin Dozolme	IFMA
2006 winter	Alfio Grillo	University of Catania
2006 winter	Patrick Esser and Jos Peeters	Netherland Student Trainees
2005 fall	Carolina Niewola-Saszkowski	
2005 fall	Wouter Beerepoot	TU Delft, Netherlands Trainee
2005 summer	Megan Yaraskavitch	NSERC Undergraduate Student Research Award
2004 winter	Nicolas Trouillet	IFMA
2004 winter	Laura Hinz	Markin-Flanagan Summer Studentship
2004 winter	Cintia de la Roche	PhD Sandwich, CAPES, Brazil
2004 summer	Laura Hinz	NSERC Undergraduate Student Research Award
2004 fall	Safi Saad, Joel Lockwood	
2004 fall	Renaud Feger	IFMA
2003 winter	Seong Kim	Volodymyr Amiot-High School Enrichment Program
2003 winter	Lenaic Gifford	
2003 summer	Rob Mutch	Markin-Flanagan Summer Studentship
2003 fall	Salvatore Federico, Alfio Grillo	Catania, Italy
2002 winter	Dominique Forand, Ali Afzal, Keith Barrett, Emily Zhang, Graeme Campbell	
2002	Salvatore Federico	University of Catania
2002 fall	Sebastian Lachanat	
2002 fall	Elizabeth Rousanoglou, Anja Niehoff	
2001	Salvatore Federico	University of Catania
2001 winter	Olivier Desvignes	
2001 winter	Mark Schuiling, Bernhard van Mazijk	
2001 winter	Ernst Hansen	
2001 summer	Harpreet Dosanjh, Brady Anderson, Sean Craig, Keith Barrett, Andrzej Stano, Jr.	
2000	Salvatore Federico	University of Catania
2000 winter	Paul van der Kampen, Roel Leenen	
2000 winter	Luciana Brondino	
2000 summer	Hillary Dinning, Inna Kouperman, Tenzing Lhamu	
2000 fall	Laurent Jobart	
1999 summer	Inna Kouperman	
1999 fall	Martine Brandsma, Melvin Roerdink, Laurent Favre	
1998 summer	Sean Craig, Marike Bijtelaar, Monique van Loon, Marilyn Kats	
1997 summer	Inna Kouperman, Wendy Carvalho, Boris Vasiliev, Eric Alcantara, Michael Pfeilmaier, Jason Karp	
1996 summer	Pavel Mayzus, Boris Vasiliev, Erwin Hairwassers, David Scheele	
1995 summer	Pavel Mayzus, Karen Seland, Boris Vasiliev, Tamar Epstein, Allene Huber	
1994 summer	Allene Huber, Pavel Mayzus, Marion Borst, Irene Hilgersom	
1992-1993	Christoph Janssen, Rock Goldade	
1992 summer	Jason Sokolosky, Rock Goldade	
1991 summer	Jason Sokolosky, Grant Brooks	
1990 summer	Brett Hessel, Seema Kamal, Susan Bornemisza, Moyez Charania, Sandro Nigg	
1989 summer	Janet Wallace, Brett Hessel, Gayle Chaki	

1988-1990	Ron Platt
1988-1989	Audrey Azad
1988-1989	Andrew Carvalho
1988	Lori Chaki-Farrington
1988 summer	Bradley Willcox, Evelyne Hasler
1987 summer	Claudio Nigg
1986-1987	Lynda Read
1986 fall	Ewa Olsson

Research Assistants

2015-present	Barbara Holash
2013-present	Ruth Seerattan
2013-present	Venus Joumaa
2013-present	Andrew Sawatsky
2002-present	Azim Jinha
1991-present	Hoa Nguyen
1988-present	Tim Leonard
2014-present	Ziad Abusara
2020-2021	Eng Kuan Moo
2008-2015	Amanda Lottermoser
1997-2011	Holly Hanna
2009-2011	Jessica Fordham
2009-2010	Marlee Hahn
2008-2009	Megan Yaraskavitch
2006-2010	Ruth Seerattan
2003-2005	Linda Mills
1997-1998	Dale Oldham (50%)
1996-1997	Louise Hyndman (50%)
1995	Gary Jacques (50%)
1993-1996	Barbara Lees
1990-1992	Joan McAslan
1989-1990	Cathy Kellar
1989-1990	Brett Hessel
1988-1989	Angela Heetvelt
1987-1988	Sheila Abrahamse
1987-1988	Eileen Dunn

Visiting Professors (> 1 month duration)

2022	Dr. Shahin Ketabi, Kurdistan University, Iran (April 14, 2022 – August 14, 2023)
2022	Dr. Gholamreza Rouhi, Amirkabir University of Technology, Teheran, Iran (Sep 2022)
2022	Dr. Don Anderson, University of Iowa, Killam Visiting Professor (Jan-Jun 2022)
2015-present	Dr. Robert Griffiths (Florey Neuroscience Institute, University of Melbourne, Australia, several visits)
2019-2020	Dr. Shahin Ketabi, Kurdistan University, Iran
2018-2019	Dr. Marco Vaz, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
2018-2019	Dr. Stela Mattiello, Federal University of Sao Carlos, Brazil
2015-2017	Dr. Fernando Diefenthaeler (Federal University of Santa Catarina, Brazil)
2014	Dr. Fernando Diefenthaeler (Federal University of Santa Catarina, Brazil)
2014	Dr. Isabelle Villemure, École Polytechnique de Montréal, Canada (departure December 2014)

2012-2013	Sergio Cunha, Brazil (departure February 2013)
2007-2008	Dr. Gudrun Schappacher, Universitat Graz, Austria (departure August 2008)
2007-2008	Dr. Markus Tilp, Universitat Graz, Austria (departure August 2008)
2005-2006	Dr. Dominique DeJaeger
2004	Dr. Marco Vaz
2004	Viviane Bortoluzzi Fração
2001-2002	Dr. Young-Doo Won
2000	Dr. Stefan Kornecki
1999	Dr. Yasuo Kawakami
1999	Dr. Alan Wilson
1994-1995	Dr. Cungen Hu

CHIROPRACTIC REPORTS

2008 – present
Expert assessment / witness for 12 legal cases

JOURNAL ARTICLES

Submitted

1. Adam NC, Smith CR, Herzog W, Amis AA, Arampatzis A, Taylor WR. In vivo strain patterns in the Achilles tendon during dynamic activities: A systematic review. Sports Medicine
Submitted: 05/13/2022

2. Bensamoun SF, Pouletaut P, Tatarenko Y, Li M, Joumaa V, Hawse J, Herzog W, Chatelin S. Multiscale mechanical characterization of rodent skeletal muscle. Journal of the Mechanical Behavior of Biomedical Materials.
Submitted: 01/12/2023

3. De Brito Fontana H, Rios JL, Michaiel J, Seerattan RA, Joumaa V, Hart DA, Reimer RA, Herzog W. Skeletal muscle composition and the effects of exercise and/or prebiotic fiber preventing diet related morbidities. Medicine &Science in Sports & Exercise
Submitted:11/20/2022

4. Gorrell L, Conway PJ, Jinha A, Herzog W. Differences in biomechanical and electromyographic characteristics of successful vs. unsuccessful manual high-velocity, low amplitude spinal manipulation – an analysis of two descriptive studies. Chiropractic and Manual Therapies.
Submitted: 04/30/

5. Han S-w, Sawatsky A, Herzog W. Effects of quadriceps muscle weakness and imbalance on patellar tracking. Journal of Biomechanics
Submitted: 03/31/2021

6. Han S-w, Sawatsky A, Herzog W. Changes in patellar tracking when reducing the magnitude of knee extensor torque: an animal model. Journal of Orthpaedic Research
Submitted: 07/07/2020

7. Hejazi S, Herzog W, Rouhi G. Alteration of lower limb kinematics and kinetics due to bilateral triple arthrodesis, Foot & Ankle Specialist
Submitted: 11/12/2021

8. Herzog W, Schappacher-Tilp G. Molecular mechanisms of muscle contraction: a historical perspective. Journal of Biomechanics (for ISB 50 year special edition)
Submitted: 11/18/2022

9. Howard JJ, Joumaa V, Robinson KG, Lee SK, Akins RE, Syed F, Shrader MW, Huntley JS, Graham HK, Leonard T, Herzog W. Collagenase clostridium histolyticum decreases muscle stiffness in cerebral palsyL an ex vivo biomechanical analysis of hip adductor muscle fiber bundles and dose-response determination. Developmental Medicine and Child Neurology.
Submitted: 11/22/2022

10. Jordan MJ, Challis G, Morris N, Lane M, Barnet J, Herzog W. Assessing vertical jump force-time asymmetries in athletes with anterior cruciate ligament injury. Aspetar Sports Medicine Journal
Submitted: 11/07/2019

11. Kakavand R, Rasoulian A, Otoo BS, Komeili A, Herzog W. A numerical model for fibril remodeling in articular cartilage. The Knee
Submitted: 07/07/2022

12. Li M, Leonard TR, Han Sw, Moo EK, Herzog W. The nature of sarcomere length nonuniformities in skeletal muscles. Journal of Experimental Biology.
Submitted: 10/17/2022

13. Liu S, Joumaa V, Herzog W. The origin of force increases in actively stretched single muscle fibres. Journal of Experimental Biology.
Submitted: 04/23/2018

14. Ojanen S, Finnilae M, Korhonen RK, Herzog W, Rieppo L. Micro-computed tomography-based collagen orientation and anisotrophy analysis of rabbit articular cartilage. Annals of Biomedical Engineering
Submitted: 10/21/2021

15. Onasch F, Sawatsky A, Stano A, Herzog W. Development of the instrumentation of a 4-man bobsled. Journal of Biomechanics
Submitted: 11/17/2022

16. Onasch F, Herzog W. Active control of static pedal force direction results in decreased maximum isometric force output. Journal of Biomechanics
Submitted: 12/14/2022

17. Reyes A, Delgado-Bravo M, Alvarez-Ruf J, Liendo R, Reimann Baptista R, Subiabre S, Tirado C, Begona U, Villalon J, Herzog W. Surface electromyograph activity of upper limb muscles during functional reaching tasks in indivuduals with subacromial impingement syndrome. Clinical Biomechanics
Submitted: 03/31/2022

18. Robinson KG, Lee SK, Akins RE, Herzog W, Shrader MW, Howard JJ. Use of collagenase clostridium hostolyticum to decrease muscle fiber bundle stiffness in cerebral palsy: determination of dose-response. Journal of Biomechanics
Submitted: 07/17/2022

19. Rouhi G, Herzog W. Alteration of lower limb kinematics and kinetics to bilateral triple arthrodesis. The Archives of Bone and Joint Surgery
Submitted: 11/17/2022

20. Smith IC, Herzog W. Changes in twitch characteristics associated with the anticipation and experience of electrical stimulation in adductor pollicis muscle of adult humans. Journal of Applied Physiology.
Submitted: 07/08/2020

21. Smith IC, Collao N, Herzog W. Reductions in peak force and instantaneous stiffness by inorganic phosphate are enhanced at short sarcomere lengths in permeabilized slow skeletal muscle fibres of the rabbit. Journal of Experimental Biology
Submitted: 08/27/2020

22. Zhang Q, Herzog W. A stretchable strain sensor system for wireless measurement of musculoskeletal soft tissue strains. Materials Technology
Submitted: 12/02/2-22

23. Zukowski M, Jordan MJ, Herzog W. Single leg lateral and horizontal loaded jumpt testing: reliability and correlation with long track sprint speed skating performance. Journal of Strength and Conditioning Research Submitted: 07/19/2022

Accepted

1. Yeo SH, Herzog W. Numerical instability of hill-type muscle models. Journal Royal Society Interface Accepted: 12/01/2022

Published

1. Bossuyt FM, Abramovic S, Leonard T, Sawatsky A, Smith CR, Taylor WR, Scott WM, Herzog W (2023) The non-inuitive, in-vivo behavior of aponeuroses in a unipennate muscle. Journal of Biomechanics 147: 111430 In Press. https://doi.org/10.1016/j.jbiomech.2022.111430
2. Sibole S, Moo EK, Federico S, Herzog W (2023) Dynamic deformation calculation of articular cartilage and cells using resonance-driven laser scanning microscopy. Journal of Biomechanical Engineering 145(2): 021005. https://doi.org/10.1115/1.4055308
3. Ames SR, Joumaa V, Herzog W (2022) Effect of active shortening and stretching on the rate of force-re-development in rabbit psoas muscle fibres. Journal of experimental Biology 225(22): jeb244703. https://doi.org/10.1242/jeb.244703
4. Boldt K, Joumaa V, Turnbull J, Fedak PWM, Herzog W (2022) A high-whey-protein diet does not enhance mechanical and structural remodeling of cardiac muscle in response to aerobic exercise in rats. Physical Activity and Nutrition 26(1): 28-38. doi:10.20463/pan.2022.0005
5. Cui A, Nippolainen E, Shaikh R, Torniainen J, Ristaniemi A, Finnilä M, , Saarakkala S, Herzog W, Töyräs J, Afara IO (2022) Assessment of ligament viscoelastic properties using Raman Spectroscopy. Annals of Biomedical Engineering 50: 1134-1142.
6. Frasson V, Johnson J, Baroni B, Herzog W (2022) Do femoral version abnormalities play a role on hip function of patients with hip pain? Clinical Biomechanics 97: 105708. https://doi.org/10.1016/j.clinbiomech.2022.105708
7. Fukutani A, Herzog W (2022) Residual force enhancement is attenuated for quick stretch conditions. Journal of Biomechanics 136: 111076. In Press.
8. Gorrell L, Sawatsky A, Edwards B, Herzog W (2022) Vertebral arteries do not experience tensile force during manual cervical spine manipulation applied to human cadavers. Journal of Manual & Manipulative Therapy 2022:1-9. In Press. https://doi.org/10.1080/10669817.2022.2148048
9. Gorell LM, Kuntze G, Ronsky JL, Carter R, Symons B, Triano JJ, Herzog W (2022) Kinematics of the head and associated vertebral artery length changes during high-velocity, low-amplitude cervical spine manipulation. Chiropractic & Manual Therapies 30:28. https://doi.org/10.1186/s12998-022-00438-0
10. Gorrell L, Onasch F, Conway P, Herzog W (2022) Electromyographic responses of neck, back and limb outlet muscles associated with high-velocity, low-amplitude manual cervical and upper thoracic spinal manipulations of individuals with mild neck disability – a descriptive observational study. Journal of Manipulative & Physiological Therapeutics 45(1): 33-44. https://doi.org/10.1016/j.jmpt.2022.03.018
11. Han S-w, Sawatsky A, Herzog W (2022) The non-intuitive contributions of individual quadriceps muscles to patellar tracking. Journal of Biomechanics 38(4): 237.245.
12. Herzog W (2022) Editorial: The secrets to running economy. Journal of Sport and Health Science 11: 273-274.
13. Herzog W (2022) Editorial: Observations regarding open access publishing in hybrid journals in sport sciences. In Press.
14. Herzog W, De Brito Fontana H (2022) Editorial: Does eccentric exercise stimulate sarcomerogenesis? Journal of Sport and Health Science 11:40-42. https://doi.org/10.1016/j.jshs.2021.10.001

15. Herzog W. What can we learn from single sarcomere and myofibril preparations? (2022) Frontiers in Physiology 13: 837611. https://doi.org/10.3389/fphys.2022.837611 (Special Issue: Methods and applications in striated muscle physiology)

16. Herzog W, Kevorkian P, Russell B, Alcantara J (2022) The forces exerted by a chiropractor on children and adults during high-speed low amplitude spinal manipulations: a feasibility study. Journal of Manipulative and Physiological Therapeutics 45 (6): 389-399. https://doi.org/10.1016/j.jmpt.2022.09.003

17. Jordan M, Morris N, Nimphius S, Aagaard P, Herzog W (2022) Attenuated lower limp stretch-shorten-cycle capacity in ACL injured vs. non-injured female alpine ski racers: not just a matter of between-limb asymmetry. Frontiers in Sports and Active Living 4: 852701.

18. Jordan M, Morris N, Barnet J, Lawson D, Aldrich-Witt I, Herzog W (2022) Forecasting neuromuscular recovery after anterior cruciate ligament injury: athlete recovery profiles with generalized additive modelling. Journal of Orthopaedic Research 40(12): 2803-2812. doi: 10.1002/jor.25302

19. Joumaa V, Boldt KR, Han SK, Chun KJ, Herzog W (2022) Botox injections in paraspinal muscles result in low maximal specific force and shortening velocity in fast but not slow skinned muscle fibres. Spine 47(11): 833-840. DOI: 10.1097/brs.0000000000004162

20. Karjalainen K, Tanska P, Sibole S, Mikkonen S, Herzog W, Korhonen RK, Moo EK (2022) Effect of cells on spatial quantification of proteoglycans in articular cartilage of small animals. Connective Tissue Research 63(6): 603-614. https://doi.org/10.100/03008207.2022.2048827

21. Lawson D, Jordan M, Herzog W (2022) Effects of lead leg selection on bilateral landing force-time characteristics: return to sport testing implications. Scandinavian Journal of Medicine in Science in Sports 32: 1192-1200. DOI: 10.1111/sms.14168

22. Liu S, de Oliveira Medeiros HB, de Brito Fontana H, Herzog W (2022) Passive force enhancement is not abolished by muscle shortening. Journal of Biomechanics 145: 111386.

23. Liu S, Joumaa V, Herzog W (2022) Fast stretching of skeletal muscle fibres abolishes residual force enhancement. Journal of Experimental Biology 225 (10): 244011. https://doiorg.ezproxy.lib.ucalgary.ca/10.1242/jeb.244011

24. Martins EC, Ruschel C, Roesler EM, Silvano GA, Peduzzi de Castro M, Herzog W, de Brito Fontana H (2022) Tensor fascia latae and gluteal muscles myoelectric responses to increasing levels of hip medial rotation torque. Journal of Biomechanics 132: 110944. In Press. https://doi.org/10.1016/j.jbiomech.2022.110944

25. Martins EC, Steffen LB, Gomes D, Herzog W, Hapenthal A, de Brito Fontana H (2022) Looped elastic resistance during squats: How do band position and stiffness affect hip myoelectric activity? Journal of Functional Morphology 7(3): 60. **https://doi.org/10.3390/jfmk7030060**

26. Medeiros HBO, Silvano GA, Herzog W, Nunes MO, de Brito Fontana H (2022) Hip torques and the effect of posture in side-stepping with elastic resistance. Gait & Posture 93: 119-125.

27. Moo EK, Herzog W, Le T, Seerattan RA, Pingguan B, Korhonen RK (2022) Deformation behaviours and mechanical impairments of tissue cracks in immature and mature cartilages. Journal of Orthopaedic Research 40(9): 2103-2112. https://doi.org/10.1002/jor.25243

28. Orava H, Huang L, Ojanen SP, Mäkelä JTA, Finnilä MAJ, Saarakkala S, Herzog W, Korhonen RK, Töyräs J, Tanska P. Changes in subchondral bone structure and mechanical properties do not substantially affect cartilage mechanical responses. Journal of Biomechanical Materials: 128: 105129

29. Orozco GA, Ristaniemi A, Haghighatnejad M, Finnilae MAJ, Saarakkala S, Herzog W, Isaksson H, Korhonen RK. Adaptation of fibril-reinforced poroviscoelastic properties in rabbit collateral ligaments 8 weeks after anterior cruciate ligament transection. Journal of Orthpaedic Research 2022: 1-15. In Press. https://doi.org/10.1007/s10439-022-03081-1

30. Orozco GA, Karjalainen K, Moo EK, Stenroth L, Tanska P, Rios JL, Tuomainen TV, Nissi MJ, Isaksson H, Herzog W, Korhonen RK (2022) A musculoskeletal finite element model of rat knee joint for evaluating cartilage biomechanics during gait. PLOS Computational Biology 18(6): e1009398. **DOI:** 10.1101/2021.09.01.458496

31. Ortes F, Jinha A, Herzog W, Arslan Y (2022) Sensitivity of muscle force response of a two-state cross-bridge model to variations in model parameters. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine 236(10): 1513-1520. https://doi-org.ezproxy.lib.ucalgary.ca/10.1177/095441192211220

32. Sibole S, Moo EK, Federico S, Herzog W (2022) The protective function of directed asymmetry in the pericellular matrix enveloping chondrocytes. Annals of Biomedical Engineering 50: 39-55. https://doi.org/10.1007/s10439-021-02900-1

33. Abusara Z, Haider I, Moo EK, Miller S, Timmermann S, Herzog W (2021) Chondrocyte morphology as an indicator of collagen network integrity. Connective Tissue Research 63(4): 319-328. https://doi.org/10.1080/03008207.2021.1922398

34. Boldt KR, Joumaa V, Turnbull J, Fedak P, Herzog W (2021) Mechanical and structural remodeling of cardiac muscle following aerobic and resistance exercise training in rats. Medicine & Science in Sports & Exercise 53(8): 1583-1594. (Highlighted in ACSM's Sports Med. Bulletin)

35. Boldt K, Mattiello S, Joumaa V, Turnbull J, Fedak PWM, Herzog W (2021) Consumption of a high-fat-high-sucrose diet partly diminishes mechanical and structural adaptations of cardiac muscle following resistance training. Physical Activity and Nutrition 25(2): 8-14.

36. Boldt KR, Rios JL, Joumaa V, Herzog W (2021) Mechanical function of cardiac fibre bundles is partly protected by exercise in response to diet-induced obesity in rats. Applied Physiology, Nutrition and Metabolism 46:46-54. http://dx.doi.org/10.1139/apnm-2020-0275

37. Crites S, Joumaa V, Rios JL, Sawatsky A, Hart DA, Reimer RA, Herzog W (2021) Moderate aerobic exercise, but not dietary prebiotic fibre, attenuates losses to mechanical property integrity of tail tendons in a rat model of diet-induced obesity. Journal of Biomechanics 129:110798.

38. De Brito Fontana H, Herzog W (2021) The role of muscles in knee joint osteoarthritis. Sports Orthopaedics and Traumatology 37(2): 85-100. https://doi.org/10.1016/j.orthtr.2021.02.005

39. De Campos D, Orssatto LBR, Tajano GS, Herzog W, de Brito Fontana H (2021) Residual force enhancement in human skeletal muscles: a systematic review and meta-analysis. Journal of Sport and Health Science 11 (1): 94-103.https://doi.org/10.1016/j.jshs.2021.05.006

40. Fortuna R, Sawatsky A, Fuller JC, Herzog W (2021) The effects of HMB supplementation on muscle mass and strength in botox-injected and contralateral quadriceps femoris in rabbits. Journal of Rehabilitation Medicine 53: jrm00229. (open access)

41. Fukutani A, Isaka T, Herzog W (2021) Evidence for muscle cell-based mechanisms of enhanced performance in stretch-shortening cycle. Frontiers in Physiology: 11: 609553.

42. Fukutani A, Herzog W (2021) The stretch-shortening cycle effect is prominent in the reduced force state. Journal of Biomechanics 115:110136. https://doi.org/10.1016/j.jbiomech.2020.110136

43. Howard JJ, Herzog W (2021) Skeletal muscle in cerebral palsy: from belly to myofibril. Frontiers in Neurology 12: 620852.

44. Huang L, Riihioja I, Tanska P, Ojanen S, Palosaari S, Kröger H, Saarakkala SJ, Herzog W, Korhonen RK, Finnilä MAJ (2021) Early changes in osteochondral tissues in a rabbit model of post-traumatic osteoarthritis. Journal of Orthopaedic Research 39(12): 2556-2567. http://doi.org/10.1002/jor.25009

45. Joumaa V, Smith IC, Fukutani A, Leonard TR, Ma W, Mijailovich SM, Irving TC, Herzog (2021). Effect of active lengthening and shortening on small angle x-ray reflections in skinned skeletal muscle fibres. International Journal of Molecular Science 22 (16): 8526.

46. Joumaa V, Fukutani A, Herzog W (2021) Energy cost of force production after a stretch-shortening cycle in skinned muscle fibres: Does muscle efficiency increase? Frontiers in Physiology 11: 567538.

47. Komeili A, Otoo B, Abusara Z, Sibole S, Federico S, Herzog W (2021) Chondrocyte deformations under mild dynamic loading conditions. Annals of Biomedical Engineering 49 (2): 846-857. https://doi.org/10.1007/s10439-020-02615-9

48. Mahmood S, Sawatsky A, Herzog W (2021) Increased force following muscle stretching and simultaneous fibre shortening: Residual force enhancement or force depression – That is the question? Journal of Biomechanics 116: 110216. In Press. https://doi.org/10.1016/j.jbiomech.2020.110216

49. Morais G, Chemerka C, Masson A, Seerattan RA, Da Rocha A, Krawetz R, Herzog W, Sanches Ramos da Silva A (2021) Excessive downhill training leads to early onset of knee osteoarthritis. Osteoarthritis and Cartilage 29(6): 870-881. doi.org/10.1016/j.joca.2021.03.016

50. Moo EK, Tanska P, Federico S, Al-Saffar Y, Herzog W, Korhonen R (2021) Collagen fibres determine the crack morphology in articular cartilage. Acta Biomaterialia 126: 301-314. doi.org/10.1016/j.actbio.2021.03.031

51. Morris N, Westerblad H, Jordan MJ, Heard M, Herzog W (2021) Electromechanical delay of the hamstrings following semitentinosus tendon autografts in return to competition athletes. European Journal of Applied Physiology 121: 1849-1858.

52. Morris N, Jordan MJ, Sumar S, van Adrichem B, Heard M, Herzog W (2021) Joint angle-specific impairments in rate of force development, strength, and muscle morphology after hamstring autograft. Translational Sports Medicine 4: 104-114.doi:10.1002/tsm2.189.

53. Otoo B, Li L, Hart DA, Herzog W (2021) Development of a porcine model to assess the effect of in-situ knee joint loading on site-specific cartilage gene expression. Journal of Biomechanical Engineering 144(2): 024502.

54. Power GP, Crooks S, Fletcher JR, MacIntosh BR, Herzog W (2021) Age-related reductions in the number of serial sarcomeres contribute to shorter fascicle lengths but not elevated passive tension. Journal of Experimental Biology 224(10): jeb242172. doi.org/10.1242/jeb.242172

55. Rios JL, Hart DA, Reimer R, Herzog W (2021) Prebiotic and exercise do not alter knee osteoarthritis in a rat model of established obesity. Cartilage 13 (2): 1456S-1466S.

56. Rytky S, Huang L, Tanska P, Tiulpin A, Panfilov E, Herzog W, Korhonen R, Saarakkala S, Finnilä M (2021) Automated analysis of rabbit knee calcified cartilage morphology using micro-computed tomography and deep learning. Journal of Anatomy. In Press. https://doi.org/10.1111/joa.13435

57. Schmidt J, Jinha A, Herzog W (2021) Sarcomere length measurement reliability in single myofibrils. Journal of Biomechanics 126: 110628. doi.org/10.1016/j.jbiomech.2021.110628

58. Smith IC, Ostertag C, O'Reilly J, Rios JL, Klancic T, MacDOnald GZ, Collins KH, Reimer RA, Herzog W (2021) Contractility of permeabilized rat vastus intermedius muscle fibres following high-fat, high-sucrose diet consumption. Applied Physiology, Nutrition, and Metabolism 46(11): 1389-1399.

59. Smith IC, Onasch F, Krysciak K, Celichowski J, Herzog W (2021) Contractile history affects sag and boost properties of unfused tetanic contractions in human quadriceps muscle. European Journal of Applied Physiology 121:645-658. DOI: 10.1007/s00421-020-04561-9

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63. De Brito Fontana H, Sawatsky A, Han S-w, Herzog W (2019) Agonistic muscle (IN)Balance during synchronized activation. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster Presentation.

64. De Brito Fontana H, Sawatsky A, Han S-w, de Campos D, Herzog W (2019) Loss in agonistic muscle torque during simultaneous (submaximal) activation. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

65. de Campos D, de Brito Fontana H, Sawatsky A, Han S-w, Herzog W (2019) Por Que Os Músculos Agonistas Perdem Seu Potencial De Gerar Força Quando Ativados Simultaneamente? XVIII Congresso Brasileiro de Biomecanica (18th Brazilian Congress of Biomechanics), Manaus, Brazil, May 1 – 4. Podium Presentation.

66. Boldt KR, Joumaa V, Herzog W (2019) Adaptations in maximal force and shortening velocity of cardiac muscle in response to aerobic and resistance exercise. Canadian Society for Exercise Physiology, Kelowna BC. Nov 6-9. Podium Presentation.

67. Boldt K, Joumaa V, Herzog W (2019) Maximum force and velocity properties of cardiac muscle following aerobic and resistance exercise training. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster and Podium Presentations (Finalist ABS J Biomech and ISB David Winter Young Investigator Awards).

68. Boldt KR, Han S-w, Joumaa V, Herzog W (2019) Residual and passive force enhancement in skinned cardiac fibre bundles. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Poster Presentation.

69. Fukutani A, Herzog W (2019) Effect of stretch-shortening cycle is prominent in the reduced force condition. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

70. Gorrell L, Conway PJ, Jinha A, Herzog W (2019) Differences in biomechanical and electromyographic characteristics of successful vs. uncussessful manual high-velocity, low-amplitude spinal manipulation in an

asymptomatic population. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Podium Presentation.

71. Han S-w, Joumaa V, Jinha A, Herzog W (2019) Does the amount of stretching affect residual force enhancement in cardiac myofibrils? European Muscle Conference, Canterbury, UK, Sep 7-11. Oral and Podium Presentations.

72. Han S-w, Joumaa V, Jinha A, Herzog W (2019) Residual force enhancement in cardiac myofibrils. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Podium Presentation.

73. Han S-w, Joumaa V, Jinha A, Herzog W (2019) Residual force enhancement in cardiac myofibrils on the ascending limb of the force-length relationship. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

74. Han S-w, Joumaa V, Jinha A, Herzog W (2019) Do cardiac myofibrils exhibit residual force enhancement properties? 63rd Meeting of the Biophysical Society, Baltimore, MD, Mar 2-6. Poster Presentation.

75. Huang L, Tanska PK, Korhonen RK, Saarakkala SJ, Herzog W, Finnilä M (2019) Novel microcomputed tomography method for thickness analysis of calcified cartilage. OARSI World Congress on Osteoarthritis, Toronto, ON, May 2-5. Poster Presentation.

76. Illg J, Rios JL, Francis D, Manske S, Boyd SK, Hallgrimsson B, Reimer RA, Hart DA, Herzog W (2019) Characterization of subchondral bone morphology in a rat model of metabolic osteoarthritis. 20th Annual Alberta Biomedical Engineering Conference, Banff AB, Oct 25-27. Poster Presentation.

77. Joumaa V, Nazeer S, Herzog W (2019) Force production during eccentric contractions in skinned muscle fibres. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Podium Presentation.

78. Joumaa V, Leonard TR, Herzog W (2019) Residual force enhancement: towards a better understanding of muscle contraction. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Invited Podium Presentation.

79. Joumaa V, Nazeer S, Ortes F, Herzog W (2019) New insights into force after active stretch in damaged skinned muscle fibres. 63rd Meeting of the Biophysical Society, Baltimore, MD, Mar 2-6. Poster Presentation.

80. Komeili A, Otoo B, Crichton R, Herzog W (2019) Cartilage matrix 2d strain distributions for physiological loading conditions. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster Presentation.

81. Leonard T, Joumaa V, Larkin-Kaiser K, Herzog W (2019) Adductor longus myofibrillar passive stiffness is reduced in cerebral palsy. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

82. Lin L, Hatami S, Freed D, Coe JY, Colen T, Sergi C, Thompson R, Di Martino E, Herzog W, Abu Sara Z, Khoo NS (2019). Rapid leaflet expansion is the main adaptive change to maintain tricuspid *TV) competency from detrimental remodeling: a three-dimensional echocardiography (3DE) study in a novel chronic right ventricular (RV) pressure and volume loaded piglet model. American Society of Echocardiography (ASE), Portland ON, Jun 21-25. Poster Presentation.

83. Lin L, Hatami S, Freed D, Coe J, Colen T, Sergi C, Thompson R, Di Martino E, Herzog W, Abu Sara Z, Khoo N (2019) Tricuspid valve (TV) leaflet expansion is the main adaptive change to maintain competency: a three-dimensional echocardiography (3DE) study in a novel chronic right ventricular (RV) pressure and volume loaded piglet model. Canadian Cardiovascular Congress: 71st Annual Meeting of the Canadian Cardiovascular Society, Montreal QC, Oct 24-27. Podium Presentation.

84. Lin LQ, Sigaeva T, Abu Sara Z, Hatami S, Sergi C, Di Martino ES, Herzog W, Thompson R, Coe JY, Colen TM, Freed DH, Khoo NS (2019) Tricuspid Valve (TV) Adaptive Changes to Chronic Right Ventricular (RV) Pressure and Volume Stressors in a Piglet Model Suggest Rapid Increase in Collagen Content: A Pilot Study. American Heart Association Scientific Sessions, Philadelphia PA, Nov 16-18. Podium Presentation.

85. Lin LQ, Hatami S, Thompson R, Sergi C, Coe JY, Colen TM, Di Martino ES, Herzog W, Abu Sara Z, Freed DH, Khoo NS (2019) Tricuspid Valve (TV) Adapt to Chronic Right Ventricular (RV) Pressure and Volume Load Stress

by Rapid Leaflet Expansion: A Three-dimensional Echocardiography (3DE) Study in a Novel Piglet Model. American Heart Association Scientific Sessions, Philadelphia PA, Nov 16-18. Poster Presentation.

86. Millard M, Franklin D, Herzog W (2019) A three filament muscle model based on a titin-myosin interaction. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

87. Millard M, Leonard T, Herzog W (2019) Is titin actively preloaded? 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Poster Presentation.

88. Moo EK, Herzog W (2019) Biomechanics of soft tissues: bridging the gap between multiple geometric scales. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Podium Presentation as Recipient of the Promising Scientist Award.

89. Moo EK, Leonard TR, Herzog W (2019) In situ investigation of the sarcomere force-length relationship in intact muscle using second harmonic generation microscopy. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Podium Presentation.

90. Moo EK, Leonard T, Herzog W (2019) The influence of muscle architecture on sarcomere force-length relationship in intact muscle. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

91. Nasir M, MacDonald GZ, Rios JL, Hart D, Reimer R, Herzog W (2019) Differences in subchondral bone fat content of young and adult rats fed a high-fat high-sucrose diet. 20th Annual Alberta Biomedical Engineering Conference, Banff AB, Oct 25-27. Podium Presentation.

92. Nazeer S, Joumaa V, Herzog W (2019) Active and passive contributions to force after damage in skinned muscle fibres. Podium presentation. 20th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 25-27. Podium Presentation

93. Otoo BS, Komeili A, Sibole S, Abusara Z, Herzog W. Chondrocyte volumetric strain measurements across cartilage zones during dynamic loading. 20th Annual Alberta Biomedical Engineering Conference, Banff AB, Oct 25–27. Podium Presentation.

94. Otoo B, Komeili A, Sibole S, Abusara Z, Herzog W (2019) Chondocyte volumetric strain measurements during cyclic loading. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster and Podium Presentations (Winner David Winter Young Investigator Award).

95. Otoo BS, Herzog W (2019) Developing a system to measure chondrocyte mechanobiology during dynamic loading. OARSI World Congress on Osteoarthritis, Toronto, ON, May 2-5. Poster Presentation.

96. Pigott T, Joumaa V, Rios JL, MacDonald G, Herzog W. Is muscle intregrity compromised in a rat model of obesity and metabolic osteoarthritis? 20th Annual Alberta Biomedical Engineering Conference, Banff AB, Oct 25-27. Podium Presentation.

97. Rios JL, Joumaa V, Michaiel J, Reimer RA, Hart DA, Herzog W (2019) The effect of moderate exercise and prebiotic fibre supplementation on vastus lateralis muscle in a rat model of obesity. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster Presentation.

98. Rios JL, Joumaa V, Michaiel J, Reimer RA, Hart DA, Herzog W (2019) Protective effect of moderate exercise and prebiotic fibre supplementation on vastus lateralis muscle in a rat model of obesity. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Poster Presentation.

99. Rios JL, Mather JW, Michaiel J, Mattiello SM, Herzog W (2019) Moderate exercise prevents cartilage softening and muscle structural changes in a rat model of obesity. OARSI World Congress on Osteoarthritis, Toronto, ON, May 2-5. Poster Presentation.

100. Smith IC, Sawatsky A, Herzog W (2019) Relaxation is not accelerated by prior contraction in plantaris muscle of rana pipiens assessed in situ. 27th Congress of the International Society of Biomechanics and 43rd Annual Meeting of the American Society of Biomechanics, Calgary, AB, Jul 31-Aug 4. Poster Presentation.

101. Smith IC, Onasch F, Herzog W (2019) Summation properties are improved by a preceding contraction and intervening rest period. 4th Rocky Mountain Muscle Symposium, Canmore AB, Jul 27-29. Podium Presentation.

102. Boldt K, MacDonald G, Joumaa V, Herzog W (2018) Cardiac mechanical adaptations to dietary-induced childhood obesity in rats. 20th Meeting of the Canadian Society for Biomechanics, Halifax, NS. Aug 14-17. Podium Presentation.

103. De Brito Fontana H, Han S-w, Sawatsky A, Wu K, Herzog W (2018) The role of moment arm and connective tissue linkage in the summation of torque and force of agonist muscles. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Poster Presentation.

104. Chen A, Herzog W (2018) Procedures and software for correcting artifacts in sonomicrometry. 20th Meeting of the Canadian Society for Biomechanics, Halifax, NS, Aug 14-17. Poster Presentation.

105. Collao N, Smith IC, Herzog W (2018) Effects of inorganic phosphate on the force-calcium relationship at different sarcomere lengths in permeabilized rabbit psoas fibres. II Congreso Internacional Asociacion Chilena de Ciencias del Movimiento (ACCM), Santiago de Chile, Aug 2-4. Podium Presentation.

106. Fortuna R, Kirchhuebel H, Seiberl W, Power GA, Herzog W (2018) Force depression following a stretch-shortening cycle is independent of stretch peak force and work performed during shortening. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Poster Presentation.

107. Fukutani A, Herzog W (2018) Residual force enhancement is attenuated by shortening in a magnitude-dependent manner. 62nd Annual Meeting of the Biophysical Society, San Francisco, CA, Feb 17-21. Poster Presentation.

108. Goecking T, Fortuna R, Seiberl W, Herzog W (2018) Force depression following a stretch-shortening cycle depends on the amount of residual force enhancement established in the initial stretch phase. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Poster Presentation.

109. Gorrell LM, Conway PJ, Herzog W (2018) Reflex responses of neck, back and limb muscles to high-velocity, low-amplitude manual cervical and upper thoracic spinal manipulation. 20th Canadian Society for Biomechanics Conference, Halifax, NS, Aug 14-17. Poster Presentation.

110. Gorrell LM, Conway PJ, Herzog W (2018) Neck, back and limb muscle reflex responses to manual cervical and upper thoracic spinal manipulation. Chiropractic and Osteopathic College of Australasia Conference, Sydney, Australia, Aug 31-Sep 2. Poster Presentation.

111. Han S-w, Sawatsky A, Jinha A, Herzog W (2018) Does the loss of vastus medialis alter patellafemoral joint contact pressures in vivo? International Society of Electrophysiology and Kinesiology, Dublin, Ireland, Jun 30 – Jul 2. Podium Presentation.

112. Han S-w, Sawatsky A, Jinha A, Herzog W (2018) Relationship between weakness of quadriceps muscle and joint contact pressure distributions, and patellafemoral pain. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Podium Presentation.

113. Joumaa V, Smith IC, Fukutani A, Leonard T, Ma W, Irving T, Herzog W (2018) Evidence for actin filament structural changes after active shortening in skinned muscle bundles. 62nd Annual Meeting of the Biophysical Society, San Francisco, CA, Feb 17.21. Poster Presentation.

114. Karabulut D, Dogru SC, Lin Y-C, Pandy M, Herzog W, Arslan YZ (2018) Modeling and simulation of the musculoskeletal system of the cat hind limb in Opensim. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Poster Presentation.

115. Komeili A, Luqman S, Abusara Z, Herzog W (2018) Effects of cracks on local strain distributions in articular cartilage. Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

116. Komeili A, Sibole S, Abu Sara Z, Herzog W (2018) Chondrocyte deformations for dynamic loading conditions. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Podium Presentation.

117. Kranenburg E, Kooijman L, Fortuna R, Herzog W (2018) Rate of force development during isometric contraction and induced pre-activated stretch conditions in the human adductor pollicis muscle. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Podium Presentation.

118. MacDonald GZ, Reimer R, Hart D, Herzog W (2018) Eccentric exercise induces great muscle damage in a childhood obesity animal model. 20th Meeting of the Canadian Society for Biomechanics, Halifax, NS, Aug 14-17. Poster Presentation.

119. MacDonald GZ, Collins KH, Rios JL, Hart DA, Seerattan RA, Reimer RA, Herzog W (2018) Exposure of male Sprague-Dawley rats to a high-fat/high-sucrose diet from waning leads to obesity-induction but not overt knee joint damage or an inflammatory state by 17 weeks of age. Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

120. Millard M, Franklin D, Herzog W (2018) A Continuous and Differentiable Mechanical Model of Muscle Force and Impedance. International Symposium on Wearable Robotics, Pisa, Italy, Oct 16-20. Podium Presentation. (Best Paper Award)

121. Moo EK, Herzog W (2018) Sarcomere contractile behaviours are location-dependent in living whole mouse. 20th Meeting of the Canadian Society of Biomechanics, Halifax, NS, Aug 14-17. Podium Presentation.

122. Moo EK, Leonard TR, Herzog W (2018) Is local mean sarcomere length a good force predictor in whole muscle? Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

123. Moo EK, Leonard TR, Herzog W (2018) On using local mean sarcomere length to predict force in whole muscle. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Podium Presentation.

124. Moo EK, Herzog W (2018) Contraction dynamics of in vivo sarcomeres at different anatomical locations in activated whole muscle. 8th World Congress of Biomechanics, Dublin, Ireland, Jul 8-12. Poster Presentation.

125. Morris N, Sumar S, Jordan M, Heard M, Herzog W (2018) Extended field of view ultrasound imaging: tracking changes in hamstring muscle architecture after ACL injury in elite skiers. SPIN Conference, Montreal, QC, Oct 31 – Nov 2. Podium Presentation. (Gord Sleivert Young Investigator Award)

126. Nazeer S, Joumaa V, Herzog W (2018) Force After Active Stretch Is Not Reduced in Damaged Skinned Muscle Fibres. 19th Annual Alberta Biomedical Engineering Conference, Banff, AB, Canada.Oct 26-28. Podium Presentation.

127. Ojanen SP, Finnilä MAJ, Saarela K, Mäkelä J, Herzog W, Saarakkala S, Korhonen RK (2018) ACL transection of rabbits alter FCD content, tissue modulus and cell deformation mustly in the lateral femoral condyle cartilage 2 weeks post-surgery. Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

128. Ojanen SP, Finnilä MAJ, Saarela K, Herzog W, Saarakkala S, Korhonen RK (2018) Time-dependent changes of FCD content during the progression of osteoarthritis in rabbits. Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

129. Onasch F, Fortuna R, Herzog W (2018) EMG reflects changes in preferred force magnitude and direction while increasing pedaling effort. 20th Meeting of the Canadian Society for Biomechanics, Halifax, NS, Aug 14-17. Poster Presentation.

130. Otoo B, Jelani N, Komeili A, Herzog W (2018) Cell viability in cartilage with non-impact induced crack. 20th Meeting of the Canadian Society for Biomechanics, Halifax, NS, Aug 14-17. Poster presentation.

131. Rios JL, Mather JW, Herzog W (2018) Moderate exercise prevents cartilage softening in a rat model of obesity. 20th Meeting of the Canadian Society of Biomechanics, Halifax, NS, Aug 14-17. Podium Presentation.

132. Rios J, Reimer RA, Hart DA, Seerattan RA, Herzog W (2018) Preventive effect of a prebiotic fibre supplement on the development of osteoarthritis. OARSI World Congress on Osteoarthritis, Liverpool, United Kingdom, Apr 26-29, Poster Presentation.

133. Sibole S, Moo EK, Federico S, Herzog W (2018) Image-driven modelling and simulation of micro-scale articular cartilage mechanics. 20th Meeting of the Canadian Society of Biomechanics, Halifax, NS, Aug 14-17. Podium Presentation.

134. Tanska P, Ronkainen AP, Fick JM, Reunamo A, Herzog W, Korhonen RK (2018) The ratio between extra- and pericellular matrix proteoglycan content and applied loading magnitude modulates chondrocyte volume loss following partial meniscectomy in the knee – Experimental and computational analysis. Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, Mar 10-13. Poster Presentation.

135. Abusara Z, Andrews S, Kossel M, Herzog W (2017) Menisci prevent cell death in intact and damaged articular cartilage. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation. (ORS Meniscus Section Member Poster Award)

136. Boldt KR, Rios JL, Joumaa V, Herzog W (2017) Mechanical and biochemical adaptations of cardiac muscle to aerobic exercise training. XXVI Congress of the International Society for Biomechanics, Brisbane, Australia, Jul 26. Podium Presentation. (Finalist, David Winter Young Investigator Award)

137. Boldt KR, Rios JL, Joumaa V, Herzog W (2017) Single fibre force production in the triceps surae following chronic exercise training. 18th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 10-12. Poster Presentation.

138. Casula VC, Kajabi AW, Ojanen S, Finnilä M, Korhonen R, Herzog W, Saarakkala S, Nissi MJ, Nieminen MT (2017) Multiparametric MRI assessment reveals early cartilage degeneration at 2 and 8 weeks after anterior cruciate ligament transection in a rabbit model. 25 Annual Meeting of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, Apr 22-27. Poster Presentation.

139. Collins KH, Paul HA, Hart DA, Reimer RA, Herzog W (2017) High-fat, high-sucrose diet rapidly alters muscle integrity, inflammation and gut microbiota in male rats. Banff Inflammation Workshop, Banff, AB, Jan 26-29. Poster Presentation.

140. Collins KH, Hart DA, Seerattan RA, Reimer RA, Herzog W (2017) Diet-induced obesity and the development of hip and shoulder osteoarthritis: insights from a rat model. Annual Meeting of the Orthopeaedic Research Society, San Diego, Mar 19-22. Poster Presentation.

141. Collins KH, Hart DA, Seerattan RA, Reimer RA, Herzog W (2017) Diet-indiced obesity, systemic inflammation, and the development of hip and shoulder osteoarthritis: insights from a rat model. OARSI World Congress on Osteoarthritis, Las Vegas, NV, Apr 27-30. Poster Presentation.

142. Finnilä MA, Ojanen S, Saarakkala A, Hewitt C, Herzog W, Nieminen P, Hart DA, Korhonen RK (2017) Increased cartilage remodeling and impaired chondrocyte mechnotransduction in early post-traumatic osteoarthritis. OARSI World Congress on Osteoarthritis, Las Vegas, NV, Apr 27-30. Podium Presentation.

143. Fontana HB, Han SW, Sawatsky A, Herzog W (2017). The non-intuitive mechanics of agonistic muscles. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Podium Presentation.

144. Fontana HB, Han SW, Sawatsky A, Herzog W (2017). The non-intuitive mechanics of agonistic muscles. XVII Brazilian Congress of Biomechanics, Porto Allegre, Brazil, May 8-11. Podium Presentation.

145. Fortuna R, Groeber M, Seiberl W, Power GA, Herzog W (2017) Shortening-induced force depression is modulated in a time- and speed-dependent manner following a stretch-shortening cycle. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Poster Presentation.

146. Fortuna R, Sawatsky A, Fuller JC, Herzog W (2017) Does HMB preserve strength and muscle mass in muscles exposed to Botox treatments. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Poster Presentation.

147. Fortuna R, Groeber M, Seiberl W, Power GA, Herzog W (2017) Shortening-induced force depression is modulated in a time- and speed-dependent manner following a shortening-stretching cycle. 41st Annual Meeting of the American Society of Biomechanics, Boulder, CO, Aug 8-11. Poster Presentation.

148. Fortuna R, Sawatsky A, Fuller JC, Herzog W (2017) Does HMB preserve strength and muscle mass in muscles exposed to Botox treatments. 41st Annual Meeting of the American Society of Biomechanics, Boulder, CO, Aug 8-11. Poster Presentation.

149. Fukutani A, Joumaa V, Herzog W (2017) Influence of residual force enhancement and elongation of attached cross-bridges on the stretch-shortening cycle. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Podium Presentation.

150. Fukutani A, Herzog W (2017) Relationship between residual force enhancement and muscle fatigue. 41st Annual Meeting of the American Society of Biomechanics, Boulder, CO, Aug 8-11. Poster presentation.

151. Han S-K, Ronkainen A, Saarakkala S, Rieppo L, Herzog H, Korhonen R (2017) Alterations in structural macromolecules in ECM and PCM in early OA lapine cartilage model. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation.

152. Han S-w, Sawatsky A, Jinha A, Herzog W (2017) Changes in patellofemoral joint mechanics in the presence of quadriceps muscle imbalance. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Podium Presentation. (Finalist, David Winter Young Investigator Award)

153. Hessel AL, Joumaa V, Herzog W; Nishikawa KC (2017) A role for titin in the activation-dependent shift of the force-length relationship in skeletal muscle. 46th European Muscle Conference, Sep 19-22, Potsdam, Germany. Poster Presentation.

154. Joumaa V, Bertrand F, Liu S, Poscente S, Herzog W (2017) Partial titin degradation increases sarcomere length non-uniformities and reduces absolute residual force enhancement after active stretch in single myofibrils. 46th European Muscle Conference, Sep 19-22, Potsdam, Germany. Poster Presentation.

155. Komeili A, Chau W, Al-Saffar Y, Herzog W. (2017) Mechanical response of articular cartilage damaged by macro cracks. OARSI World Congress on Osteoarthritis, Las Vegas, NV, Apr 27-30. Podium Presentation.

156. Komeili A, Abusara Z, Federico S, Herzog W (2017). Axial strain variations thorough cartilage depth. Canadian Conference of Applied Mechanics (CANCAM), Victoria, BC, May 29 – Jun 1. Podium Presentation.

157. Leonard T, Herzog W (2017) Activated skeletal muscle myofibrils have different peak stresses at similar sarcomere lengths when lengthened beyond myofilament overlap. 61st Annual Meeting pf the Biophysical Society, New Orleans LA, Feb 11-15. Podium Presentation.

158. Leonard T, Herzog W (2017) Locally deactivated sarcomeres do not over-lengthen in myofibrils. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Podium Presentation.

159. Liu S, Joumaa V, Herzog W (2017) The origin of the force increase observed after active stretch beyond myofilament overlap in single muscle fibers. 61st Annual Meeting of the Biophysical Society, New Orleans, LA, Feb 11-15. Poster Presentation.

160. Luqman S, Komeili A, Abusara A, Herzog W (2017) Effects of cracks on local strain distributions in articular cartilage. 18th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 10-12. Poster Presentation.

161. MacDonald GZ, Mazara N, Herzog W, Power GA (2017) The bilateral deficit: a difference in contralateral limb torque. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, July 23-27. Podium Presentation.

162. Michaiel J, Rios JL, Seerattan R, Herzog W (2017) Is prebiotic fibre supplementation effective in preventing structural changes in vastus lateralis muscle in a rat model of obesity? 18th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 10-12. Poster Presentation.

163. Moo EK, Sibole SC, Han SK, Herzog W (2017) In situ mapping of three-dimensional strain in live cartilage using multi-photon microscopy. 4th Annual McCaig Meeting on Musculoskeletal Diseases, Calgary, AB, May 12. Podium Presentation.

164. Moo EK, Leonard T, Herzog W (2017) Increased non-uniformity in in vivo sarcomere length during a tetanic contraction. 61st Annual Meeting of the Biophysical Society, New Orleans LA, Feb 11-15. Poster Presentation.

165. Moo EK, Sibole SC, Han S-K, Herzog W (2017) Three-dimensional Micro-scale strain mapping in live cartilage. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation.

166. Moo EK, Sibole SC, Herzog W (2017) A novel imaging approach for morphological analysis of the pericellular matrix in live cartilage. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation.

167. Moo EK, Leonard TR, Herzog W (2017) In vivo sarcomere length distribution during a tetanic contraction. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Poster Presentation.

168. Moo EK, Sibole SC, Han SK, Herzog W (2017) In situ mapping of three-dimensional strain in live cartilage. XXVI Congress of the International Society of Biomechanics, Brisbane, Australia, Jul 23-27. Poster Presentation.

169. Ojanen SP, Finnilä MA, Saarela K, Happonen E, Herzog W, Saarakkala S, Korhonen R (2017) Site-specific changes in deformation of articular cartilage chondrocytes at very early stage of post-traumatic OA. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation.

170. Ojanen SP, Finnilä MA, Mäkelä J, Saarela K, Happonen E, Herzog W, Saarakkala S, Korhonen R (2017) Site-specific changes of articular cartilage biomechanics and chondrocyte deformation in early OA. 23rd Congress of the European Society of Biomechanics, Seville, Spain, Jul 2-5. Podium Presentation.

171. Onasch F, Fortuna R, Herzog W (2017) Effects of constrained force application on muscle work and pedaling efficiency. 41st Annual Meeting of the American Society of Biomechanics, Boulder CO, Aug 8-11. Poster Presentation

172. Rios JL, Hart DA, Reimer RA, Seerattan RA, Herzog W (2017) Moderate exercise inhibits the development of knee OA-like changes in a rat model of diet-induced obesity. 4th Annual McCaig Meeting on Musculoskeletal Diseases, Calgary, AB, May 12. Podium Presentation.

173. Rios JL, Hart DA, Reimer RA, Collins KH, Seerattan RA, Herzog W (2017) Moderate exercise inhibits the development of knee osteoarthritis-like changes in a rat model of diet-induced obesity. OARSI World Congress on Osteoarthritis, Las Vegas, NV, Apr 27-30. Poster Presentation.

174. Rios JL, Hart DA, Reimer RA, Seerattan RA, Herzog W (2017) Moderate exercise and dietary fibre supplementation inhibits the development of knee OA-like changes in a rat model of diet-induced obesity.Bone and Joint Health Strategic Clinical Network Workshop: Obesity - Implication forCare of Albertans with Osteoarthritis, Alberta Health Services, Leduc AB, June 13-14, 2017. Poster Presentation. (3rd Place Poster Award)

175. Ronkainen A, Tanska P, Fick J, Herzog W, Korhonen R (2017) Biomechanical responses of chondrocytes after partial meniscectomy – importance of cartilage structure. Annual Meeting of the Orthopaedic Research Society, San Diego CA, Mar 19-22. Poster Presentation.

176. Santos AG, Gervasio FM, Herzog W, Menezes RL, Ribeiro DM (2017) Gait symmetry after stroke: Do cerebral hemispheres influence equally?. 21st IAGG World Congress of Gereontology & Geriatrics, San Francisco CA, July 23-27. Poster Presentation.

177. Sibole S, Moo EK, Herzog W (2017) A method to measure 3D micro-scale deformation of biological tissue. 18th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 10-12. Poster Presentation.

178. Smith IC, Ali J, Power GA, Herzog W (2017) Sag is dependent on muscle length and the inter-pulse interval of stimulation in human adductor pollicis muscle. Exercise Neuroscience Meeting, Guelph, ON, Jun 15-16. Podium Presentation.

179. Smith IC, Ali J, Power GA, Herzog W (2017) The sag response inhuman adductor pollicis muscle. 46th European Muscle Conference, Sep 19-22, Potsdam, Germany. Poster Presentation.

180. Wu K, Han S-w, Sawatsky A, Herzog W (2017) Experimental approach to the mechanics of agonistic muscles. 18th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 10-12. Podium Presentation. (Best Oral Presentation Award, Canadian Society of Biomechanics).

181. Al-Saffar Y, Pingguan-Murphy B, Herzog W (2016) Predicting Cartilage Crack Morphology. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

182. Boldt K, Rios JL, Herzog W (2016) Force properties of skinned cardiac myocyte bundles following 11-week treadmill training. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

183. Boldt K, Rios JL, Joumaa V, Herzog W (2016) Cardiac muscle and cell-level adaptations to 11-week treadmill training and overtraining. 40th American Society of Biomechanics Annual Meeting, Raleigh, NC, Aug 2-5. Poster Presentation.

184. Boldt KR, Rios JL, Joumaa V, Herzog W (2016) Cardiac myocyte bundle peak power output following chronic cardiovascular training in rats. Canadian Society for Exercise Physiology, Victoria BC, Oct 15. Podium Presentation.

185. Chau W, Komeili A, Al-Saffar Y, Herzog W (2016) The effect of macro cracks on the load bearing capacity of articular cartilage. 17th Annual Alberta Biomedical engineering Conference, Banff AB, Oct 21-23. Poster Presentation.

186. de Brito Fontana H, Herzog W (2016) Vastus lateralis maximum force-generating potential occurs at optimal fascicle length regardless of activation level. 40th American Society of Biomechanics Annual Meeting, Raleigh, NC, Aug 2-5. Podium Presentation.

187. Collins K, Hart D, Herzog W, Reimer R (2016) Muscles display differential regulatory responses and intramuscular fat accumulation with short term exposure to high fat high sucrose diet in rats. Keystone Symposia meeting on Molecular and Cellular Basis of Growth and Regeneration, Breckenridge, CO, Jan 10-14. Poster Presentation.

188. Collins KHM, Hart DA, Reimer RA, Herzog W (2016) High fat high sucrose diet results in early morphological and pro-inflammatory changes in the vastus lateralis muscle – implications for metabolic osteoarthritis. Orthopaedic Research Society Annual Meeting, Orlando, FL, Mar 5-8. Poster Presentation.

189. Collins K, Herzog W (2016) Short-term high fat-sucrose metabolic challenge results in compromised muscular integrity, alterations in gut bicrobiota and oxidative stress. 3rd Annual McCaig Meeting on Musculoskeletal Diseases, Calgary, AB, May 6. Podium Presentation.

190. Collins K, Sawatzky A, hart DA, Smith IC, Herzog W (2016) The rat soleus muscle maintains structural and functional integrity with diet-induced obesity. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

191. Dholakia C, Waters-Banker C, Power GA, Herzog W (2016) Is fast food speeding up the aging process? Comparing the skeletal muscle inflammatory environment in diet induces obesity model and aging model. International Conference for Healthcare and Medical Students (ICHAMS), Dublin, Ireland. Feb 19-20. Presentation.

192. Engel M, Leonard T, Herzog W (2016) Continuous electrical stimulation of skeletal muscles results in sarcomere non-uniformity and disorganization. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

193. Hahn D, Seiberl W, Power GA, Herzog W (2016) Increased performance during the stretch-shortening cycle – more than stretch reflex and recoil of elastic energy. 40th American Society of Biomechanics Annual Meeting, Raleigh, NC, Aug 2-5. Podium Presentation.

194. Holash RJ, Smith IC, Herzog W, MacIntosh BR (2016) Increased occupation of sarcomeric calcium buffers reduces required calcium release for similar troponin-c binding of subsequent activation. 45th European Muscle Conference, Montpellier, France, Sep 2-6. Poster Presentation.

195. Issler A, Collins K, Herzog W (2016) Does fibrosis differ by obesity response in the vastus lateralis muscles of rats? National Undergraduate Resarch Conference, Toronto, ON, Apr 1. Poster Presentation.

196. Jordan M, Heard M, Doyle-Baker P, Aagaard P, Herzog W (2016) Associated pathology and limb asymmetry in acl reconstructed elite alpine racers. International Congress on Science and Skiing, St. Christoph, Austria, Dec 10-15. Podium Presentation.

197. Joumaa V, Kim SY, Seerattan R, Herzog W (2016) Does titin explain the high passive force observed in frog tibialis anterior muscle? Experimental Biology, San Diego, CA, Apr 2-6. Poster Presentation.

198. Joumaa V, Smith IC, Leonard TR, Antipova O, Irving TC, Herzog W (2016) Effect of active shortening and stretching on lattice spacing and cross-bridge binding in skinned muscle fibres. 60th Annual Meeting of the Biophysical Society, Los Angeles, CA, Feb 27 – Mar 2. Poster Presentation.

199. Joumaa V, Fitzowitch A, Herzog W (2016) Energy cost of isometric force production after active shortening in skinned muscle fibres. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

200. Karabulut D, Dogru S, Arslan Y, Lin Y, Pandy M, Herzog W (2016) Development of a computational musculoskeletal model of the cat hind limb. International Conference of the Polish Society of Biomechanics, Biala Podlaska, Poland, Sep 5-7. Podium Presentation.

201. Ko L, Joumaa V, Rios JL, Sawatsky A, Herzog W (2016) Mechanical properties and collagen composition of the tail tendon in rats fed with a high fat and sucrose diet: Effects of exercise and dietary fiber supplement. 17th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 21-23. Podium Presentation. (Best Posium Presentation Award)

202. Komeili A, Al-Saffar Y, Herzog W (2016) Crack opening in mature and immature cartilage. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Poster Presentation.

203. Komeili A, Moo EK, Federico S, Herzog W (2016) A continuum depth-dependent biphasic model of cartilage. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Poster Presentation.

204. Liu S, Joumaa V, Herzog W (2016) New insight into the active force produced by skeletal muscle after stretch. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

205. Liu S, Joumaa V, Herzog W (2016) Force after active stretch beyond myofilament overlap: titin and/or cross bridges? 17th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 21-23. Poster Presentation.

G, Herzog W (2016) Altered skeletal muscle function with dietary-induced obesity. 13th International Congress on Obesity, Vancouver, BC, May 1-4. Podium Presentation.

206. MacDonald G, Herzog W (2016) Skeletal muscle alterations resulting from diet induced obesity. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Poster Presentation.

207. Maleki M, Herzog W, Federico S (2016) Modelling large deformation-dependent permeability of articular cartilage. 22nd Congress of the European Society of Biomechanics, Lyon, France, Jul 10 – Jul 13. Podium Presentation.

208. Mather J, Rios JL, Herzog W (2016) Can exervise prevent osteoarthritis-like changes in the tibial plateau of rats exhibiting diet induced obesity? 17th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 21-23. Podium Presentation.

209. Moo EK, Fortuna R, Abusara Z, Herzog W (2016) Sarcomere length and passive sarcomere lengthening are location-dependent in live mouse tibialis anterior muscle. 60th Annual Meeting of the Biophysical Society, Los Angeles, CA, Feb 27 – Mar 2. Poster Presentation.

210. Moo EK, Fortuna R, Sibole S, Abusara Z, Herzog W (2016) Sarcomere lengths and sarcomere elongations are not uniform in an intact in vivo muscle. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

211. Otoo B, Rodriguez M, Hart D, Herzog W, LePing Li (2016) Loading rate dependent cartilage mechanical behavior and gene expression in the intact knee joint. 22nd Congress of the European Society of Biomechanics, Lyon, France, Jul 10 – Jul 13. Podium Presentation.

212. Poscente S, Larkin-Kaiser KA, Leonard T, Herzog W (2016) Muscle adaptation with acute electrical stimulation in a rabbit model. 17th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 21-23. Poster Presentation.

213. Powers K, Joumaa V, Nishikawa K, Herzog W (2016) Deficient force enhancement in titin mutated single fibers. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Poster Presentation.

214. Rios JL, Boldt K, Seerattan RA, Hart D, Herzog W (2016) High mileage walking does not lead to osteoarthritis changes in the rat knee. OARSI World Congress on Osteoarthritis, Amsterdam, NL, Mar 31 – Apr 4. Poster Presentation.

215. Rios J, Herzog W (2016) High mileage walking does not lead to osteoarthritis changes in the rat knee. 3rd Annual McCaig Meeting on Musculoskeletal Diseases, Calgary, AB, May 6. Podium Presentation.

216. Rios JL, Boldt K, Seerattan R, Hart DA, Herzog W (2016) A prolonged program of brisk walking does not lead to osteoarthritis-like changes in the rat knee. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

217. Rios JL, Hawes T, Joumaa V, Herzog W (2016) Effects of exercise and dietary fibre supplementation on the myosin heavy chain isoforms in rats with diet-induced obesity. 17th Annual Alberta Biomedical Engineering Conference, Banff, Alberta, Oct 21-23. Poster Presentation

218. Ronkainen A, Reunamo A, Fick J, Herzog W, Korhonen R (2016) Changes in the local proteoglycan content of the pericellular matrix are highly site-specific and related to cell deformation behavior 3 days after a partial meniscectomy in the rabbit knee joint. Orthopaedic Research Society Annual Meeting, Lake Buena Vista, FL, Mar 5-8. Poster Presentation.

219. Ronkainen A, Fick J, Herzog W, Korhonen R (2016) Collagen content in the local cartilage matrix controls chondrocyte shape changes in mechanically loaded healthy tissue. Orthopaedic Research Society Annual Meeting, Lake Buena Vista, FL, Mar 5-8. Poster Presentation.

220. Smith IC, Herzog W, Tupling AR (2016) The viscosity of relaxed skeletal muscle increases following disruption of the short range elastic component. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Podium Presentation.

221. Smith IC, O'Reilly JJ, Collins K, Sawatsky A, Herzog W (2016) The effects of a high fat, high sugar diet on the contractile properties of permeabilised rat vastus intermedius fibres. 19th Canadian Society for Biomechanics Biennial Meeting, Hamiltion, ON, Jul 19-22. Poster Presentation.

222. Smith IC, Bellissimo C, Herzog W, Tupling R (2016) The fibre-type dependence of sag during unfused tetanic contractions can be explained by differences in cytosolic inorganic phosphate concentration. 45th European Muscle Conference, Montpellier, France, Sep 2-6. Poster Presentation.

223. Abusara Z, Kossel M, Herzog W (2015) In vivo static and dynamic deformation of articular cartilage. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

224. Al-Saffar Y, Pingguan-Murphy B, Herzog W (2015) Deformation patterns of cracked articular cartilage under compression. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

225. Boldt K, Joumaa V, Herzog W. Residual force enhancement in cardiac myofibrils. 59th annual meeting of the Biophysical Society, Baltimore USA, Feb 7-11. Poster Presentation.

226. Boldt K, Joumaa V, Herzog W (2015) Does cardiac muscle exhibit history-dependent properties? 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

227. Boldt KR, Rios JL, Herzog W (2015) Developing and Characterizing Cardiovascular Training and Overtraining Protocols in Rats. Canadian Society for Exercise Physiology Annual General Meeting, Hamilton, ON. October 15, 2015. Podium Presentation.

228. Borthwick MJ, Collings KH, Sawatsky AJ, Aurka S, Smith IC, Herzog W (2015) Diet induced obesity may affect the force-velocity relationship in rat soleus. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Podium Presentation.

229. Collins KH, Paul HA, Reimer RA, Serrattan RA, Hart DA, Herzog H (2015) Relationship between the gut microbiota, lipopolysaccharide, inflammation, and metabolic osteoarthritis development: Studies in a rat model. OARSI World Congress of Osteoarthritis, Seattle, WA, April 30 – May 3. Poster Presentation.

230. Collins KH, Hart DA, Raimer RA, Herzog W (2015) Diet-induced obesity leads to increased expression of adipokines by intraarticular tissues and osteoarthritis-like changes in the rat knee. Annual Meeting of the Orthopedic Research Society, Las Vegas, NV, March 27-28. Poster Presentation.

231. Collins KH, Hart DA, Seerattan RA, Reimer RA, Herzog W (2015) Chronic Inflammation and metabolic osteoarthritis: evidence of time-course changes in a rat model. Canadian Student Health Research Forum, Winnipeg, MB, June 2-4. Poster Presentation.

232. Collins KH, Seerattan RA, Herzog W (2015) The skinny on osteoarthritis – does body fat affect quadriceps muscle composition? 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

233. Collins KH, Hart DA, Reimer RA, Seerattan RA, Herzog W (2015) Short-term exposure to a high fat high sucrose diet results in rapid intramuscular fat deposition and altered inflammatory environment. Obesity Week Conference, Los Angeles, CA, Nov. Poster Presenation.

234. Crooks S, Power GA, Herzog W (2015) Muscle fascicle length is reduced in old age owing to shorter sarcomeres and serial sarcomere loss. Leaders in Medicine Symposium, University of Calgary, October 30, Calgary, AB. Poster Presentation.

235. Engel M, Leonard T, Herzog W (2015) Long-term stimulation results in sarcomere length non-uniformity. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

236. Fick J, Ronkainen A, Sawatsky A, Madden R, Herzog W (2015) Early in situ site-specific changes in chondrocyte biomechanical responses due to a partial meniscectomy in the lateral compartment of the mature rabbit knee joint. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

237. Fontana HB, Roesler, H, Herzog W (2015) Vastus lateralis fascicle force-length relationship for maximal and submaximal activation. 26th Brazilian congress of Biomechanics, Florianopolis, Brazil, May 7. Podium Presentation.

238. Fortuna R, Power GA, Herzog W (2015) The magnitude of stretch-induced force enhancement following shortening is time-dependent. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

239. Fukutani A, Sawatsky A, Leonhard T, Herzog W (2015) Does Achilles tendon contribute to the force potentiation induced by stretch-shortening cycle? 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

240. Han SK, Mäkitalo J, Saarakkala S, Rieppo L, Federico S, Herzog W, Chun KJ, Korhonen RK (2015) The biomechanical role of pericellular matrix in early osteoarthritis cartilage of lapine retropatellar. Korean Society for Precision Engineering Fall Conference, Gyeongju, Korea, Dec 16-18. Poster Presentation (Best Paper Award).

241. Herzog J, Leonhard TR, Jinha A, Herzog W (2015) Titin hysteresis is greater for actively lengthened compared to passively lengthened skeletal muscle sarcomeres. 59th Annual Meeting of the Biophysical Society, Baltimore, MD, Feb 7-11. Poster Presentation.

242. Johnston KR, Jinha A, Herzog W (2015) The role of sarcomere length non-uniformities in residual force enhancement. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

243. Jordan M, Aagaard P., Herzog W (2015) Fatigue Impairs Landing Quadriceps-Hamstrings Co-activity and Causes Asymmetry in Elite Ski Racers With/Without ACL Reconstruction. Sport Innovation Summit, Toronto, ON, Oct 26-27. Podium Presentation.

244. Jordan MJ, Barnert J, Aagaard P, Herzog W (2015) The kinetic impulse asymmetry index in the vertical jump predicts lower body injury in elite athletes. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

245. Joumaa V, Herzog W (2015) Calcium sensitivity after active shortening in rabbit psoas fibres. 59th Annual Meeting of the Biophysical Society, Baltimore, MD, Feb 7-11. Poster Presentation.

246. Kuznetsova S, Villemure I, Abu Sara Z, Moo EK, Al-Saffar Y, Herzog W (2015) In situ chondrocyte viscoelasticity following static and dynamic compressions. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Poster Presentation.

247. Larkin-Kaiser K, Joumaa V, Leonhard T, Howard J, Herzog W (2015) Larger isoforms of titin are associated with increased sarcomere lengths and severity of hip displacement in cerebral palsy. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

248. Leonhard TR, Herzog J, Jinha A, Herzog W (2015) Peak force and hysteresis in actively and passively lengthened skeletal muscle myofibrils at very long sarcomere length. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

249. Liu, Shyue, Joumaa V, Herzog, W (2015) Is titin responsible for force enhancement in skeletal muscle? 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Poster Presentation.

250. Martis G, Johnston K, Jinha A, Leonhard T, Herzog W (2015) Titin hysteresis and elasticity in actively stretched muscle myofibrils. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Podium Presentation.

251. Moo EK, Kuznetsova S, Herzog W (2015) Adaptation of chondrocytes to mechanical compression: are membrane ruffles unfolded for cell protection? 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12- 16th. Podium Presentation.

252. Moo, EK, Sibole SC, Herzog W (2015) A novel approach to visualise the morphology of pericellular matrix in live cartilage. XXV Congress of the International Society of Biomechanics, Glasgow, UK, July 12- 16. Podium Presentation.

253. Moo EK, Amrein M, Epstein M, Duvall M, Abu Osman NA, Pingguan-Murphy B, Herzog W (2015) Strain rate-dependent membrane reservoir- key to chondrocyte death by impact. 2nd Annual Alberta Nanotechnology Symposium, Banff, AB, May 30-31. Podium Presentation.

254. Moo EK, Herzog W (2015) Protective mechanism adopted by chondrocytes through unfolding of surface ruffles during mechanical compression. Orthopaedic Research Society (ORS) Annual Meeting, Las Vegas, Nevada, United States, March 28-31. Poster Presentation.

255. Power G, Flaaten N, Dalton B, Herzog W (2015) An increased proportion of weakly bound cross-bridges contribute to the age-related maintenance of eccentric strength. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Poster Presentation.

256. Power GA, Fletcher J, Herzog W, MacIntosh BR (2015) Comparing apples and oranges: superimposed twitch vs. a control twitch in estimating voluntary activation. American College of Sports Medicine Annual Meeting, San Diego, CA, May 26-30. Poster Presentation.

257. Power GA, Crooks S, Fletcher JR, MacIntosh BR, Herzog W (2015) Age-related reductions in the length and number of serial sarcomeres contribute to shortened fascicle lengths: A source of elevated passive tension in the elderly? 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

258. Powers K, Nishkawa K, Herzog W (2015) Advancement towards a mechanism for force enhancement. Alberta Nano Research Symposium, Banff AB, Canada, May 28-31. Poster Presentation.

259. Powers KL, Nishkawa K, Herzog W (2015) Towards an understanding of the mechanisms underlying force enhancement. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

260. Riek P, MacDonald G, Herzog W (2015) Metabolic effects of diet induced obesity. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Poster Presentation.

261. Rios JL, Tang C, Herzog W (2015) Individuals with knee osteoarthritis use different muscle activation patterns than healthy subjects during maximal isometric knee extensions. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

262. Rios JL, Boldt KR, Seerattan R, Herzog W (2015) Does high mileage running cause knee osteoarthritis in rats? 16th Annual Alberta Biomedical Engineering Graduate Conference, Banff, AB, Nov 6-8. Podium Presentation

263. Seiberl W, Power GA, Herzog W, Hahn D. Residual force enhancement contributes to increased performance in fast stretch-shortening cycles of human skeletal muscles. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

264. Seiberl W, Power GA, Herzog W, Hahn D (2015) Der Dehnungs-Verkürzungs-Zyklus: alte Mechanismen neu aktiviert. Tagung der DVS Sektion Biomechanik: Active Health: Bewegung ist gesund, March 26-28, Berlin, Germany. Podium Presentation.

265. Smith IC, Herzog W (2015) The effects of titin degradation on passive stiffness properties of skinned rabbit psoas fibers during osmotic compression. 59th Annual Meeting of the Biophysical Society, Baltimore, MD, Feb 7-11. Poster Presentation.

266. Smith IC, Power GA, Fortuna R, Herzog W (2015) Shortening-induced force depression in human adductor pollicis during fatigue. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Poster Presentation.

267. Waters-Banker C, Sawatzky A, Jinha A, Leonard T, Herzog W (2015) Characterization of functional changes in the aponeuroses of the rabbit medial gastrocnemius during contraction in-situ. 25th Congress of the International Society of Biomechanics, Glasgow, UK, July 12-16. Podium Presentation.

268. Zhang T, Fortuna R, Herzog W (2015) Distal and proximal fascicle length changes in active and passive human gastrocnemius muscle. 16th Annual Alberta Biomedical Engineering Conference, Banff, AB, Nov 6-8. Podium Presentation.

269. Abughazaleh N, Abusara Z, Krawetz R, Herzog W (2014) The influence of maximal and submaximal cyclic concentric and eccentric exercise. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

270. Abusara Z, Herzog W (2014) Cartilage biomechanics: what really happens inside a joint? 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

271. Al-Saffar Y, Murphy B, Herzog W (2014) Deformation patterns of cracked articular cartilage under compression. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

272. Boldt K, Joumaa V, Herzog W (2014) Contractile properties of cardiac muscle following increasing doses of chronic exercise training and overtraining in rats: MSc research proposal. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 74. Poster Presentation.

273. Boldt K, Killick A, Herzog W (2014) Metabolic efficiency in four-legged locomotion-respiration coupling. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

274. Collins K, Reimer R, Herzog W (2014) Body fat explains contralateral limb osteoarthritis damage in obese rats. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

275. Crooks S, Power GA, Herzog W (2014) Muscle fascicle length is reduced in old age owing to shorter sarcomeres and serial sarcomere loss. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 60. Poster Presentation.

276. Dholakia C, Waters-Banker C, Power GA, Herzog W (2014) Is fast food speeding up the aging process? Comparing the skeletal muscle inflammatory environment in diet induced obesity model and aging model. Bachelor of Health Sciences Research Symposium, October 2, Calgary, AB. Poster Presentation.

277. DuVall MM, Jinha A, Leonhard TR, Herzog W (2014) Titin-actin-myosin interaction observed in labeled skeletal myofibrils. 43rd European Muscle Conference, Salzburg, Austria, Sep 10-14. Poster Presentation.

278. DuVall MM, Jinha A, Leonhard TR, Herzog W (2014) Titin-actin-myosin interaction observed in labeled skeletal myofibrils. Molecular Insight into Muscle Function and protein Aggregate Myopathies, Potsdam, Germany, Jun 6. Poster Presentation.

279. Engel M, Leonard TR, Herzog W (2014) Muscle morphology of the spastic muscle. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 83. Poster Presentation.

280. Fick JM, Bartczak A, Herzog W, Korhonen R (2014) Does a partial lateral meniscectomy of the anterior horn create early changes in cell biomechanics? A preliminary study in the mature rabbit knee joint. 60th Annual Meeting of the Orthopaedic Research Society, New Orleans, AL, Mar 15-18. Poster Presentation.

281. Fontana H, Roesler H, Herzog W (2014) In-vivo vastus lateralis force-velocity relationship at the fascicle and muscle tendon unit level. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

282. Fortuna R, Sawatsky A, Vaz MA, Herzog W (2014) Persistent muscle weakness and contractile material loss in a clinically relevant Botulinum toxin type-A (BTX-A) injection pool. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 35. Podium Presentation.

283. Fortuna R, Sawatsky A, Vaz MA, Herzog W (2014) Persistent quadriceps femoris atrophy and weakness six months following a single botulinum toxin type-A injection in a rabbit model. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

284. Han S-K, Turunen S, Madden R, Korhonen R, Herzog W (2014) In situ pericellular deformations during mechanical compression of cartilage at 4 weeks following ACL transection. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

285. Herzog JA, Leonard TR, Jinha A, Herzog W (2014) Titin visco-elasticity modulated by limiting Ig domain unfolding/refolding. Biophysical Society Meeting, San Francisco, USA, Feb 15-19. Poster Presentation.

286. Herzog J, Leonard TR, Jinha A, Herzog W (2014) Titin visco-elastic properties differ between isolated protein and in situ sarcomere preparations. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

287. Herzog J, Leonard TR, Jinha A, Herzog W (2014) Is skeletal muscle titin an activable molecular spring? The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 45. Podium Presentation.

288. Herzog W (2014) The distribution problem in biomechanics and movement control. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

289. Herzog W (2014) A new model of muscle contraction. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

290. Herzog W, Symons B (2014) The biomechanics of cervical spinal manipulation: risk of stroke? 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

291. Hisey B, Herzog W (2014) Hierarchical difference in active and passive force production at long lengths in skeletal muscls. CSCI-CITAC Annual Scientific Meeting, November 24-26, Toronto, ON. Poster Presentation.

292. Hisey B, Herzog W (2014) The effect of passive properties on skeletal muscle failure. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

293. Johnston KR, Jinha A, Herzog W (2015) The role of sarcomere length non-uniformities in residual force enhancement. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 85. Poster Presentation.

294. Johnston K, Jinha A, Herzog W (2014) An examination of sarcomere length non-uniformities in actively stretched muscle myofibrils. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

295. Jones AA, Power GA, Herzog W (2014) History dependence of EMG: implications for isometric steady-state EMG parameters following a lengthening or shortening contraction. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 40. Podium Presentation.

296. Jones AA, Power GA, Herzog W (2014) History dependence of EMG: does a prior shortening or lengthening contraction influence steady-state isometric EMG parameters? Proceedings of the Exercise Physiologists of Western Canada Conference, Kelowna, BC, July 16-18. Podium Presentation.

297. Joumaa V, Herzog W (2014) Changes in calcium sensitivity after active stretch: role of titin and lattice spacing. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

298. Kaiser K, Leonard TR, Logan K, Orlik R, El-Hawary J, Howard J, Herzog W (2014) Increased sarcomere length is associated with decreased range of motion in Cerebral Palsy. 7th World Congress of Biomechanics. Podium Presentation.

299. Killick A, Herzog W (2014) Metabolic and mechanical properties of the skate skiing techniques. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

300. Kuznetsova S, Villemure I, Abusara Z, Moo E, Al-Saffar Y, Herzog W (2014) In situ chondrocyte mechanics following static and dynamic compressive stresses. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 75. Poster Presentation.

301. Leonard TR, Kaiser K, Herzog J, Logan K, Orlik R, El-Hawary J, Howard J, Herzog W (2014) Passive forces in single myofibrils from children with Cerebral Palsy. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

302. Makela J, Herzog W, Korhonen R (2014) Collagen content is increased in lapine femoral condyle cartilage four weeks after anterior cruciate ligament transection. 60th Annual Meeting of the Orthopaedic Research Society, New Orleans. Poster Presentation.

303. Moo E, Han S-K, Federico S, Sibole S, Jinha A, Osman NAA, Pingguan-Murphy B, Herzog W (2014) Extracellular matrix integrity affects the mechanical behavior of in-situ chondrocytes under compression. 7th World Congress of Biomechanics, Boston, MA, July 7-11. Poster Presentation.

304. Power GA, Joumaa V, Hisey B, Caicedo A, Stutz J, Herzog W (2014) The effect of MHC isoform expression on the history-dependence of force production. 43rd European Muscle Conference, Salzburg, Austria, September 10-14. Poster Presentation.

305. Power GA, Joumaa V, Hisey B, Herzog W (2014) History-dependence of force production: The effect of MHC isoform expression on transient and steady-state aspects. Canadian Society for Exercise Physiology, St. John's, NL, October 22-25. Podium Presentation.

306. Power GA, Makrakos DP, Stevens DE, Herzog J, Rice CL, Vandervoort AA (2014) Shortening induced torque depression in old age: implications for power loss in the elderly? 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

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308. Powers KL, Jinha A, Leonard TR, Herzog W (2014) An enhanced role for titin in actively stretched skeletal muscle. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Podium Presentation.

309. Powers KL, Schappacher-Tilp G, Jinha A, Leonard TR, Herzog W (2014) Force enhancement; a titin achievement in skeletal muscle. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 21. Podium Presentation.

310. Sibole S, Herzog W (2014) How important is the smooth transition of pericellular matrix properties to the chondrocyte microenvironment? A multiscale finite element study of healthy and osteoarthritic cases. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

311. Sibole S, Jinha A, Federico S, Herzog W (2014) Getting more from image data: pyCellAnalyst, a 3-D image reconstruction and deformation analysis tool. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 50. Podium Presentation.

312. Wang V, Kaiser K, Herzog W (2014) Embryonic mysosin heavy chain expression in skeletal muscle as a marker of recovery after electrical stimulation damage. The 15th Annual Alberta Biomedical Engineering Conference, October 24-26, Banff, AB pg(s) 94. Poster Presentation.

313. Wu JZ, Herzog W, Federico S (2014) Finite Element implementation of a model for finite deformable, biphasic biological tissues with transversely isotropic statistically distributed fibers. 7th World Congress of Biomechanics, Boston, MA, July 6-11. Poster Presentation.

314. Abughazaleh N, Abusara Z, Roman K, Herzog W (2013) Changes in synovial fluid proteins and prg4 following intense muscular loading of the knee. American Society of Biomechanics Conference, Omaha, NE, September 4-7. Podium Presentation.

315. Abusara Z, Krawetz R, Steele B, DuVall M, Schmidt TA, Herzog W (2013) Changes in protein concentration in murine knee joints with muscular contraction. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9, pg(s) 133. Podium Presentation.

316. Arslan Y, Kaya M, Jinha A, Herzog W (2013) Static optimization solution to the force sharing problem. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 104. Podium Presentation.

317. Cantergi D, Loss J.F., Jinha A, Brodt G.A., Herzog W (2013) Variability of muscle contributions to leg extensions performed on the reformer apparatus. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 159. Poster Presentation.

318. Collins K, Reimer R, Herzog W (2013) Acute kinematic and kinetic changes in rats after diet induced obesity and ACL-X. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 49. Podium Presentation.

319. Crooks S, Nair A, Sawatsky A, Leonard TR, Herzog W (2013) Serial sarcomere loss in rabbit triceps surae muscles following a five hour electrical stimulation protocol. 14th Annual Alberta Biomedical Engineering Conference, Banff, AB, October 25-27. Poster Presentation.

320. Cunha SA, Fortuna R, Jinha A, Herzog W (2013) Mathematical model to optimize goalkeepers' jumping. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9, 2013 pg(s) 124. Podium Presentation.

321. DuVall M, Jinha A, Leonard TR, Herzog W (2013) Comparative stress production of native and quantum dot labeled rabbit psoas muscle myofibrils. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9, 2013 pg(s) 134. Podium Presentation.

322. Federico S, Grillo A, Herzog W (2013) Transversely isotropic composites with statistically oriented inclusions. SES 50th Annual Technical Meeting and ASME-AMD Annual Summer Meeting, Providence, RI, July 28-31. Podium Presentation.

323. Fontana H, Herzog W, Roesler H (2013) Ground reaction forces during stationary running in water and on land: effect of immersion, movement cadence and body density. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 145. Poster Presentation.

324. Han S-K, Madden R, Herzog W (2013) Pericellular matrix deformations in situ under mechanical compression. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 132. Podium Presentation.

325. Herzog J, Leonard TR, Jinha A, Herzog W (2013) Modulation of titin elasticity in working muscle to minimize energy loss in passive stretch-shorting cycles. American Society of Biomechanics Conference, Omaha, Nebraska September 4-7 2013.

326. Herzog W, Killick A (2013) Functional muscle mechanics in sports: why we should care. International Society of Biomechanics in Sports, Taipei, Taiwan. July 7-11. Podium Presentation.

327. Hisey B, Herzog W (2013) Differences between active and passive failure in whole skeletal muscle. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 138. Podium Presentation.

328. Horisberger M, Fortuna R, Valderrabano V, Herzog W (2013) Long-term cyclic muscle induced submaximal joint loading leads to cartilage degeneration in an in-vivo model. Proceedings of the 2013 Orthopaedic Research Society Annual Meeting, San Antonio, TX, January 26-29 pg(s) 85. Poster Presentation.

329. Killick A, Herzog W (2013) Impulse contribution from each limb in skate cross-country skiing. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9, 2013 pg(s) 152. Poster Presentation.

330. Leonard TR, Herzog J, Jinha A, Herzog W (2013) Myofibril (and titin) kinetics during passive stretch-shortening cycles. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 133. Podium Presentation.

331. Madden R, Herzog W (2013) The effect of loading magnitude on calcium signaling in articular cartilage chondrocytes. Proceedings of the 2013 Orthopaedic Research Society Annual Meeting, San Antonio, TX, January 26-29 pg(s) 128. Poster Presentation.

332. Madden R, Herzog W (2013) The effect of loading magnitude on chondrocyte calcius signaling in situ. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 137. Podium Presentation.

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334. Moo E, Amrein M, DuVall M, Abu Osman N.A, Pingguan-Murphy B, Herzog W (2013) Strain rate dependence of cell membrane reservoir is key to impact-induced chondrocyte death. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 136. Podium Presentation.

335. Moo E, Amrein W, Osman NAA, Murphy B, Herzog W (2013) Chondrocyte membrane mechanics at different loading rates. Proceedings of the 2013 Orthopaedic Research Society Annual Meeting, San Antonio, TX, January 26-29 pg(s) 88. Poster Presentation.

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337. Moo E, Han S-K, Jinha A, Abusara Z, Federico S, Osman NAA, Murphy B, Herzog W (2013) Mechanics of in-situ chondrocytes near cartilage lesions: experimental and finite element study. Proceedings of the 2013 Orthopaedic Research Society Annual Meeting, San Antonio, TX, January 26-29 pg(s) 89. Poster Presentation.

338. Powers KL, Herzog W (2013) Active force beyond filament overlap: a titin achievement in skeletal muscle. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 135. Podium Presentation.

339. Tang C, Wuest S, Robert J, Herzog W (2013) A prospective study evaluating the effects of manual therapy on the treatment of anterior knee pain. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 64.

340. Von Kossel M, Herzog W (2013) Vastus lateralis fascicle length isometricity at different knee extensor torques and angles. XXIV Congress of the International Society of Biomechanics, Natal, Brazil, August 4-9 pg(s) 209. Poster Presentation.

341. Abusara Z, Herzog W (2012) Cells within joints release proteins into the synovial fluid during controlled muscular exercise. 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Podium Presentation.

342. Abusara Z, Steele B, Schmidt TA, Herzog W (2012) Muscular loading of joints and its effect on synovial fluid composition. Proceedings of the 58th Annual Meeting of the Orthopaedic Research Society, San Francisco, CA, February 4-7. Poster Presentation.

343. Arslan Y, Kaya M, Herzog W (2012) Evaluation of muscle force predictions using optimization theory. International Conference on Mathematical Modeling in Physical Sciences, September 3-7, Budapest, Hungary 410. Podium Presentation.

344. Collins K, Reimer R, Herzog W (2012) Does metabolically-induced obesity affect the severity of Knee Osteoarthritis? 13th Annual Alberta Biomedical Engineering Conference, Banff, AB, October 19-21. Poster Presentation.

345. Crooks S, Killick A, Herzog W (2012) Oxygen uptake in one and two skate cross country skiing at increasing grades. 13th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 19-21. Poster Presentation.

346. DuVall M, Herzog W (2012) Proposed investigation into titin's elastic behavior during active stretch (muscle). 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Poster Presentation.

347. DuVall M, Jinha A, Leonard TR, Herzog W (2012) Z-line elongation observed in titin labeled myofibrils. Proceedings of the Biophysical Society 56th Annual Meeting, San Diego, CA, February 25-29. Poster Presentation.

348. Fortuna R, Herzog W (2012) Do skeletal muscle properties recover following botulinum toxin type A treatment? ISEK 2012 Biennial Congress, Brisbane, Australia, July 19-21. Poster Presentation.

349. Fortuna R, Horisberger M, Herzog W (2012) Do skeletal muscle properties recover following repeat botulinum toxin type A injections? AACPCM 2012 Annual Meeting, Toronto, ON, September 12-15. Poster Presentation.

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357. Herzog W, Leonard TR, DuVall M, Herzog J (2012) Force enhancement in skeletal muscles: a role for titin? Proceedings of the 8th European Solid Mechanics Conference, July 9-13, Graz, Austria. Podium Presentation.

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360. Killick A, Herzog W (2012) Metabolically optimal gait transitions in cross-country skate skiing. 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Podium Presentation.

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362. Leonard TR, Herzog W (2012) Skeletal muscle myofibril force production during lengthening. 8th European Solid Mechanics Conference, Graz, Austria, July 9-13 pg(s) 103. Podium Presentation.

363. Madden R, Han S-K, Herzog W (2012) Chondrocyte deformation under extreme tissue strains. Proceedings of the Biophysical Society 56th Annual Meeting, San Diego, CA, February 25-29. Poster Presentation.

364. Madden R, Herzog W (2012) Effect of loading magnitude on calcium signaling in articular cartilage chondrocytes. 13th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 19-21. Poster Presentation.

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366. Mohammadi H, Herzog W (2012) A nonlinear finite element model for the evaluation of instabilities in atherosclerotic plaques (modeling). 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Poster Presentation.

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373. Sawatsky A, Herzog W (2012) The effect of knee extension force on patellofemoral tracking (rehabilitation). 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Poster Presentation.

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376. Tang C, Herzog W, Wuest S (2012) A prospective study evaluating the effects of mrt on the treatment of patellofemoral pain syndrome (rehabilitation). 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Poster Presentation.

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378. Turunen S, Han S-K, Herzog W, Korhonen R (2012) Changes in collagen orientation and proteoglycan content four weeks after anterior cruciate ligament transection modulate cell morphology in mechanically loaded rabbit cartilage. Proceedings of the 2012 Annual Meeting of the Orthopaedic Research Society, San Francisco, California, Feb 4-7, 2012. Poster Presentation.

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380. Wang V, Yamamoto M, Leonard TR, Herzog W (2012) Effect of intermittent passive stretching on serial sarcomere loss caused by electrical stimulation in rabbit triceps surae muscles. 13th Annual Alberta Biomedical Engineering Conference, Banff, AB, Oct 19-21. Poster Presentation.

381. Yamamoto M, Leonard TR, Herzog W (2012) Rapid serial sarcomere loss caused by electrical stimulation in rabbit triceps surae muscles. 2012 Canadian Society for Biomechanics, June 6-9, Vancouver, BC. Podium Presentation.

382. Abusara Z, Herzog W (2011) Dynamic chondrocyte behavior during in vivo muscle loading in the intact mouse knee joint. Proceedings of the XXIIIrd International Society of Biomechanics, Brussels, July 1 - 8 pg(s) 13. Poster Presentation.

383. Abusara Z, Herzog W (2011) In vivo dynamic chondrocyte mechanics for physiological joint loading conditions. Proceedings of the 2011 Annual Meeting of the Orthopaedic Research Society, Long Beach, California, January 13-16, 2011 pg(s) 57. Podium Presentation.

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388. Han S-K, Madden R, Abusara Z, Herzog W (2011) The viscoelasticity of chondrocytes in situ. Proceedings of the 35th Annual Meeting of the American Society of Biomechanics, Long Beach, CA, August 10-13. Poster Presentation.

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399. Matthiasdottir S, Hahn M, Yaraskavitch M, Herzog W (2011) Muscle and fascicle excursions in children with cerebral palsy. Proceedings of the 12th Annual Alberta Biomedical Engineering Conference, Banff, AB, Canada, October 21-23. Podium Presentation.

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