



- Sport Performance, Sport Injury, Strength & Conditioning
- Athlete Health & Performance
- Neuromuscular Adaptations to Resistance Training Across the Lifespan

mjordan@ucalgary.ca

DR. MATT JORDAN, PhD, CSCS

ACADEMIC CREDENTIALS

PhD, Department of Medical Science (Specialization in Joint Injury and Arthritis), University of Calgary (Additional Course Work Done at the University of Southern Denmark, Odense Denmark)

Master of Science in Exercise and Muscle Physiology, Faculty of Kinesiology, University of Calgary

Bachelor of Kinesiology, Faculty of Kinesiology, University of Calgary

EXECUTIVE LEADERSHIP AND BUSINESS TRAINING

Executive Sport Science Leadership and Mentorship Certificate, Royal Roads University, Victoria, British Columbia

UNIVERSITY FACULTY APPOINTMENTS AND ACTIVITIES

2021-Present	Assistant Professor, Faculty of Kinesiology, Sport Medicine Centre, University of Calgary, Calgary, Canada
2024-Present	Adjunct Assistant Professor, School of Kinesiology, Acadia University, Nova Scotia
2022-Present	Principal Investigator, Muscle Strength & Power – Integrative Neuromuscular Sport Performance Lab, Faculty of Kinesiology, University of Calgary, Calgary, Canada
2020-2024	Adjunct Professor, School of Medical and Health Science, Edith Cowan University, Perth, Australia

KINESIOLOGY COURSE DEVELOPMENT

2024	Advanced Concepts in the Neuromechanics of Human Muscle Strength and Power, University Federal of Santa Catarina, Florianopolis, Brazil
2023-Present	KNES 785, Training Strategies for Health and Performance, Faculty of Kinesiology, University of Calgary
2018-Present	KNES 478, Neuromuscular Adaptations to Resistance Training: Health, Injury Prevention and Performance (Strength Training Science), Faculty of Kinesiology, University of Calgary. (Student Union Teach Award Nomination, Fall 2023)
2009-2012	KNES 203, Physical Activity: Health, Fitness and Performance, Faculty of Kinesiology, University of Calgary. (Student Union Teach Award Recipient, Winter 2010)

EDUCATIONAL LEADERSHIP

Critical Reflection Learning Module, Taylor Institute for Teaching and Learning, University of Calgary:

<https://taylorinstitute.ucalgary.ca/resources/module/critical-reflection>

Developing Your Teaching Dossier, Taylor Institute for Teaching and Learning, University of Calgary:

<https://taylorinstitute.ucalgary.ca/resources/module/developing-your-teaching-dossier>

Blended Learning Module, Taylor Institute for Teaching and Learning, University of Calgary:

<https://taylorinstitute.ucalgary.ca/resources/module/blended-learning>

Designing Student Assessment Learning Module, Taylor Institute for Teaching and Learning, University of Calgary:

<https://taylorinstitute.ucalgary.ca/resources/module/designing-student-assessments>

RELEVANT PROFESSIONAL ACTIVITIES

2024-Present	Committee Member, National Basketball Association Biomechanics Program Implementation Committee
2020-Present	Consultant and Advisor, National Hockey League, New York, New York – Advisor to NHL Legal Council on Physical Fitness Testing
2017-Present	Scientific Advisor, Plantiga Technologies, Vancouver, British Columbia
2017-2023	Scientific Advisor, Noraxon, Phoenix, Arizona
2021-2022	Sport Science Consultant, Canadian Sport Institute Calgary, Calgary, Alberta
2014-2022	Director, Sport Science, Canadian Sport Institute Calgary
2017-2021	Adjunct Assistant Professor, Faculty of Kinesiology, University of Calgary
2014-2019	Director, Sport Science-Sport Medicine, Alpine Canada
2010-2014	Head of Sport Science/Strength & Conditioning, Canadian Alpine Ski Team (Women's Program)
2000-2014	Strength & Conditioning Coach/Sport Physiologist, Canadian Sport Institute Calgary

MEMBERSHIPS

2024-Present	Full Member, Alberta Children's Hospital Research Institute, University of Calgary
2021-Present	Full Member, McCaig Institute for Bone and Joint Health, University of Calgary
2020-Present	Full Member, Sport Injury Prevention Research Centre, Faculty of Kinesiology, University of Calgary
2020-Present	Professional Member, Sport Scientist Canada
2012-Present	Canadian Society of Biomechanics
2012-Present	European College of Sport Science (ECSS)
1999-Present	Certified Strength & Conditioning Specialist (CSCS), National Strength and Conditioning Association

LEADERSHIP ACTIVITIES AND CONFERENCE ORGANIZATION

2025-07-13	Scientific Symposium Organizer Co-Chair. 2025 Elite Basketball Rehab Conference. Las Vegas, NV.
2025-04-17	From Data to Discovery – Machine Learning and Analytics in Sport Science and Sport Medicine, University of Calgary, Canada
2025-04-17	Dinos Athlete Sport Science Integrated Support Team (ASSIST) Workshop. University of Calgary, Canada
2024-07-13	Scientific Symposium Organizer Co-Chair. 2024 Elite Basketball Rehab Conference. Las Vegas, NV.
2024-04-12	Dinos Athlete Sport Science Integrated Support Team (ASSIST) Workshop. University of Calgary, Canada
2021-Present	Conjoint Health Research Ethics Board Committee Member, University of Calgary, Canada
2019-2022	National Return to Health & Performance Task Force, Calgary, Canada
2018-2021	Scientific Board of Directors, ALTIS Living Lab, Phoenix, Arizona
2020	Conference Co-Organizer, Sport Innovation Summit, Calgary, Canada

2019-2020	Scientific Board of Directors, National Academy of Sports Medicine, Phoenix, Arizona
2016-2017	Board of Directors, OPEX Fitness, Phoenix, Arizona
2015	Conference Organizer, Canadian Applied Strength & Power Summit, Calgary, Canada
2010-2015	National Sport Science Sport Medicine Advisory Council, Own the Podium, Ottawa, Ontario

HONOURS, AWARDS AND RECOGNITIONS

2024	Student's Union Teaching Award Nominee, University of Calgary, Fall 2024
2022	Student's Union Teaching Award Nominee, University of Calgary, Fall 2022
2015	Scientific Investigator Award, 2015 Sport Innovation Summit, Toronto, Ontario
2010	Student's Union Teaching Award, University of Calgary, Winter 2010

CURRENT ACTIVE OR PENDING RESEARCH GRANTS

2025-Present	MITACS Accelerate. Characterizing the Multijoint Force-Velocity Relationship: A Comparison of Velocity-load, Velocity-relative load, and Force-velocity Approaches. (Primary Investigator, Under Review, \$20,000 CAD).
2025-Present	Canadian Institutes for Health Research Project Grant. Strength training for osteoporosis prevention during early menopause. (Co-Applicant, Under Review, \$1,245,000 CAD, PI: L Gabel).
2025-Present	Joan Snyder Research Award. EmpowerHer: Reducing the Impact of Traumatic Knee Injuries in Girls and Women Through Prevention, Early Treatment, and Improved Rehabilitation. (Primary Investigator, Awarded, \$60,000 CAD)
2025-Present	Natural Sciences and Engineering Research Council Discovery Grant. Neuromuscular Mechanisms of Multi-Joint Eccentric Rapid Muscle Force Capacity and the Contribution to Stretch Shorten Cycle Function in Humans across the Lifespan. (Primary Investigator, Awarded, \$195,000 CAD)
2024-Present	SPARC McCaig Institute Research Award, Evaluation of Postoperative Hypercoagulability and Increased Blood Clotting Risk in Patients with Surgically Repaired Knee Injuries. (Co-Investigator, Awarded, \$20000 CAD)
2024-Present	SPARC McCaig Institute Research Award, Building Blocks for Pediatric Knee Health: A Catalyst for Specialized Care. (Primary Investigator, Awarded, \$20000 CAD)
2024-Present	MITACS Global Link Research Award, Return to Sport Monitoring after ACL Injury in Canadian Collegiate U-Sport Athletes. (Primary Investigator, Awarded, \$6000 CAD)
2024-Present	UCalgary Vice President Research Catalyst Grant, Building Blocks for Pediatric Knee Health: A Catalyst for Specialized Care. (Primary Investigator, Awarded, \$12750 CAD)
2024-Present	Australian Institute of Sport Research Grant. Assessing movement variability with non-linear measures to inform better RTP outcomes. (Co-Investigator, Awarded, \$117294 AUD)
2023-Present	UCalgary Vice President Research Catalyst Grant, Preventing Anterior Cruciate Ligament Injuries in Female Team Sports through In-depth Biomechanical Analyses and Tailored Exercises – Towards a Meaningful and Effective ACL Injury Prevention Approach in Female Athletes. (Co-Investigator, Awarded, \$10,000 CAD)

- 2023-Present Canada Foundation for Innovation – 2023 Innovation Fund – **University of Calgary Concussion Research Centre (UC-CRC)**. PIs: CA Emery, K Yeates, total \$3,630,746 (40%) Pending Alberta Government matching TBC (40%) and other matching (20%) (embargoed) (Co-Investigator, Awarded)
- 2023-Present International Olympic Committee. **Sport Injury Prevention Research Centre-A Centre for Research in Injury Prevention in Sport**. (January 2023-December 2027) CA Emery (PI), total \$320,000 USD (Co-Investigator, Awarded)
- 2023-2024 Canadian Chiropractic Research Foundation. **Fast Stretch Shorten Cycle Regulation in ACL Injured and Non-Injured Athletes** (Primary Investigator, Awarded, \$8000 CAD)
- 2023-2024 UCalgary Transdisciplinary Scholarship Initiating Connector Grant. **Longitudinal Analysis of Risk Factors for ACL Reinjury**, University of Calgary. (Primary Investigator, Awarded, \$8,500 CAD)
- 2023-Present MITACS Accelerate, **The Influence of Compression Garments on Running Biomechanics and Soft Tissue Vibrations in Female Athletes**, Sport Product Testing, Canadian Sport Institute Calgary, Calgary, Canada (Primary Investigator, Awarded, \$60,000 CAD)
- 2023-2024 UCalgary Vice President Research Catalyst Grant, **Longitudinal Analysis of Predictors of Traumatic Knee Injury in Athletes**, Faculty of Kinesiology, University of Calgary, Calgary, Canada (Primary Investigator, Awarded, \$15,000 CAD)
- 2022-Present UCalgary Start Something Dinos Excellence Research Award, **Longitudinal Analysis of Predictors of Traumatic Knee Injury in Canadian U-Sport Athletes**, University of Calgary, Calgary, Canada (Primary Investigator, Awarded, \$88,000 CAD)
- 2020-2022 Canadian Sport Institute Calgary Research Scholarship, **Multi-Planar Force Velocity Jump Profiles in Long Track Speed Skaters**, Calgary, Canada (Primary Investigator, Awarded, \$40,000 CAD)
- 2019-2021 Canadian Sport Institute Calgary Research Scholarship, **Evaluation of Lower Body Strength and Landing Strategy of Elite Athletes After Anterior Cruciate Ligament Reconstruction with Hamstring Autograft**, Calgary, Canada (Primary Investigator, Awarded, \$40,000 CAD)
- 2018-2020 Own the Podium Research Scholarship, **Neuromuscular Deficits Following Anterior Cruciate Ligament Reconstruction with Hamstring Autograft: Implications for Rehabilitation and Return to Sport Testing**, Calgary, Canada (Primary Investigator, Awarded, \$40,000 CAD)
- 2020-2021 MITACS Accelerate, **Performance-based Sport Concussion and Traumatic Lower Body Injury Prevention Program**, Canadian Sport Institute Calgary/University of Calgary, Calgary, Canada (Co-Investigator, Awarded)
- 2020-2023 MITACS Accelerate, **Optimizing Return to Sport and Return to Performance After Knee Injuries in Winter Slope Sports: Evidence-Based Timelines for Return to Sport and Return to Performance**, Canadian Sport Institute Calgary/University of Calgary, Calgary, Canada (Primary Investigator, Awarded, \$45,000 CAD)
- 2012-2016 Own the Podium, A Framework for ACL Injury/Reinjury Prevention in Alpine Ski Racing, (Principal Applicant, Awarded, \$58,000 CAD)
- 2012-2020 **Total Research and Scholarship Funding Received as Doctoral Student and in Industry = \$346,720**
Highlights of Doctoral Awards: Killam Doctoral Scholarship, Alberta Innovates Health Solutions Doctoral Scholarship, University of Calgary Eyes High Scholarship

EDITORIAL SERVICES

- 2025-Present Editorial Board, Professional Journal of Strength & Conditioning
- 2024-Present Reviewer, Journal of Strength & Conditioning Research
- 2021-Present Review Editor for Elite Sports and Performance Enhancement, Frontiers in Sports and Active Living
- 2018-Present Review Editor for Biomechanics and Control of Human Movement, Frontiers in Sports and Active Living

RESEARCH COLLABORATIONS

- 2023-Present Edith Cowan University, Australian Institute of Sport, Perth Australia
- 2022-Present International Ski Federation, ISPASS Consensus on Return to Sport Working Group
- 2021-2023 Relationship Between Neuromuscular Testing and Psychological Readiness in Collegiate Athletes, McMaster University, Hamilton, Ontario, Canada
- 2019-2023 Application of Statistical Parametric Mapping for Vertical Jump Force-Time Analysis after ACL Injury, University of Pretoria, South Africa
- 2020-2023 Application of Vertical Jump Interlimb Force-Time Asymmetries for Baseline Testing, United States Olympic Performance Centre, Colorado Springs, Colorado
- 2019-2021 Effects of Collagen and Vitamin C on Collagen Synthesis and Performance, University of California Davis, San Francisco, California (PI: Dr. Keith Baar)
- 2018-Present Concussion Harmonization IMpLeMentation in Canada, Sport Injury Prevention Research Centre, University of Calgary, Calgary, Canada (PI: Dr. Kathryn Schneider)
- 2018-Present Training Load and Injury Prevention in Youth Soccer, Sport Injury Prevention Research Centre, University of Calgary, Calgary, Canada (PI: Dr. Kati Pasanen)
- 2017-2019 Surveillance in High Schools to Reduce Injuries (SHRED) Research Team, Sport Injury Prevention Research Centre, University of Calgary, Calgary, Canada (PI: Dr. Carolyn Emery)
- 2017-Present IOC Research Centres for Prevention of Injury and Protection of Athlete Health, Sport Injury Prevention Research Centre, University of Calgary, Calgary, Canada (PI: Dr. Carolyn Emery)
- 2017-Present Department of Exercise and Sports Science, School of Medicine and Health Sciences, Edith Cowan University, Perth, Australia
- 2017-2019 National Basketball Association and General Electric Youth Injury Prevention Project, Sport Injury Prevention Research Centre, University of Calgary, Calgary, Canada (PI: Dr. Carolyn Emery)
- 2012-Present Human Performance Laboratory, Dr. Walter Herzog Biomechanics Laboratory, University of Calgary, Calgary, Canada

PUBLISHED BOOK CHAPTERS

Matthew Jordan, Dustin Nabhan. 2026. "Injury Prediction, Functional Testing, and Return-to-Play Assessment: What Can We Learn from Sherlock Holmes?" In *Sustainable Athleticism and Healthy Longevity*, edited by Craig Liebenson and Nicole Rodriguez, 2nd ed., Chapter 27. Wolters Kluwer: In Press

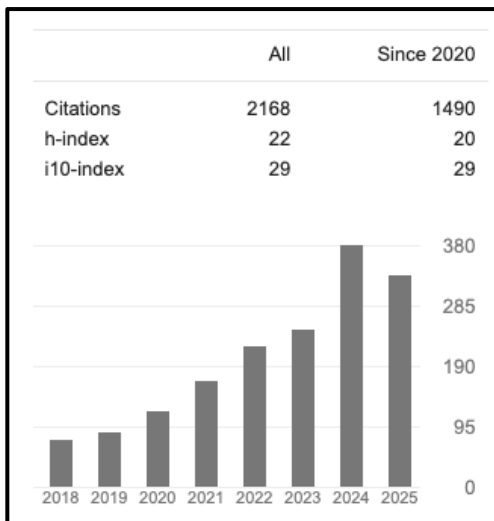
Matthew Jordan. “Strength & Conditioning for Alpine Ski Racing”. In: Handbook of Strength and Conditioning, edited by Chris Bishop and Athony Turner, 1st edition. London: Routledge: In Press

Matthew Jordan, Jörg Spörri, and Jim Taylor. 2023. “Injury Prevention and Rehabilitation”. In *The Science of Alpine Ski Racing*, edited by James Pritchard and Jim Taylor, 1st ed., 113–53. London: Routledge.
<https://doi.org/10.4324/9781003258773>.

Matthew Jordan. 2022. “Optimizing Movement Efficiency.” In *High-Performance Training for Sports*, edited by David Joyce and Daniel Lewindon, 2nd ed., 85–105. Champaign, IL: Human Kinetics.

Matthew Jordan. Resistance Training for Sport Performance. In: National Academy of Sports Medicine 2nd edition. (In Press).

GOOGLE SCHOLAR CITATIONS AS OF 2025-09-03



PEER REVIEWED PUBLICATIONS

1. McClean Z, da Silva Torres R, Herzog W, Pasanen K, Lun V, **Jordan M**. The influence of sport representation and attitudes towards strength training on neuromuscular performance profiles in university athletes: part I female athletes. *Journal of Strength & Conditioning Research*. 2025: **Accepted**
2. McClean Z, da Silva Torres R, Herzog W, Pasanen K, Lun V, **Jordan M**. The influence of sport representation and attitudes towards strength training on neuromuscular performance profiles in university athletes: part II male athletes. *Journal of Strength & Conditioning Research*. 2025: **Accepted**
3. Neil M, Galarneau J, Kolstad A, Cairns J, **Jordan M**, Smirl J, Emery, C. Age, power, and sport related concussion. Is there a tension between sport performance and concussion risk in football? *Journal of Sport Sciences*. 2025: <https://doi.org/1-9.10.1080/02640414.2025.2548710>
4. Oriol Bonell Monsonís, Evert Verhagen, Vincent Gouttebarger, Marine Alhammoud, Dave Collins, Lynn Ellenberger, Matthias Gilgien, **Matthew J Jordan**, Michael Lasshofer, Gerald Mitterbauer, Abi Okell, Kati Pasanen, Matej Supej, Caroline Bolling, Jörg Spörri. A risk management framework for competitive alpine skiing co-developed with stakeholders. *BMJ Open Sport & Exercise Medicine*. 2025: **Accepted**
5. Cairns J, Kolstad A, Galarneau J, van den Berg C, **Jordan M**, Schenider K, Pasanen K, Emery C. Down, Set, Record: Assessing neuromuscular training warm-up use in Canadian Adolescent Football. *International Journal of Sport Science & Coaching*. 2025: **Accepted**

6. McClean Z, MacDougall K, **Jordan M**, Danilo I, Aboordarda J, MacInnis M. Performance fatigability at task failure and beyond: distinct patterns of recovery following constant load versus intermittent cycling exercise. *International Journal of Exercise Science*. 2025: **Accepted**
7. Ajayi T, van Rassel C, **Jordan M**, MacInnis M. Non-linear heart rate variability is sensitive to exercise duration but not indicative of acute performance decrement. *European Journal of Applied Physiology*. 2025: Accepted
8. Afonso J, Virgile A, Peña J, **Jordan M**, Garcia-de-Alcaraz A, Sa M, Bishop C. On Uneven Ground: Embracing the Challenges of Inter-limb Asymmetries and Their Assessment. *Asymmetry*. 2025: <https://doi.org/10.55092/asymmetry20250004>
9. Di França C, **Jordan M**, Botha T, Bayne H. Countermovement Jump Kinetic Impairments in Elite Athletes Before and After ACL Injury: Force-Time Waveform Versus Discrete Kinetic Analysis. *Translational Sports Medicine*. 2025: **Accepted**: <https://doi.org/10.1155/tsm2/1176787>
10. Hagstorm A, Parsons J, **Jordan M**, S, Coen S, Nimphius S, Norton R It is time to improve our reporting of sex and gender in exercise science and sports medicine research. *British Journal of Sports Medicine*. 2025: <https://doi.org/10.1136/bjsports-2024-109342>
11. Xu J, Turner A, Comyns T, Chavda S, **Jordan M**, Bishop C. Acute Effects of Repeated Sprints on Performance Measures During the Countermovement Rebound Jump. *Journal of Strength & Conditioning Research*. 2025: <https://doi.org/10.1519/JSC.0000000000005102>.
12. McClean Z, McKenzie M, Zukowski M, Foley L, Pasanen K, Herzog W, Nabhan D, **Jordan M**. Predicting Multi-Joint Maximal Eccentric and Concentric Strength with Force Velocity Jump Mechanics in Collegiate Athletes. *International Journal of Sport Physiology and Performance*. 2025: <https://doi.org/10.1123/ijsp.2024-0439>
13. Xu J, Turner A, Comyns T, Chavda S, **Jordan M**, Bishop C. A narrative review of rebound jumping and fast stretch-shortening-cycle mechanics. *Strength and Conditioning Journal*. 2024: **Accepted**
14. Morris N, da Silva Torres R, Heard M, Doyle-Baker P, Herzog W, **Jordan M**. Return to on-snow performance in ski racing after anterior cruciate ligament reconstruction. *The American Journal of Sports Medicine*. 2025: 50(3): 640-648. <https://doi.org/10.1177/03635465241307212>.
15. McClean Z, Boon van Mossel N, McKenzie M, Aagaard P, Herzog W, Pasanen K, Lun V, **Jordan M**. Lower Extremity Asymmetry Values Derived from Multiple Strength Testing Modes are Associated with Perceived Functional Capabilities among University Athletes. *Translational Sports Medicine*. 2024: 1-9.
16. Kadlec D, **Jordan M**, Alderson J, Nimphius S. Examining the effects of dynamic and isometric resistance training on knee joint kinetics during unplanned sidesteps in elite female athletes. *Journal of Strength & Conditioning Research*. 2024: 1-9
17. Zukowski M, Herzog W, **Jordan M**. Velocity-load jump testing predicts acceleration performance in elite speed skaters: but does movement specificity matter? *International Journal of Sport Physiology and Performance*. 2024: 31(1): 1-8. DOI: <https://doi.org/10.1123/ijsp.2023-0373>
18. Keogh JA, Ruder, MC, White K, Momchil GG, Phillips SM, Heisz J, **Jordan MJ**, Kosbar D. Longitudinal monitoring of biomechanical and psychological state in collegiate female basketball athletes using principal component analysis. *Translational Sport Medicine*. 2024: 00(00): 1-14. DOI: <https://doi.org/10.1155/2024/7858835>
19. Thome M, **Jordan M**, Thorpe R, Nimphius S. Relationship between external training load and session rating of perceived exertion-training impulse in elite sprinters. *International Journal of Sports Physiology and Performance*. 2024: 00(00): 1-6. DOI: <https://doi.org/10.1123/ijsp.2023-0341>
20. McClean Z, Pasanen K, Herzog W, Werthner P, Lun V, **Jordan M**. Considerations along the training load, fatigability, and sport injury pathway in university sport: a bio-psycho-social sport injury etiology model. *Journal of Strength and Conditioning Research*. 2024: 38(6): 1177-1188. DOI: <https://doi.org/10.1519/JSC.0000000000004789>

21. Jiaqing X, **Jordan M**, Chavda S, Turner A, Bishop C. Test-retest reliability of the magnitude and direction of asymmetry in the countermovement jump, drop jump and countermovement rebound jump. *Symmetry*. 2023; 15(10):1-13.
22. **Jordan M**, Aagaard P, McClean Z, Morris N, Boon van Mossel N, Pasanen K, da Silva Torres R, Herzog W. Explosive strength and stretch-shortening-cycle capacity during ACL rehabilitation: mechanical biomarkers for return to sport and performance readiness. *Aspetar Medical Journal*. 2023;12: 324-331.
23. **Jordan M**, Bishop C. Testing Limb Symmetry and Asymmetry after Anterior Cruciate Ligament Injury Injury: 4 Considerations to Increase Its Utility. *Strength and Conditioning Journal*. 2023;00: 1-9.
<https://doi.org/10.1519/SSC.0000000000000821>
24. Alanen A, Gibson E, Critchley M, Benson L, **Jordan M**, Ferber R, Pasanen K. Differences in situational patterns during change of direction movements greater than 90° in youth male and female soccer players. *Journal of Human Kinetics*. 2023; 89:149-160. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10694721/pdf/JHK-89-169524.pdf>
25. Alanen A, Barons Z, **Jordan M**, Ferber R, Pasanen K. Between-day reliability of inertial measurement unit parameters during a soccer specific change of direction test. *International Journal of Sport Science and Coaching*. 2023; 00: 1-8. <https://journals.sagepub.com/doi/pdf/10.1177/17479541231196733>
26. Müller P, Taylor J, **Jordan M**, Scherr J, Verhagen E, Collins D, Spörri J. A call for the application of a biopsychosocial approach to the return-to-sport framework for snow sports athletes. *BMJ Open Sport & Exercise Medicine*. 2023; 9(3): 1-4.
27. Keogh J, Bishop C, **Jordan M**, Kobsar D. Monitoring Limb Asymmetry and Psychological Measures in Athletic Populations- A Scoping Review. *Scandinavian Journal of Medicine and Science in Sports*. 2023; 33(11): 2125-2148.
28. Zukowski M, Herzog W, **Jordan M**. Multi-Planar Jump Performance in Speed Skating Athletes: Interlimb Differences in an Asymmetrical Sport. *Symmetry*. 2023; 15(5): 1-11.
29. Alanen A, Benson L, **Jordan M**, Ferber R, Pasanen K. Effects of Game Specific Demands on Accelerations During Change of Direction Movements: Analysis of Youth Female Soccer. *Biomechanics*. 2023; 3: 250-257. <https://doi.org/10.3390/biomechanics3020021>
30. Zukowski M, Herzog W, **Jordan M**. Modeling the early and late acceleration phases of the sprint start in elite long track speed skaters. *Journal of Strength & Conditioning Research*. 2023;38(2): 236-244.
31. Thome M, **Jordan M**, Thorpe R, Nimphius S. Validity of global positioning system (GPS) technology to measure maximum velocity sprinting in elite sprinters. *Journal of Strength & Conditioning Research*. 2023;37(12): 2438-2442. <https://doi.org/10.1519/JSC.0000000000004567>
32. Alanen A, Bruce O, Benson L, Chin M, van den Berg C, **Jordan M**, Ferber R, Pasanen K. Capturing In-season Change of Direction Movement Pattern Change in Youth Soccer Players with Inertial Measurement Units. *Biomechanics*. 2023; 3:155-165.
33. Bishop C, Schrier I. **Jordan M**. Ratio data: understanding pitfalls and knowing when to standardize. *Symmetry*. 2023; 15(2): 318.
34. Petway A, **Jordan M**, Espley S, Anloauge P. Mechanisms of anterior cruciate ligament tears in professional National Basketball Association Players: a video analysis. *Journal of Applied Biomechanics*. 2023; 39(3): 143-150.
35. Bishop C, **Jordan M**, Torres-Ronda L, Loturco I, Harry J, Virgile A, Mundy P, Turner A, Comfort P. Selecting metrics that matter: comparing the use of the countermovement jump for performance profiling, neuromuscular fatigue monitoring, and injury rehabilitation testing. *Strength and Conditioning Journal*. 2023;45(5): 545-553
<https://doi.org/10.1519/SSC.0000000000000772>. (Top Cited Paper in 2024)

36. Zukowski M, Herzog W, **Jordan M**. Single Leg Lateral and Horizontal Loaded Jump Testing: Reliability and Correlation with Long Track Sprint Speed Skating Performance. *Journal of Strength & Conditioning Research*. 2023;37(11):2251-2259.
37. Senevirathan H, Edwards B, **Jordan M**, Ferber R. Differences in kinetic variables between injured and uninjured rearfoot runners: a hierarchical cluster analysis. *Scandinavian Journal Medicine and Science in Sports* 2023; 33(2): 160-168.
38. Petway A, **Jordan M**, Espley S, Anloauge P. Mechanisms of Achilles tendon rupture in professional National Basketball Association Players. *Journal of Applied Biomechanics*. 2022; 38(6): 398-403.
39. Miutz L, Emery C, Black A, **Jordan M**, Smirl J, Schneider K. The effect of physical exertional testing on post-concussion symptom scale scores in uninjured high school students. *Pediatric Exercise Science*. 2022; 35(2): 70-76.
40. **Jordan M**, Morris N, Nimphius S, Herzog W. Attenuated Lower Limb Stretch-Shorten-Cycle Capacity in ACL Injured versus Non-Injured Female Alpine Ski Racers: Not Just a Matter of Inter Limb Asymmetry. *Frontiers in Sports and Active Living*. 2022; 56: 1-10 <https://doi.org/10.3389/fspor.2022.853701>.
41. **Jordan M**, Morris N, Lawson D, Aldrich-Witt I, Barnert J, Herzog W. Forecasting recovery after anterior cruciate ligament injury with generalized additive models: individual athlete recovery profiles. *Journal of Orthopaedic Research*. 2022; 40(12): 2803-2812 <https://doi.org/10.1002/jor.25302>.
42. Lawson D, **Jordan M**, Herzog W. The effects of lead leg on vertical landing force-time characteristics. *Scandinavian Journal of Medicine and Science in Sport*. 2022; 32(8): 1192-1200.
43. Bishop C, Turner A, **Jordan M**, Harry John, Loturco I, Lake J, Comfort P. A framework to guide practitioners for selecting metrics during the countermovement and drop jump tests. *Strength and Conditioning Journal*. 2022; 44(4): 95-103 <https://doi.org/10.1519/SSC.0000000000000677>. (Top Cited Paper in 2024)
44. Davey K, Read P, Coyne J, Jarvis P, Turner A, Brazier J, Šarabon N, **Jordan M**, Bishop C. An assessment of the hopping strategy and inter-limb asymmetry during the triple hop test: a test-retest pilot study. *Symmetry*. 2021; 13 (1890): 1-12: <https://doi.org/10.3390/sym13101890>.
45. Morris N, **Jordan M**, Heard M, Herzog W. Electromechanical delay of the hamstrings following Semitendinosus tendon autografts in return to competition athletes. *European Journal of Applied Physiology*. 2021; 121(7), 1849-1858: <https://doi.org/10.1007/s00421-021-04639-y>.
46. Lis D, **Jordan M**, Lipuma T, Smith T, Schaal K, Baar K. Effects of collagen and vitamin C supplementation on lower limb mechanical muscle function and rate of force development. *International Journal of Sport Nutrition*. 2021: Online: <https://doi.org/10.1123/ijsnem.2020-0313>.
47. Kadlec D, **Jordan M**, Snyder Alderson J, Nimphius S. Test re-test reliability of single and multijoint strength properties in female Australian footballers. *Sports Medicine - Open*. 2021; 7(5): 1-5: <https://doi.org/10.1186/s40798-020-00292-5>.
48. Nimphius S, **Jordan M**. Show me the data, Jerry: data visualization and transparency. *International Journal of Sports Physiology and Performance*. 2020; 15(10):1353-1355: <https://doi.org/10.1123/ijspp.2020-0813>.
49. Morris N, **Jordan M**, Sumar S, van Adrichem B, Heard M, Herzog W. Joint angle specific impairments in rate of force development, strength and muscle morphology after hamstring autograft. *Translational Sports Medicine*. 2020; 00: 1-11: <https://doi.org/10.1002/tsm2.189>.
50. **Jordan M**, Challis G, Morris N, Lane M, Barnert J, Herzog W. Assessing vertical jump force-time asymmetries in athletes with anterior cruciate ligament injury. *Aspetar Sports Medicine Journal*. 2020; 9: 24-32. <https://www.aspetar.com/Journal/viewarticle.aspx?id=490#.YpVDBKjMJPY>
51. **Jordan M**, Morris N, Lane M, Barnert J, MacGregor K, Heard M, Robinson S, Herzog W. Monitoring the return to sport transition after ACL Injury: an alpine ski racing study. *Frontiers in Sports and Active Living*. 2020; 1: 1-12: <https://doi.org/10.3389/fspor.2020.00012>.

52. Turpeinen J, Freitas T, Rubio-Aras J, **Jordan M**, Aagaard P. Contractile rate of force development after anterior cruciate ligament reconstruction—a comprehensive review and meta-analysis. *Scandinavian Journal of Medicine & Science in Sport*. 2020; 30: 1572-1585: <https://doi.org/10.1111/sms.13733>.
53. Ghali BM, Owoeye OBA, Stilling C, Palacios-Derflinger L, **Jordan M**, Pasanen K, and Emery CA. Internal and External Workload in Youth Basketball Players Who Are Symptomatic and Asymptomatic for Patellar Tendinopathy. *Journal of Orthopaedic & Sports Physical Therapy*. 2020; 50(7): 402-408: <https://doi.org/10.2519/jospt.2020.9094>.
54. Steeves D, Thornley LJ, Goreham JA, **Jordan MJ**, Landry SC, Fowles JR. Reliability and validity of a novel trunk strength assessment for high-performance sprint flatwater kayakers. *International Journal of Sports Physiology and Performance*. 2019; 14(4): 486-492.
55. Steeves D, Thornley L, Jobin F, **Jordan M**, Bawol M, Kruk J, Fowles J. A high performance approach to the strength and power training evolution in 200m Kayak/Canoe. *Journal of Australian Strength and Conditioning*. 2018: 26(7): 79-83.
56. **Jordan M**, Aagaard P, and Herzog W. A comparison of limb stiffness and mechanical muscle function in elite, adolescent and ACL reconstructed alpine ski racers. *Journal of Sport and Health Science*. 2018: 7: 416-423. <https://doi.org/10.1016/j.jshs.2018.09.006>.
57. **Jordan M**, Heard M, Doyle-Baker P, Aagaard P, and Herzog W. ACL injury/re-injury in alpine ski racing: considerations for neuromuscular assessment and training. In: E. Mueller (Ed.) *Science and Skiing VII*, Austria: Meyer & Meyer Sport. 2018: 135-141.
58. Cuenca-Fernández F, Smith I, **Jordan M**, MacIntosh B, Lopez-Contreras G, Arellano R, and Herzog W. Non-localized postactivation performance enhancement (PAPE) effects in trained athletes: a pilot study. *Applied Physiology, Nutrition and Metabolism*. 2017;42(10): 1122-1125. **(207 Citations)**
59. **Jordan M**, Doyle-Baker P, Heard M, Aagaard P, and Herzog W. A retrospective analysis of concurrent pathology in the ACL reconstructed knees of elite alpine ski racers. *The Orthopaedic Journal of Sports Medicine*. 2017: 2017;5(7):1-7.
60. **Jordan M**, Aagaard P, and Herzog W. Anterior cruciate ligament injury/re-injury in alpine ski racing: a narrative review. *Open Access Journal of Sports Medicine*. 2017;8(2):71-83. [10.2147/OAJSM.S106699](https://doi.org/10.2147/OAJSM.S106699)
61. **Jordan M**, Aagaard P, Herzog W. Asymmetry and thigh muscle co-activity in fatigued anterior cruciate ligament reconstructed elite skiers. *Medicine and Science in Sports and Exercise*. 2017;49(1):11-20.
62. Wallace S, **Jordan M**, Blake T, Doyle-Baker P. Heart rate variability in an elite female alpine skier: a case study. *Annals in Applied Sport Science*. 2017: 5(2): 3-10.
63. **Jordan M**, Aagaard P, Herzog W. Lower limb asymmetry in mechanical muscle function: a comparison between ski racers with and without ACL reconstruction. *Scandinavian Journal of Medicine and Science in Sports*. 2015;25: e301-e309. <https://doi.org/10.1111/sms.12314>. **(194 Citations)**
64. **Jordan M**, Aagaard P, Herzog W. A return to skiing envelope of function for anterior cruciate ligament reconstructed elite alpine ski racers. In: E. Mueller (Ed.) *Science and Skiing VI*, Austria: Meyer & Meyer Sport. 2015: 187-195.
65. **Jordan M**, Aagaard P, Herzog W. Rapid hamstrings/quadriceps strength in ACL reconstructed elite alpine ski racers. *Medicine and Science in Sport and Exercise*. 2015;47(1): 109-119. **(122 Citations)**
66. **Jordan M**, Norris S, Smith D, Herzog W. Acute effects of whole-body vibration on peak torque, muscle twitch torque and voluntary muscle activation of the knee extensors. *Scandinavian Journal of Medicine and Science in Sports*. 2010;20: 535-540.
67. Bullock N, Martin D, Ross A, Rosemond CD, **Jordan MJ**, Marino FE. An acute bout of whole-body vibration on skeleton start and 30-m sprint performance. *European Journal of Sport Science*. 2009;9(1):35-39.

68. Bullock N, Martin DT, Ross A, Rosemond CD, **Jordan MJ**, Marino F. Acute effects of whole-body vibration on sprint and jumping performance in elite skeleton athletes. *Journal of Strength and Conditioning Research*. 2008;22(4): 1371-1374. (136 Citations)
69. **Jordan MJ**, Herzog W, Norris SR, Smith DJ, Spiewak S. Vibration Training: An overview of the area, training consequences, and future considerations. *Journal of Strength and Conditioning Research*. 2005;19(2): 459-466. **(380 Citations)**

PEER REVIEWED PUBLICATIONS: UNDER FIRST REVIEW, IN PREPARATION

70. **Jordan M**, McClean Z, Aagaard P, Pasanen K, de Brito Fontana H, Herzog W. Does variation in the eccentric-to-concentric force ratio contribute to human stretch-shortening-cycle leg power output between the sexes? *Scientific Reports*. 2025: **Second Review**
71. Spörri J, Müller P, Bonell Monsonis O, Bahr R, Beck L, Brucker P, Engebretsen L, Fink C, Hörterer H, **Jordan M**, Mitterbauer G, Moksens H, Okel A, Santelli J, Scherr J, Shobersberger W, Stolz A, Taylor J, Valtonen M, Weihrather T, Gouttebarga V, Bolling C, Verhagen E. International Ski and Snowboard Federation (FIS) consensus statement on return-to-performance in competitive alpine and freestyle skiers and snowboarders. *BMJ Open Sport & Exercise Medicine*. 2025: **Under Review**
72. Landry M, Chan D, Galarneau JM, Pasanen K, Mushal V, Mohtadi N, **Jordan M**. Comparison of the PIVOT App and Pivot Shift Test for Assessing Knee Laxity after ACL Injury: Validity and Impact of Thigh Muscle Co-Activity. *Journal of the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine*. 2025: In Preparation.
73. Durante G, Clermont C, Jones-Hershinow C, Pasanen K, Herzog W, **Jordan M**. The effect of compression shorts on soft tissue vibration during outdoor 5-km running. *Journal of Biomechanics*. 2025: **Under Review**
74. Durante G, Clermont C, Pasanen K, Herzog W, **Jordan M**. The effects of leg extensor eccentric-concentric strength and leg power output on soft tissue vibration during outdoor running. *Scandinavian Journal of Medicine and Science in Sports*. 2025: **Under Review**
75. Durante G, **Jordan M**, Pasanen K, Herzog W, Clermont C Between-Day Reliability of Soft Tissue Vibrations at the Medial Gastrocnemius During Outdoor 5 km. *Journal of Biomechanics*. 2025 **Under Review**
76. Dimmick H, van Rassel CR, McClean Z, **Jordan M**, MacInnis M, Ferber R. Efficacy of stride-to-stride variability as a training load metric in running. *Gait & Posture*. 2023: **Under Review**
77. Morris N, da Silva Torres R, Heard M, Doyle-Baker P, Herzog W, **Jordan M**. Towards Determining Knee-Injury Recovery Status Using Machine Learning: A Pilot Study on Ski Racers with ACL Injury Using the Countermovement Jump. *Sports Biomechanics*. 2025: **Under Review**
78. Kadlec D, **Jordan MJ**, Alderson J, Nimphius S. Trunk Constraints Increase Knee Joint Kinetics During Sidestep Cuts in Female Athletes: Implications for Anterior Cruciate Ligament Injury Risk. *Scientific Reports*. 2025: **Under Review**
79. Al Saket S, McClean Z, Boon van Mossel N, Bayne H, de França C, Pasanen K, **Jordan M**. Single Leg Countermovement Jump Force-Time Deficits in ACL Injured Athletes: What Can be Learned from a Waveform Analysis Compared to Healthy Control Limbs? *Scandinavian Journal of Medicine and Science Sport*. 2025: **Under Review**
80. Nickel A, McClean Z, Boon van Mossel N, Morris N, Zukowski M, **Jordan M**. Test-Retest Reliability of Knee Extension Peak Torque and Rate of Torque Development using a Custom-Built Isometric Dynamometer: A Comparison of the Burst and Maximum Voluntary Contraction. *International Journal of Sport Physiology & Performance*. 2025: **In Preparation**
81. Boon van Mossel N, Bertram J, Herzog W, Jordan M. Methodological Considerations for Force-Time Analysis of Repeat Hop Testing in Athletes. *Journal of Biomechanics*. 2025: **In Preparation**

82. Boon van Mossel N, Martin R, Herzog W, Jordan M. Knee Extension Torque is Associated with Repeat Hop Test Performance in ACLR Athletes – But the Constraint Matters. *Medicine and Science and Sports and Exercise*. 2025: **In Preparation**
83. Boon van Mossel N, Bertram J, Martin R, Herzog W, Jordan M. Interlimb Force-Time Asymmetries and Bilateral Deficit During Single and Double Leg Hop Testing in Athletes after ACL Injury. *Medicine and Science and Sports and Exercise*. 2025: **In Preparation**
84. Spörri J, Müller P, Fink C, Alhammoud M, Gokeler A, Seiler J, Roten Y, **Jordan M**, Holmberg HC. Return-to-performance in alpine skiing: a scoping review. *Scandinavian Journal of Medicine and Science in Sports*. 2026: **In Preparation**
85. McClean Z, Zukowski M, Morris N, Kennedy C, Jordan M. Countermovement jump force-time metrics as predictors of on-ice race performance and seasonal neuromuscular adaptations in speed skating: a machine learning analysis on longitudinal data. *International Journal of Sports Physiology and Performance*. 2025: **In Preparation**

CONFERENCE ABSTRACTS

1. Kadlec D, Cowin J, Daniels K, **Jordan M**, Miller-Dicks M, Vial Shayne, Nimphius S. (November 2-6, 2025). The stability of variability – multi-day reliability of sample entropy in submaximal hop and strength tasks in elite athletes. International Society of Biomechanics in Sports Conference 2025. ([Oral Presentation](#)).
2. Kennedy R, Lebsack M, **Jordan M**. (August 13, 2024). Neuromuscular determinants of the eccentric to concentric force ratio in male and female athletes. McCaig Institute for Bone and Joint Health Summer Student Conference. (Oral Presentation).
3. McClean Z, da Silva Torres R, Pasanen K, Herzog W, Lun V, **Jordan M**. (July 18, 2025). Establishing the neuromuscular benchmark: an unsupervised machine learning analysis examining muscle strength in female athletes. National Strength & Conditioning Association National Conference. Kansas City, USA. (Poster Presentation).
4. McClean Z, da Silva Torres R, Pasanen K, Herzog W, Lun V, **Jordan M**. (July 11, 2025). Performance ready? A supervised machine learning model to establish performance readiness after ACL injury. The 2nd Annual Elite Basketball Rehabilitation Conference. Las Vegas, USA. (Poster Presentation).
5. Boon van Mossel N, Martin R, Herzog W, Jordan M. Knee Extension Torque is Associated with Repeat Hop Test Performance in ACLR Athletes – But the Constraint Matters. The 2nd Annual Elite Basketball Rehabilitation Conference. Las Vegas, USA. (Poster Presentation).
6. Al-Saket S, **Jordan M**. (November 18, 2024). Identifying differences in the force-time curves of single leg vertical countermovement jumping after anterior cruciate ligament reconstruction: a secondary analysis. SU Undergraduate Research Symposium. Calgary, Canada (Poster Presentation, Research Investigator Award).
7. Julie Walton, **Matthew J Jordan**, Jared R Fletcher (August 21, 2024). Achilles Tendon Stiffness, Running Economy and Plantarflexor Muscle Strength in Trained Pre- and Post-Menopausal Females. 2024 Conference of the Canadian Society of Biomechanics. Edmonton, Canada (Poster Presentation, CSB President's Award).
8. Gabriella Durante, Kati Pasanen, Walter Herzog, Christian Clermonte, **Matthew J Jordan** (August 21, 2024). Methods to Measure in the Wild: The Effects of Compression Garments and Muscular Strength on Soft Tissue Vibrations in Male and Female Runners. 2024 Conference of the Canadian Society of Biomechanics. Edmonton, Canada (Poster Presentation).
9. Mark McKenzie, Zachary McClean, **Matthew J Jordan** (August 21, 2024). The Reliability of Upper and Lower Body Strength Testing in Competitive U-Sport Swimmers. 2024 Conference of the Canadian Society of Biomechanics. Edmonton, Canada (Poster Presentation).

10. Melissa Lee, Zachary McClean, **Matthew J Jordan** (August 21, 2024). The Importance of Sport-Specific Jump Mechanic Considerations: Field Hockey Versus Soccer Athletes. 2024 Conference of the Canadian Society of Biomechanics. Edmonton, Canada (Poster Presentation).
11. Zachary McClean, Mark McKenzie, Walter Herzog, Kati Pasanen **Matthew J Jordan** (August 21, 2024). Uncovering Whole Body Eccentric and Concentric Muscle Strength Mechanics Through Loaded Countermovement Jump Testing. 2024 Conference of the Canadian Society of Biomechanics. Edmonton, Canada (Poster Presentation).
12. Al-Saket S, Jordan M. (August 14, 2024). Identifying differences in the force-time curves of single leg vertical countermovement jumping after anterior cruciate ligament reconstruction: a secondary analysis. McCaig Institute for Bone and Joint Health Summer Conference. (Poster Presentation).
13. Boon van Mossel N, Herzog W, **Jordan M** (July 13, 2024). Knee Extension Torque is Associated with Repeat Hop Test Performance in ACLR Athletes – But the Constraint Matters! 2024 Elite Rehab in Basketball Conference. Las Vegas Nevada. (Poster Presentation).
14. Boon van Mossel N, Herzog W, **Jordan M** (July 13, 2024). Knee Extension Torque is Associated with Repeated Hopping Performance in ACLR Athletes. 2024 Elite Rehab in Basketball Conference. Las Vegas Nevada. (Poster Presentation).
15. Zachary J. McClean, Nathan Boon-van Mossel, Mark McKenzie, Per Aagard, Kati Pasanen, Victor Lun, Walter Herzog, **Matthew J. Jordan**. (May 31, 2024). Lower Limb Strength Asymmetries is Associated with Perception of Limb Function in University Athletes. 2024 Elite Rehab in Basketball Conference. Las Vegas Nevada. (Poster Presentation, Conference Abstract Award Winner).
16. Julie S. J. Walton, **Matthew J. Jordan**, Jared R. Fletcher (May 30, 2024). Test-retest Reliability of a Novel Protocol to Evaluate Muscle-tendon Function in Pre- and Post-menopausal Women. American College of Sport Medicine 2024 Annual Meeting. Boston, Massachusetts. (Poster Presentation, Joseph Hamill Access to Science Award)
17. Zachary J. McClean, Nathan Boon-van Mossel, Mark McKenzie, Per Aagard, Kati Pasanen, Victor Lun, Walter Herzog, **Matthew J. Jordan**. (May 31, 2024). Lower Limb Strength Asymmetries is Associated with Perception of Limb Function in University Athletes. American College of Sport Medicine 2024 Annual Meeting. Boston, Massachusetts. (Poster Presentation).
18. Joshua Cairns, Ashley Kolstad, Isla Shill, Jean-Michel Galarneau Ph.D., **Matthew Jordan Ph.D.**, Kathryn Schneider PT, Ph.D., Kati Pasanen PT, Ph.D., & Carolyn Emery PT, Ph.D. (February 29, 2024). Friday nights under the Northern Lights: Injury rates, burden, and risk factors in high-school aged tackle football players in Canada. 7th International Olympic Committee World Conference on Prevention of Injury and Illness in Sport, Monaco, (Poster Presentation).
19. Joshua Cairns, Ashley Kolstad, Carla van den Berg, Jean-Michel Galarneau Ph.D., **Matthew Jordan Ph.D.**, Kathryn Schneider PT, Ph.D., Kati Pasanen PT, Ph.D., & Carolyn Emery PT, Ph.D. Down, Set, Record: Assessing NMT warm-up use in Canadian Youth Football. (February 29, 2024). 7th International Olympic Committee World Conference on Prevention of Injury and Illness in Sport, Monaco, (Poster Presentation).
20. Reid Vander Vleuten, Bill Wannop, Carla Van den Berg, Meghan Critchley, Matt Jordan, Tron Krosshaug & Kati Pasanen. Knee Kinematics and Kinetics During Sport-Specific Cutting and Landing Maneuvers in Female University Soccer Players: Implications for ACL Injury Prevention. (February 29, 2024) 7th International Olympic Committee World Conference on Prevention of Injury and Illness in Sport, Monaco, (Poster Presentation).
21. Ajayi OO, van Rassel CR, Dominguez E, **Jordan M**, MacInnis M. (July 4-7, 2023). **Assessing indices of aerobic fitness with detrended fluctuation analysis of heart rate variability data**. Canadian Society of Exercise Physiology Conference, Calgary, Alberta (Poster Presentation).
22. De França C, **Jordan M**, Bayne H (September 11, 2023). Changes in countermovement jump performance and the force-time waveform after anterior cruciate ligament reconstruction. South African Society of Biomechanics Conference, Pretoria, South Africa (Oral Presentation).

23. Zukowski M, Herzog W, **Jordan M** (July 12-14, 2023). Modeling the sprint start in long track speed skating. National Strength & Conditioning Association National Conference. Las Vegas, USA (Oral Presentation – Conference Award).
24. Zukowski M, Herzog W, **Jordan M** (July 12-14, 2023). Single Leg Lateral and Horizontal Loaded Jump Testing: Reliability and Correlation with Long Track Sprint Speed Skating Performance. National Strength & Conditioning Association National Conference. Las Vegas, USA (Poster Presentation).
25. Di França C, **Jordan M**, Bayne H (July 4-7, 2023). Changes in countermovement jump performance and the force-time waveform after anterior cruciate ligament reconstruction. 28th Annual Congress of the European College of Sport Science, Paris, France (Oral Presentation).
26. Ajayi OO, van Rassel CR, Dominguez E, **Jordan M**, MacInnis M. (July 4-7, 2023). Assessing indices of aerobic fitness with detrended fluctuation analysis of heart rate variability data. 28th Annual Congress of the European College of Sport Science, Paris, France (Oral Presentation).
27. Haverinen M, Halonen E, **Jordan M**, Parkkari J, Kyröläinen H (July 4-7, 2023). Influence of physical qualities on game performance, acute physiological responses and post-game recovery in ice hockey. 28th Annual Congress of the European College of Sport Science, Paris, France (Poster Presentation).
28. Foley L, **Jordan M** (June 22, 2023). Reliability of countermovement jump force-velocity vs. velocity-load testing in athletes. Rocky Mountain Muscle Symposium. Canmore, Alberta. (Poster Presentation).
29. **Jordan M**, Foley F, Zukowski M (April 18, 2023). Functional Force Velocity Testing: Intrinsic Muscle Properties or Functional Strength Capacity. Force Velocity Symposium, XX Congress of the Brazilian Society of Biomechanics, Bauru, Brazil (Oral Presentation).
30. Joshua Keogh, Emma Waddington, Sobia Mahmood, Zaryan Masood, Anil Palanisamy, Matthew Ruder, Sameena Karsan, Chris Bishop, **Matthew Jordan**, Jennifer Heisz, Dylan Kobsar. (August, 2022). Monitoring lower limb biomechanics, asymmetry, and introspective state in healthy athletic populations: a scoping review. North American Congress on Biomechanics, Ottawa, Ontario (Poster Presentation).
31. Cassidy de França, **Matthew Jordan**, Helen Bayne. (August, 2022). The effect of countermovement jump initiation detection methods on discrete performance variables. International Festival of Sports Exercise and Medicine Conference. South Africa (Oral Presentation).
32. Kadlec Daniel, **Jordan Matthew**, Alderson, Jacqueline, Nimphius Sophia (July, 2022). Effects of task constraints on sidestepping joint kinetics. International Society of Biomechanics in Sports. Liverpool, UK (Oral Presentation).
33. Matti Alanen A, Bruce O, Benson L, Chin M, van den Berg C, **Jordan M**, Ferber R, Pasanen K. (June 4, 2022). Differences in Situational Patterns of over 90° Change of Direction Movements in Youth Male and Female Soccer Players. Isokinetic Conference: Football Medicine, Players' Voices. Lyon, France (Oral Presentation).
34. Matti Alanen A, Bruce O, Benson L, Chin M, van den Berg C, **Jordan M**, Ferber R, Pasanen K. (July 26, 2021). Capturing In-Season Change of Direction Movement Pattern Variability in Youth Soccer Players with IMUs. International Society of Biomechanics. Stockholm, Sweden (Poster Presentation).
35. Morris N, **Jordan M**, Herzog W. (May 26, 2021). Form Dictates Function and the Knee Joint Angle Matters: Hamstring Muscle Morphology is Associated with Knee Flexor Strength Deficits in Athletes with ACL Injury. Canadian Society of Biomechanics Conference. Montreal, Canada (Oral Presentation).
36. Lawson D, Morris N, **Jordan M**. (May 26, 2021). Accuracy of the Reactive Strength Index Assessed with an Instrumented Insole. Canadian Society of Biomechanics Conference. Montreal, Canada (Poster).
37. Lawson D, Morris N, **Jordan M**. (May 26, 2021). Concurrent Validity of an IMU Instrumented Intelligent Insole System for Measuring Running Speed. Canadian Society of Biomechanics Conference. Montreal, Canada (Oral Presentation).
38. Lawson D, **Jordan M**, Herzog W. (May 26, 2021). Reliability of Knee Flexion Angle Measurements with an Inertial Measurement Unit System. Canadian Society of Biomechanics Conference. Montreal, Canada (Poster).

39. Lawson D, **Jordan M**, Herzog W. (May 26, 2021). Influence of Lead Leg Selection on Bilateral Drop Landing Characteristics. Canadian Society of Biomechanics Conference. Montreal, Canada (Poster).
40. **Jordan M**, Morris N, Herzog W. (October 29, 2020). Assessing Hamstring Strength Deficits in Alpine Ski Racers with Anterior Cruciate Ligament Injury. 25th Annual Congress of the European College of Sport Science Book of Abstracts. Sevilla, Spain.
41. Lawson D, **Jordan M**, Herzog W. (October 21, 2020). Influence of Lead Leg Selection and Drop Landing Characteristics. Sport Innovation Summit. Calgary, Canada.
42. Lawson D, **Jordan M**, Herzog W. (October 21, 2020). A Case Study Report of Lower Limb Strength and Single Leg Landing Strategy in an ACL Reconstructed Elite Freestyle Skier. Sport Innovation Summit. Calgary, Canada.
43. Lis D, Schaal K, Smith T, Lipuma T, **Jordan M**, Baar K. (May 27, 2020). Effects of Vitamin C Enriched Hydrolyzed Collagen on Explosive Performance. American College of Sport Medicine Annual Congress. (Online).
44. Lis D, Schaal K, Smith T, Lipuma T, **Jordan M**, Baar K. (May 27, 2020). Dietary Collagen and Collage Protein Synthesis and Performance. American College of Sport Medicine Annual Congress. (Online).
45. Schneider K, Cowle S, Fuselli P, van Rassel, CR, Chader MK, Tittley J, Makowski A, MacDonald K, Jackson T, **Jordan M**, Leclerc S, van Neutegem A, Black A. (May, 2020) Concussion Harmonization IMpLementation in Canada – The “CHAIMP” Study Phase 1: An Evaluation of Barriers and Facilitators to Implementation Across Sport and Level of Play. Canadian Academy of Sport and Exercise Medicine. Banff, Alberta.
46. Miutz LN, Emery CA, Black AM, **Jordan MJ**, Schneider KJ (December 12-13, 2019). Validation of a Field Test of Exertion in Adolescents. ACHRI Conference. Calgary, Alberta.
47. Lawson D, **Jordan M**, Herzog W. Relationship Between Hip Strength Asymmetry and Landing Performance (October 30, 2019). Sport Innovation Summit. Toronto, Canada.
48. Lawson D, **Jordan M**, Herzog W. Reliability of Hip Strength Measures Using a Custom-Instrumented Dynamometer. (October 30, 2019). Sport Innovation Summit. Toronto, Canada.
49. **Jordan MJ**, Aagaard P, Herzog W (August 1, 2019). A Comparison of Lower Limb Mechanical Muscle Function in Elite, Development and ACL Reconstructed Alpine Ski Racers. In: XXVII Congress of the International Society of Biomechanics Abstract Book. Calgary, Canada.
50. Miutz LN, Emery CA, Black AM, **Jordan MJ**, Schneider KJ (May 16-18, 2019). Validation of a Field Test of Exertion in Adolescents. Canadian Academy of Sports and Exercise Medicine. Vancouver, British Columbia.
51. Ghali BM, Owioye OBA, Stilling C, Palacios-Derflinghter L, **Jordan M**, Pasanen K, Emery CA (June 6-9, 2018). Examining the Difference in Workload in Youth Basketball Players with and without Patellar Tendinopathy. Canadian Academy of Sports and Exercise Medicine. Halifax, Nova Scotia.
52. Lane MD, Barnert JR, **Jordan M** (November 1st, 2018). Loaded Countermovement Jump Testing in Female Alpine Skiers. Sport Innovation Summit, Montreal, Quebec, Canada.
53. Challis G, Lane M, Groves E, **Jordan M** (November 1st, 2018). Reliability of Commonly Derived Countermovement Jump Outcome Measures Using a Dual Force Platform System. Sport Innovation Summit, Montreal, Quebec, Canada.
54. Morris N, **Jordan M**, Heard M, Herzog W (November 1st, 2018). Knee Flexor Muscle Strength Deficits in Elite Alpine Skiers Following Semitendinosus Autograft ACL Reconstruction Surgery. Sport Innovation Summit, Montreal, Quebec, Canada.
55. Morris N, Lane M, Challis G, **Jordan M** (November 1st, 2018). Concurrent Validity of a Custom-Built Dynamometer for Assessing Lower Body Isometric Strength. Sport Innovation Summit, Montreal, Quebec, Canada.

56. Morris N, Sumar S, **Jordan M**, Heard M, Herzog W (November 1st, 2018). Extended Field of View Ultrasound Imaging: Tracking Changes in Hamstring Muscle Architecture After ACL Injury in Elite Skiers. Sport Innovation Summit, Montreal, Quebec, Canada.
57. **Jordan M**, Aagaard P, Herzog W. (October 4, 2017). Jump Mechanical Properties and Lower Limb Asymmetries in Elite, ACL Reconstructed, and Development Alpine Ski Racers. Sport Innovation Summit, Vancouver, British Columbia.
58. Lane M, Challis G, **Jordan M**, Groves E (October 4, 2017). The Time-Course Change in Accuracy of AMTI and Pasco Force Plates. Sport Innovation Summit, Vancouver, British Columbia.
59. Lane M, Challis G, **Jordan M**, Groves E (October 4, 2017). Does Your Force Plate Work? Implications and Solutions for Detecting a Broken Force Plate. Sport Innovation Summit, Vancouver, British Columbia.
60. **Jordan M**, Heard M, Doyle-Baker P, Aagaard P, Herzog W. (November 17, 2016). Associated Pathology and Asymmetry in ACL Reconstructed Alpine Racers. Sport Innovation Summit, Calgary, Alberta.
61. **Jordan MJ**, Heard M, Doyle-Baker T, Aagaard P, Herzog W. (December 14, 2016). Associated Pathology and Limb Asymmetry in ACL Reconstructed Elite Alpine Racers. In: E. Mueller (Ed.) Abstract Book of the 7th International Congress on Science and Skiing (p. 114). Salzburg, Austria: Department of Sport Science and Kinesiology University of Salzburg, Austria.
62. Challis GG, **Jordan M**, Groves EM. (November 17, 2016). A Comparison of Accuracy and Precision Across Multiple Force Platforms. Sport Innovation Summit, Calgary, Alberta.
63. Lane M, McCartney J, **Jordan M**, Groves EM (November 17, 2016). The Reliability of a Unilateral Leg Press for Rate of Force Development: A Pilot Study. Sport Innovation Summit, Calgary, Alberta.
64. **Jordan M**, Aagaard P, Herzog W. (October 27, 2015). Fatigue Impairs Landing Quadriceps-Hamstrings Co-activity and Causes Asymmetry in Elite Ski Racers With/Without ACL Reconstruction. Sport Innovation Summit, Toronto, Ontario.
65. Challis G, Sekulich Q, **Jordan M**. (October 27, 2015). Squat Jump Load vs. Take Off Velocity Profiling in Elite Bobsledders. Sport Innovation Summit, Toronto, Ontario.
66. Barnert J, Challis G, **Jordan M**. (October 27, 2015). A New Test of Upper Body Explosive Strength and Functional Asymmetry: Reliability and Relationship to Performance in Elite Lugers. Sport Innovation Summit, Toronto, Ontario.
67. Wallace S, **Jordan M**, Doyle-Baker P. (October 27, 2015). Heart rate variability in an elite female alpine skier: a case study. Sport Innovation Summit, Toronto, Ontario.
68. Christie M, **Jordan M**, Doyle-Baker P. (October 27, 2015). Hamstring muscle strength at least one year after ACL reconstruction: what you really “knee” to know. Sport Innovation Summit, Toronto, Ontario.
69. **Jordan MJ**, Barnert J, Aagaard P, Herzog W. (July 13, 2015). The kinetic impulse asymmetry index in the vertical jump predicts lower body injury in elite athletes. In: XXV Congress of the International Society of Biomechanics Abstract Book. Glasgow, United Kingdom. (pp. 664-665) (AS-0311).
70. **Jordan MJ**, Aagaard P, Herzog W. (July 2-5, 2014). Rapid Hamstrings/Quadriceps Strength in ACL Reconstructed Elite Alpine Ski Racers. In: A. De Haan, C.J. De Ruiter, E. Tsolakidis (Ed.) 19th Annual Congress of the European College of Sport Science Book of Abstracts. Amsterdam, Netherlands (p. 524).
71. **Jordan M**, Barnert J, Aagaard P, Herzog W. (2014). The kinetic impulse asymmetry index in the vertical jump predicts lower body injury in athletes: a preliminary report. Sport Innovation Summit, Montreal, Quebec.
72. **Jordan M**, Aagaard P, Herzog W. (2013). The Acute Effects of Fatiguing Resistance Exercise on Mechanical Muscle Power and Force-Time Variables Assessed during Countermovement and Squat Jumping in Elite Female Alpine Ski Racers. Sport Innovation Summit, Calgary, Alberta.

73. **Jordan M**, Sekulich Q, Read M. (2013). The Relationship Between Field Test of Speed, Speed-Strength, and Mechanical Muscle Power, and Bobsled Push Start in Elite Canadian Male Bobsledders. Sport Innovation Summit, Calgary, Alberta.
74. Barnert J, **Jordan M**. (2013). Examination of the Relationship of a Luge Start to the Testing Battery used for the Men's Canadian Luge Team. Sport Innovation Summit, Calgary, Alberta.
75. **Jordan MJ**, Maurer C, Aagaard P, Herzog W. (December 16-18, 2013). Long-term effects of anterior cruciate ligament reconstruction on neuromuscular asymmetries in elite alpine ski racers. In: E. Mueller (Ed.) Abstract Book of the 6th International Congress on Science and Skiing (p. 109). Salzburg, Austria: Department of Sport Science and Kinesiology University of Salzburg.
76. **Jordan MJ**, Aagaard P, Herzog W. (December 16-18, 2013). The acute effects of fatiguing resistance exercise on mechanical power and force-time variables assessed during countermovement and squat jumping in elite female ski racers. In: E. Mueller (Ed.) Abstract Book of the 6th International Congress on Science and Skiing (p. 131). Salzburg, Austria: Department of Sport Science and Kinesiology University of Salzburg, Austria.
77. **Jordan M**, Maurer C, Aagaard P, Herzog W. (June 26-June 29, 2013) Long-term effects of anterior cruciate ligament reconstruction on neuromuscular asymmetries in elite alpine ski racers. In: (Ed.) 18th Annual Congress of the European College of Sport Science. Barcelona, Spain.
78. **Jordan MJ**, Aagaard P, Herzog W. (2013). The Effects of an Off-Snow Preparatory Training Block on Peak Power, Impulse and Bilateral Asymmetry in the Countermovement Jump in Elite Female Alpine Ski Racers. The Biomedical Basis of Human Performance International Workshop, Calgary, Alberta.
79. **Jordan MJ**, Price M, Maurer C, Aagaard P, Herzog W. (2012). The Long-Term Effects of ACL Reconstruction on Neuromuscular Performance in Elite Alpine Ski Racers. Sport Innovation Summit, Vancouver, British Columbia.
80. **Jordan MJ**, Norris S, Herzog W, Smith DJ, Spiewak S. (2003). The Effects of Vibration on Specific Neural and Mechanical Properties of Muscle during Isometric Knee Extension. In: E. Muller (Ed.) Proceedings 8th Annual ECSS Conference. Salzburg, Austria: Department of Sport Science and Kinesiology University of Salzburg, (p. 379).

HIGHLIGHTED SCIENTIFIC, PROFESSIONAL, INVITED AND KEYNOTE PRESENTATIONS

1. November 8, 2025: Establishing return to performance readiness after ACL injury through measures of explosive strength and stretch-shortening cycle mechanics. 2025 Royal College of Chiropractic Sport Sciences Return to Play Conference. Toronto, Canada. (National Conference, **Invited Presenter**).
2. October 11, 2025: Assessing eccentric strength and braking capacity with stretch-shortening cycle mechanics. 2025 Royal College of Chiropractic Sport Sciences Sportsmith Strength & Conditioning Conference. Manchester, UK. (International Conference, **Invited Presenter**).
3. September 17, 2025: Return to performance after ACL injury: an integrated team approach. 2025 Ontario Coaches Summit. Toronto, Canada. (National Conference, **Keynote Presenter**).
4. September 17, 2025: Return to sport after ACL injury in alpine ski racing is not all downhill: current best practices in promoting a return to performance. 2025 Ontario Coaches Summit. (National Conference, **Keynote Presenter**).
5. July 12, 2025: Performance readiness after ACL injury? Making the most of your force plate system. 2nd Annual Elite Basketball Rehabilitation Conference. Las Vegas, USA. (International Conference, **Invited Presenter**).
6. June 27, 2025: Performance readiness after ACL injury? What we are learning from assessing across an envelope of muscular strength. Sportsmith Vald Return to Play Conference. Los Angeles, USA. (International Conference, **Invited Presenter**).
7. May 24, 2025: Performance readiness after ACL injury? Assessing across an envelope of strength. Vald Return to Play Conference. Vancouver, Canada. (National Professional Conference, **Invited Presenter**).

8. May 14, 2025: NBA Biomechanics Implementation Committee: What Was Learned in Year 1? National Basketball Association Health & Performance Meetings. Chicago, USA. (National Professional Conference, **Invited Presenter**).
9. April 23, 2025: Keeping Them in the Game: A Biopsychosocial Approach for Sport Injury Prevention in Canadian University Athletes. Canadian Integrated Healthy and Injury Surveillance System Annual Meeting. St Catharines, Canada. (National Meeting, **Invited Presenter**).
10. February 17, 2025: Keeping Them in the Game: A New Approach to ACL Injury and Reinjury Prevention in Women's University Sport. Aspetar Tuesday Seminar Series. Qatar. (International Seminar, **Invited Presentation**).
11. January, 25, 2025: Keeping Them in the Game: A New Approach to ACL Injury and Reinjury Prevention in Women's University Sport. RACE Community Engagement, Sport Injury Prevention Research Centre, Calgary, Alberta, (Community Scientific Conference, **Invited Presenter**)
12. January, 25, 2025: Keeping Them in the Game: A New Approach to ACL Injury and Reinjury Prevention in Women's University Sport. RACE Community Engagement, Sport Injury Prevention Research Centre, Calgary, Alberta, (Community Scientific Conference)
13. October, 25, 2024: From Mind to Muscles: Stretch Shortening Cycle Mechanics for Strength Diagnostics, Return-to-Play and Athlete Monitoring. 14th Annual Conference of the Brazilian Society of Neuromechanics. Florianopolis, Brazil (Scientific Conference, **Keynote Presenter**)
14. September 27, 2024: Return to Performance after ACL Injury. Managing Progressive Joint Injury through Athlete Monitoring, Muscle Mechanics, and Training Load. National Capital Knee Symposium. Ottawa, Canada (Scientific Conference, **Invited Presenter**)
15. September 26, 2024: Return to Performance after ACL Injury. A Case Study in the Perils of the Contralateral Limb Benchmark. National Capital Knee Symposium. Ottawa, Canada (Scientific Conference, **Invited Presenter**)
16. June 26, 2024: Assessing Muscle Mechanics with Force Velocity Testing: Athlete Monitoring, Rehab and Strength Diagnostics. The NHL Professional Hockey Athletic Trainers Society Annual Meeting. Orlando, Florida (Professional Conference, **Invited Presenter**).
17. June 19, 2024: Assessing Muscle Mechanics with Force Velocity Testing: Athlete Monitoring, Rehab and Strength Diagnostics. Canadian Strength and Conditioning Association Conference. Calgary, Canada. (Invited Presenter)
18. February 27, 2024: Keeping them in the Game: A Holistic Biopsychosocial Approach for Sport Injury Prevention in Canadian University Athletics. 7th International Olympic Committee World Conference on Prevention of Injury and Illness in Sport, Monaco. (Accepted Symposium).
19. October 14, 2023: Jumping to Health with Muscle Power: Your Mechanical Biomarker for Health and Performance. Canadian Society of Exercise Physiology Conference, Calgary, Alberta, (National Conference, **Invited Presenter**).
20. September 15, 2023: Secondary and Tertiary ACL Injury Prevention in Female Alpine Skiers: Strength Matters. RACE Community Engagement, Sport Injury Prevention Research Centre, Calgary, Alberta, (Community Scientific Conference)
21. August 21, 2023: The Biomechanics of Muscle Strength and Power after ACL Injury: New Perspectives on Return to Sport Testing. 8th Annual Vail Scientific Summit, Vail, Colorado (International Scientific Conference, **Invited Presenter**).
22. July 8, 2023: Assessing the Envelope of Function after ACL Injury: A Performance Based Approach to Athlete Monitoring, Elite Basketball Rehab Conference, University of Las Vegas, Las Vegas, Nevada (Professional Conference, **Invited Presenter**).
23. May 17, 2023: Force Plate Analysis and Athlete Monitoring after Injury: Quantifying the Return to Performance Transition, National Basketball Association Health & Performance Meetings, Chicago, Illinois (Professional Conference, **Invited Presenter**).

24. April 20, 2023: The Biomechanics of Muscle Strength and Power after ACL Injury. XX Congress of the Brazilian Biomechanics Society, Bauru, Brazil (International Scientific Conference, **Keynote Presenter**).
25. April 18, 2023: Assessing Mechanical Muscle Function: Kinetic Analysis of the Jumping Athlete. XX Congress of the Brazilian Biomechanics Society, Bauru, Brazil (International Scientific Conference, **Invited Presenter**).
26. December 10, 2022: Vertical Jump Force Time Testing for Return to Play and Athlete Monitoring. Major League Baseball Strength & Conditioning Meetings, San Diego, California (Professional Conference, **Invited Presenter**).
27. October 7, 2022: Vertical Jump Force Time Testing for Return to Play and Athlete Monitoring. Noraxon User Group Meeting, Phoenix, Arizona, (Professional Conference, **Keynote Presenter**).
28. September 16, 2022: Secondary and Tertiary ACL Injury Prevention in Female Alpine Skiers: Strength Matters. RACE Community Engagement, Sport Injury Prevention Research Centre, Calgary, Alberta, (Community Scientific Conference).
29. July 8, 2022: Managing Return to Sport after ACL Injury in a Long-Term Athlete Development Pathway. The LTAD Network Conference, Gloucester, UK, (International Conference, **Keynote Presenter**).
30. June 21, 2022: Monitoring the Return to Sport Transition after ACL Injury: When AMM I Ready? Canadian Athletic Therapy Association, Calgary, Canada, (National Presentation, **Invited Presenter**).
31. June 18, 2022: Return to Performance after ACL Injury: Why Strength Matters. Notre Dame University/ACU Human Performance Summit, Notre Dame, USA (International Conference, **Keynote Presenter**).
32. April 29, 2022: Secondary ACL Injury Prevention in Alpine Skiing: It's Not All Downhill. Canadian Academy of Sport and Exercise Medicine, Quebec City, Canada, (National Presentation, **Invited Presenter**).
33. April 3, 2022: Monitoring Neuromuscular Readiness after ACL Injury: Measuring What Matters. Royal College of Chiropractic Sports Sciences: Actionable Analytics, Toronto, Canada, (National Presentation, **Invited Presenter**).
34. March 22, 2022: Monitoring the Return to Sport Transition after ACL Injury: When AMM I Ready? Sports Biometrics Conference, San Diego, USA (International Conference, **Invited Presenter**).
35. March 5, 2022: Return to Performance after ACL Injury: Why Strength Matters. The 13th Annual Strength and Conditioning Student Conference – Middlesex University, London Sport Institute (International Conference, **Keynote Presenter**).
36. February 23, 2022: Biomechanical Muscle Strength and Power Assessments after ACL Injury. The Houston Texans Sport Performance Summit, 2022. (North American Conference, **Invited Presenter**).
37. November 6, 2021: Getting Back to Health and Performance after Knee Injuries: Why Strength Matters. The Woods Forum (National Conference, **Invited Presenter**).
38. September 17, 2021: The Hamstring Conundrum: Data-Led Approach to Rehabilitation after ACL Reconstruction. Brazilian Biomechanics Conference. (International Conference, **Keynote Presenter**).
39. May 5, 2021: Re-pre-habilitating the Hamstring Muscle Group to Prevent ACL Reinjury after Hamstring Autograft. Exercise and Sport Science Association – Research to Practice (International Conference, **Invited Presenter**).
40. March 21, 2021: So, You Want to Build a Holacracy? Learn to Follow Before You Lead. Art of Coaching Communication and Leadership Strategy Summit. Online (International Conference, **Invited Presenter**).
41. February 26, 2021: Assessing Vertical Jump Force-Time Asymmetries: Performance, Injury and Return to Sport Forecasting. Sports Biometrics Conference. Online (International Conference, **Invited Presenter**).
42. February 13, 2021: Assessing Vertical Jump Force-Time Asymmetries: Performance, Injury and Return to Sport Forecasting. University of Iowa Running Injury Symposium. Online (National Conference, **Invited Presenter**).
43. October 22, 2020: Monitoring the Uncertain Journey Back from ACL Injury – From Case Study to Prospective Study. Sport Innovation Summit. Calgary, Canada (National Conference, **Invited Presenter**).

44. April 15, 2020: Monitoring the Uncertain Journey Back from ACL Injury – A Case Study. Vail Injury Prevention Conference. Vail, Colorado (Professional Conference, **Invited Presenter**).
45. October 17, 2019: Monitoring the Uncertain Journey Back from ACL Injury – A Case Study. The United States Olympic Committee High Performance Think Tank. Colorado Springs, Colorado (Professional Conference, **Invited Presenter**).
46. September 14, 2019: Managing the Uncertain Journey Back from ACL Injury. The ALTIS High Performance Think Tank. Tahoe, California (Professional Conference, **Invited Presenter**).
47. June 25-26, 2019: Assessing Asymmetries and Performance with Dual Force Plate Systems. The STTAR Summit, Philadelphia 76ers. Philadelphia, Pennsylvania (Professional Conference, **Invited Presenter**).
48. December 6, 2019: Building Individual Resilience Against ACL Injury/Reinjury with Strength Training. International Conference on Strength Training, Perth, Australia (International Conference, Keynote Presenter).
49. May 3, 2019: Building Individual Resilience Against ACL Injury/Reinjury with Strength Training. The Mountain-Con Annual High-Performance Conference. Vail, Colorado (Professional Conference, **Invited Presenter**).
50. December 1, 2018: Building Individual Resilience Against ACL Injury/Reinjury with Strength Training. International Conference on Strength Training, Perth, Australia (International Conference, **Keynote Presenter**).
51. November 30, 2018: Evaluating Mechanical Muscle Function in ACL Reconstructed Elite Athletes. International Conference on Strength Training, Perth, Australia (International Conference, **Invited Presenter**).
52. October 12, 2018: Assessing Athlete Readiness in Elite Level Slope Sports. United States Olympic Committee Professional Development Conference (International Conference, **Invited Presenter**).
53. June 23, 2018: Assessing Concentric/Eccentric Force Asymmetries. The NHL Professional Hockey Athletic Trainers Society Annual Meeting. Orlando, Florida (Professional Conference, **Invited Presenter**).
54. May 18, 2018: Monitoring Training Load: Why Measuring What Matters, Matters. Varala Sports Institute Professional Coaching Conference. Tampere, Finland (Professional Conference, **Invited Presenter**).
55. May 13, 2018: Eccentric Muscle Actions, Eccentric Deceleration Ability and ACL Injury in Alpine Ski Racing. The Mountain-Con Annual High Performance Conference. Vail, Colorado (Professional Conference, **Invited Presenter**).
56. March 26-28, 2018: Assessing Concentric/Eccentric Force Asymmetries for ACL Injury/Reinjury Prevention. The National Football League (NFL) Professional Strength and Conditioning Association Annual Meeting. Las Vegas, Nevada (Professional Conference, **Invited Presenter**).
57. November 5, 2017: A Conversation on Return to Performance Planning and Team Integration After Knee Injuries. Montreal, Quebec (National Conference, **Invited Panel**).
58. October 16-19, 2017: Detecting Functional Asymmetries from the Strength Lab to the Weight Room. The First International Meeting on High Performance Sports. Ponte de Lima, Portugal (International Conference, **Invited Presenter**).
59. October 12-14, 2017: Detecting Functional Asymmetries from the Strength Lab to the Weight Room. The First International Meeting on High Performance Sports. Sao Paulo, Brazil (International Conference, **Invited Presenter**).
60. October 5, 2017: Philosophies Around Training Loads vs. Injuries: Should You Smash Your Eggs or Polish Them? Sport Innovation Summit. Vancouver, British Columbia (National Conference, **Invited Presenter**).
61. June 14, 2017: Neuromuscular Monitoring for Return to Sport: Why Measuring What Matters, Matters. The NHL Professional Hockey Athletic Trainers Society Annual Meeting. Phoenix Arizona (Professional Conference, **Invited Presenter**).

62. June 3, 2017: Hamstring/Quadriceps Coactivity: Effects of Fatigue and Training Considerations. The High Performance Athletic Development Conference Carrie, North Carolina (International Coaching Conference, **Invited Presenter**).
63. May 13, 2017: Detecting Functional Asymmetries: From the Strength Lab to the Weight Room. National Strength and Conditioning Association Ontario Provincial Clinic. Toronto, Ontario (Provincial Conference, **Invited Presenter**).
64. January 25, 2017: Neuromuscular Monitoring After ACL Injury: Return to Sport and Return to Podium. The 2017 Sports Science Summit (International Conference, **Invited Presenter**).
65. September 17, 2016: How Monitoring Strength Abilities After ACL Reconstruction Led to a Better Conversation. United Kingdom Strength and Conditioning Association 12th Annual Conference. Leicester, UK (International Conference, **Keynote Presenter**).
66. November 21, 2015: Functional Neuromuscular Assessment in ACLR Elite Ski Racers: Strength Matters. Royal College of Chiropractic Sport Sciences, Train Smarter Conference, Toronto, Ontario (National Conference, **Invited Presenter**).
67. November 8, 2015: ACL Injury Prevention in Elite Alpine Ski Racers: Neuromuscular Assessment and Training Philosophy. The Australian Strength and Conditioning Association International Conference on Strength and Conditioning, Gold Coast, Australia (International Conference, **Invited Presenter**).
68. October 27, 2015: Return to Sport Functional Neuromuscular Assessment in Elite Alpine Ski Racing: It's Not All Downhill. Sport Innovation Summit, Toronto, Ontario (National Conference, **Invited Presenter**).
69. May 16, 2015: ACL Injury/Re-Injury Prevention in Alpine Ski Racing: It's Not All Downhill. Boston Sports Medicine and Performance Seminars, Boston, Massachusetts (International Conference, **Invited Presenter**).
70. October 12, 2012: Advancements in the Movement Screen: The Assessment of Bilateral Asymmetry in Elite Winter Athletes. 2012 International Conference on Applied Strength and Conditioning. Australian Strength and Conditioning Association. Kingscliff, Australia. (International Conference, **Keynote Presenter**).

HIGHLIGHTED SEMINARS

1. What can we learn from elite athletes when it comes to getting back to things we love after injury? Exercise is better than medicine, but progression is everything. McCaig Institute for Bone and Joint Health. Science on Tap – A Community Knowledge Translation Presentation. (August 25, 2025).
2. Force Plate Analysis for Return to Play. Phoenix Suns, NBA, Phoenix, USA. (May 23, 2025).
3. Assessing Mechanical Muscle Function in Hockey Players: Neuromuscular Fatigue, Performance and Rehab. GVN Performance, Chicago, USA. (May 10-11, 2025).
4. Assessing Mechanical Muscle Function with Force Plates. Eins-A Coaching Conference, Vienna, Austria. (April 27-28, 2025).
5. Assessing Mechanical Muscle Function with Force Plates. Next Generation Performance, Krakow, Poland. (May 9-10, 2024).
6. Four Training Load Concepts to Make You a More Knowledgeable and Scientific Coach. Hydrow. Boston Massachusetts. (January 19, 2024).
7. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Arizona Diamondbacks. (November 11, 2023).
8. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Los Angeles Lakers. (October 20-21, 2023).
9. Career Planning for Strength & Conditioning Coaches. Sport Scientist Canada. (October 13, 2023).

10. The Importance of Explosive Strength after ACL Injury. Take a Knee Conference. (October 13, 2023).
11. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Australian Institute of Sport. (September 27, 2023).
12. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Washington Spirit. (September 1, 2023).
13. Assessing and Monitoring Interlimb Force-Time Asymmetries. Memphis Grizzlies. (August 20-22, 2022).
14. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Minnesota Vikings. (January 26, 2022).
15. Assessing and Monitoring Interlimb Force-Time Asymmetries after Injury. Houston Texans. (March 23, 2021).
16. Monitoring the Uncertain Journey Back from ACL Injury – From Case Study to Prospective Study. Simon Fraser University Sports Analytics Meeting. Burnaby, Canada. (March 12, 2021).
17. Monitoring the Return to Sport Transition After ACL Injury: From Case Study to Prospective Study. Human Performance Laboratory. University of Calgary. Calgary, Canada. (September 10, 2020).
18. Assessing Vertical Jump Force-Time Asymmetries. National Basketball Association Trainers Meeting. (Online). (April 10, 2020).
19. Assessing Vertical Jump Force-Time Asymmetries. Golden State Warriors Basketball Club. San Francisco, United States of America. (January 27, 2020).
20. Eccentric Muscle Actions and Assessing Eccentric Abilities. Edith Cowan University. Perth, Australia. (November 30, 2018).
21. Research Directions for Assessing Athletes with ACL Injury. Murdoch University. Perth, Australia. (November 30, 2018).
22. Neuromuscular Profiling and Assessment Workshop. Institute for Human and Machine Cognition. Pensacola, Florida. (November 2018).
23. Neuromuscular Profiling and Assessment Workshop. Kansas City Football Club. Kansas City, Kansas. (October 2018).
24. Neuromuscular Profiling and Assessment Workshop. Jacksonville Jaguars. Jacksonville, Florida. (July 2018).
25. Neuromuscular Profiling and Assessment Workshop. Irish Rugby Federation. Dublin, Ireland. (July 2-3, 2018).
26. From Elite Athlete to Average Joe: Preparing for Life After Sport. Game Plan Summit. Calgary, Canada. (May 11, 2018).
27. Preparing for the Beijing Olympic Winter Games: Perspectives from Sport Science/Sport Medicine. Own the Podium/Canadian Olympic Committee Pyeongchang Olympic Debrief. Calgary, Canada. (May 3, 2018).
28. Assessing Concentric/Eccentric Force Asymmetries: From the Strength Lab to the Weight Room. University of Calgary Varsity Athletics Strength and Conditioning Meeting. Calgary, Alberta. (April 17, 2018).
29. Neuromuscular Profiling for Return to Combat in Elite Military Operators. Canadian Special Operations Force Command, Ottawa, Canada. (February 19-20, 2018).
30. Neuromuscular Profiling and Assessment Workshop, Noraxon, USA. Phoenix, Arizona. (December 1-2, 2017).
31. Past, Present and Future: Analysis of Physical Fitness and Neuromuscular Abilities in Alpine Ski Racing from 1999-2017. Alpine Canada Provincial High Performance Directors Meeting. Calgary, Alberta. (September 19, 2017).
32. Neuromuscular Monitoring After Injury: Hypertrophy, Neuromechanics and Lower Limb Mechanical Muscle Function. Sports Surgery Clinic, Dublin, Ireland. Jordan MJ (July 20-22, 2017).
33. Jordan MJ (July 21, 2017). Muscle Hypertrophy: Physiology and Training Consideration. Sports Surgery Clinic, Dublin, Ireland.

34. Neuromuscular Profiling for Return to Combat in Elite Military Operators. Joint Special Operations Command, USA Army, Fort Bragg, North Carolina. (July 7, 2017).
35. How Monitoring Strength Abilities After ACL Reconstruction Led to a Better Conversation. University of Calgary Varsity Athletics Strength and Conditioning Meeting. Calgary, Alberta. (April 17, 2017).
36. Return to Sport Assessment and Neuromuscular Monitoring After ACL Injury in Elite Alpine Ski Racers. Sea to Sky Orthopaedic Meeting. Whistler, British Columbia. (February 20, 2017).
37. ACL Injury/Reinjury Prevention in Alpine Skiing: Training to Protect the Knee Joint. Nakiska Ski Club Ski Coaches Meeting. Calgary, Alberta. (February 6, 2017).
38. Concepts and Methodology for Return to Sport Screening after ACL Injury. The Pittsburgh Penguins Hockey Club. Pittsburgh, Pennsylvania, USA. (February 25, 2016).
39. Assessing Strength Qualities in High Performance Sport. The Olympic Winter Institute of Australia, Sydney, Australia. (November 11, 2015).
40. Strength and Power Training for Elite Sport, Barbados Olympic Committee, Barbados. (October 15, 2014).

GRADUATE TRAINEE SUPERVISION

Current Graduate Students as Primary Supervisor or Co-Supervisor						
Start	End	Name	Degree	Title	Institution	Role
2025	Present	Andrew Nickel	MSc	Characterizing the Multijoint Force-Velocity Relationship: A Comparison of Velocity-load, Velocity-relative load, and Force-velocity Approaches.	University of Calgary	Primary
2025	Present	Shadan Al Saket	MSc	Effects of ACL injury on contralateral limb eccentric strength and rapid force capacity.	University of Calgary	Primary
2025	Present	Patrick Whitman	PhD	Effects of Heavy Strength Training on Bone in Post-Menopausal Women	University of Calgary	Co-Supervisor
2025	Present	Nick Pilichos	MSc	Validity and Development of the PASH Test for Shoulder Strength Assessment in University Athletes	Acadia University	Co-Supervisor
2024	Present	Brandt Haddad	MSc	An Examination of Biological Sex Differences in Residual Force Enhancement	University of Calgary	Primary
2024	Present	Dana Hunter	PhD	Biopsychosocial Factors Influencing Pediatric Knee Injury and Reinjury	University of Calgary	Primary
2024	Present	Landon Foley	MSc	A Comparison in Lower Limb Mechanical Muscle Function between Adolescent Athletes with and without ACL Injury	University of Calgary	Primary
2023	Present	Nathaniel Morris	PhD	A Framework for Return to Play after Hip and Knee Injuries in Ice Hockey Players	University of Calgary	Primary
2022	Present	Zachary McClean	PhD	A Bio-Psycho-Social Framework for Traumatic Knee Injury Prevention in Canadian Collegiate Athletes	University of Calgary	Primary

Past Graduate Students as Primary Supervisor or Co-Supervisor						
Start	End	Name	Degree	Title	Institution	Role
2021	2025	Nathan Boone van Mossel	MSc	Effects of ACL injury on neuromuscular control of stretch shorten cycle movements	University of Calgary	Primary
2023	2025	Gabriella Durant	MSc	The Influence of Compression Garments and Lower Limb Eccentric Strength	University of Calgary	Primary

				Capacity on Running Biomechanics and Soft Tissue Vibrations in Female Athletes		
2022	2024	Julie Walton	MSc	Effects of Estrogen Therapy on Stretch Shorten Cycle and Tendon Function in Pre-Menopausal Female Athletes	University of Calgary	Primary (Co-Sup: Dr. Jared Fletcher)
2022	2024	Madison Landry	MSc	A Study of the Reliability and Validity of the PIVOT App and Effects of Thigh Muscle Co-Activity on the Detection of Knee Instability	University of Calgary	Primary
2020	2023	Matthew Zukowski	MSc	Relationship Between the Functional Force-Velocity Relationship and On-Ice Performance in Elite Sprint Speed Skaters	University of Calgary	Primary
2020	2023	Cassidy di Franca	MSc	Changes in countermovement jump force-time waveform after ACL reconstruction	University of Pretoria	Co-Sup (Primary: Dr. Helen Bayne)
2018	2021	Drew Lawson	MSc	Evaluation of Lower Body Strength and Landing Strategy of Elite Athletes After Anterior Cruciate Ligament Reconstruction with Hamstring Tendon Autograft http://dx.doi.org/10.11575/PRISM/39289	University of Calgary	Co-Sup (Primary: Dr. Walter Herzog)
2017	2020	Nathaniel Morris	MSc	Neuromuscular Deficits Following Anterior Cruciate Ligament Reconstruction with Hamstring Autograft: Implications for Rehabilitation and Return to Sport Testing https://prism.ucalgary.ca/handle/1880/112309	University of Calgary	Co-Sup (Primary: Dr. Walter Herzog)

Graduate Student Supervisory Committee Membership

Start	End	Name	Degree	Title	Institution
2025	Present	Tamar Kritzer	PhD	Return to Play after ACL Injury in Female Basketball Players	Department of Kinesiology, McMaster University
2025	Present	Donald Golden	PhD	Strength Training in Hypermobility Disorder	Medical Science, University of Calgary
2025	Present	Misa Noumi	PhD	Differences in reproductive hormone levels and Achilles tendon stiffness, in young and middle-aged active women.	University of Calgary
2024	Present	Matthias Scheid-Wiltshire	MSc	Examining the Association Between Cervical Muscle Strength and Magnitude of Head Acceleration Events in Youth Wrestlers and Rugby Players	University of Calgary
2024	Present	Kate Sales	PhD	Do sport specific gut microbiota profiles exist?	University of Calgary
2024	Present	Elise Lacoste	PhD	The development of a multi-component mental performance and mental health program for varsity athletes	University of Calgary
2023	Present	Chris Rusling	PhD	MSK injury, illness, SRC, and performance in male professional soccer players from the Canadian Premier League (CPL)	University of Calgary
2024	Present	Haley Truscott	MSc	Tackling injury prevention: Examining the efficacy of a neuromuscular training program in reducing concussion and musculoskeletal injury rates in high school tackle football players	University of Calgary
2024	Present	Adam Bradshaw	MSc	Optimizing hockey skate fit and comfort using a statistical shape model of the foot	Biomedical Engineering University of Calgary
2024	Present	Torri Heiser	MSc	Energy Cost of Force Enhancement and Force Depression in Skinned Rabbit Psoas Muscle Fibres	University of Calgary

2022	Present	Cole Romeo	MSc	Quantifying the relationship between mechanical strain and tendon adaptation in athletes; a longitudinal cohort study	University of Calgary
2022	Present	Reid Vander Vleuten	PhD	Preventing Anterior Cruciate Ligament Injuries in Female Team Sports through In-depth Biomechanical Analyses and Tailored Exercises	University of Calgary

Past Graduate Student Supervisory Committee Membership

Start	End	Name	Degree	Title	Institution
2024	2025	Rachel Ghitter	MSc	Sex differences in knee extension critical power in healthy adults	University of Calgary
2024	2025	Adam Bradshaw	MSc	Optimizing hockey skate fit and comfort using a statistical shape model of the foot	Biomedical Engineering University of Calgary
2023	2025	Esthevan Marchado	PhD	In Vivo and Ex Vivo Hysteresis of Sheep Medial Gastrocnemius and Plantaris Tendons	University of Calgary
2023	2025	Patrick Whitman	MSc	The effect of exercise on muscle mass and strength in peri- and early post-menopausal females	University of Calgary
2023	2023	Ark Banerjee	MKin Advisor	Lower Limb Power in U-Sport Athletes	University of Calgary
2022	2023	Kelleigh Ryan	MKin Advisor	Lower Limb Asymmetries and Mechanical Muscle Function in Canadian Collegiate Athletes with and without Traumatic Knee Injury	University of Calgary
2021	2023	Joshua Cairns	MSc	An Examination of Warm Up Strategies in High School American Football Players	University of Calgary
2021	2023	Angela Senevirathna	MSc	Differences in Kinetic Variables Between Injured and Uninjured Rearfoot Runners: A Hierarchical Cluster Analysis	University of Calgary
2021	2023	Franzi Onasch	PhD	Pushing for Gold on Force Application in Bobsleigh and Cycling	University of Calgary
2019	2023	Aki Matti Allanen	PhD	Using Inertial Measurement Units to Evaluate Change of Direction Movement Patterns in Youth Soccer Players	University of Calgary
2018	2024	Matthew Thome	PhD	Monitoring Adaptations in Elite Sprinters and Hurdlers.	Edith Cowan University, Australia
2018	2023	Daniel Kadlec	PhD	Isolated Assessment of Muscle Strength and Strength Training and Transfer to Sport Skill	Edith Cowan University, Australia
2017	2019	Roger Jaswal	MSc	Adoption of Technology Amongst High Performance Sport Stakeholders	University of Calgary
2018	2019	Sean Causier	MS Advisor		University of British Columbia
2018	2019	Lauren Miutz	MSc	Feasibility, Reliability, and Concurrent Validation of a Field Test of Exertion in High School Students	University of Calgary
2017	2018	Kayla Kashluba	MSc	An Intervention Program Designed to Improve Balance and Power Acquisition in U14 Alpine Ski Racers	University of Calgary
2017	2018	Doug Brown	MS Advisor		University of British Columbia
2016	2016	Adam Wasylyshyn	MKin Advisor	Validation and Reliability of a Lower Body Isometric Dynamometer	University of Calgary

UNDERGRADUATE TRAINEE SUPERVISION

Current and Past Undergraduate Student Supervision					
Start	End	Name	Degree	Title	Institution
2025	2025	Makenna Lebsack	Summer Student	Hip Muscle Strength in Ice Hockey Players (PURE Award, \$7500)	University of Calgary
2025	2025	Riley Kennedy	Summer Student	Force Velocity Mechanics in Male and Female University Athletes (PURE Award, \$7500)	University of Calgary
2025	2025	Finn Frankowski	Summer Student	Bodybuilding as Gender Affirming Care (Alberta Innovates Summer Studentship)	University of Calgary
2024	2024	Shadan Al-Saket	Summer Student	Single Leg Vertical Jump Force-Time Analysis with Statistical Parametric Mapping: A Comparison of ACL Injured and Non-Injured Limbs (RR Singleton Award, \$7500)	University of Calgary
2024	2025	Shadan Al-Saket	BSc Honours	Single Leg Vertical Jump Force-Time Analysis with Statistical Parametric Mapping: A Comparison of ACL Injured and Non-Injured Limbs	University of Calgary
2024	2025	Anoush Rehmani	BSc Honours	Effects of Burst and Maximal Voluntary Contraction Isometric Knee Extension on Quadriceps Muscle Activity	University of Calgary
2023	2024	Andrew Nickel	BSc Honours	Reliability of a Robotic and Burst Contraction Strength Method	University of Calgary
2023	2024	Melissa Lee	BSc Honours	Examination of In-Season Change in Inter-Limb Asymmetries in Female Field Hockey Players	University of Calgary
2023	2024	Mark McKenzie	BSc Honours	Evaluation of an Isometric Shoulder Strength Test in University Swimmers: Reliability and Benchmarks in Swimmers with and Without Shoulder Injury	University of Calgary
2023	2023	Mark McKenzie	Summer Student	Force Velocity Assessments in ACL Injured Varsity Athletes	University of Calgary
2022	2023	Landon Foley	BSc Honours	A Description of the Reliability of Two Vertical Jump Force Velocity Relationship Methods	University of Calgary
2022	2023	Daniel Gutierrez	BSc Honours	Effects of Cueing on the Neuromuscular Control Strategy and Stretch Shorten Cycle Kinetics During Repeat Cyclic Hopping: A Pilot Study	University of Calgary
2022	2023	Mac Horwood	BSc Honours	Lower Limb Asymmetries and Mechanical Muscle Function in Canadian Collegiate Tackle Football Players with and without Traumatic Knee Injury	University of Calgary
2018	2019	John Choi	BSc Honours Co-Sup	The Relationship Between Internal Workload and Lower Extremity Injury in Canadian Youth Basketball Players	University of Calgary
2016	2017	Nathaniel Morris	Intern	Reliability of Isometric Leg Extension Rate of Force Development Testing	Canadian Sport Institute Calgary
2016	2017	Michael Christie	BSc Honours Co-Sup	Effects of Hamstrings Tendon Autograft on the Knee Flexor Strength Curve	University of Calgary
2015	2016	Sean Wallace	BSc Honours Co-Sup	Heart Rate Variability Monitoring in a Female Elite Alpine Ski Racer	University of Calgary
2012	2013	Kerri McGowan	Summer Student	Automated Analysis of the Vertical Ground Reaction Force in Jumping	University of Calgary
2004	2005	Kelsey Andries	BSc Honours Co-Sup	Validation of the Muscle Lab Force Plate	University of Calgary

STUDENT FUNDING AND AWARDS

Student	Degree	Award	Amount	Year
Dana Hunter	PhD	Lloyd and Florence Cooper Doctoral Scholarship in Mind-Body Connection in Health	\$25000	2025
		Alberta Graduate Excellence Scholarship	\$15000	2025
Zach McClean	PhD	Alberta Graduate Excellence Scholarship	\$15000	2023
		John William Cooke Scholarship	\$2000	2023
		Kinesiology Graduate Leadership Scholarship	\$5000	2022
		Graduate Student Association Professional Development Award	\$1250	2022
		Kinesiology Presentation Award	\$1200	2022
		Faculty of Graduate Studies Doctoral Scholarship	\$15000	2024
		Dinos Excellence Research Award	\$88000	2022
		NSERC Doctoral Scholarship	\$100,000	2024
		Alberta Innovates Health Solutions Doctoral Award	\$24,000	2024-2025
Landon Foley	MSc	CIHR Master Award	\$26,000	2025
Makenna Lesback	Honors	PURE Summer Studentship Award	\$7500	2025
Riley Kennedy	Honors	PURE Summer Studentship Award	\$7500	2025
Shadan Al Saket	Honors	Student Union Undergraduate Research Award		2024
		McCaig RR Singleton Summer Studentship Award	\$7500	2024
Matt Zukowski	MSc	CSI Calgary Student Award	\$40000	2021
Nathan Boon	MSc	Alberta Graduate Excellence Scholarship	\$5000	2022
		Alberta Graduate Excellence Scholarship	\$3000	2022
		Canadian Chiropractic Research Grant	\$8000	2022
		Royal Chiropractic College of Sports Sciences Conference Award	\$1000	2024
Madison Landry	MSc	Sport Medicine Research Fellowship	\$40000	2022-2024
		Alberta Graduate Excellence Scholarship	\$11000	2024
		Alberta Graduate Excellence Scholarship	\$11000	2019
Gabriella Durante	MSc	MITACS Accelerate	\$40000	2023
		Alberta Graduate Excellence Scholarship	\$10000	2023
		NSERC Master Scholarship	\$17500	2024
Nate Morris	PhD	Alberta Graduate Excellence Scholarship	\$11000	2023
		Alberta Talent Transformation Award	\$8000	2019
		UCalgary Presentation Award	\$1000	2019
		UCalgary Kinesiology Merit Award	\$3000	2018
		CSI Calgary Student Award	\$14000	2019
		OTP Sport Science Scholarship	\$12000	2018
		University of Calgary Graduate Studies Scholarship	\$5000	2024
Julie Walton	MSc	Alberta Graduate Excellence Scholarship	\$11000	2023
		Canadian Society of Biomechanics New Investigator Award		2024
		American College of Sport Medicine, Joseph Hamill Access to Science Award		2024
		Alberta Graduate Excellence Scholarship	\$15,000	2024

Drew Lawson	MSc	Alberta Talent Transformation Award	\$8000	2019
		Alberta Graduate Excellence Scholarship	\$5000	2019
		CSI Calgary Student Award	\$40000	2019
		Alberta Graduate Excellence Scholarship	\$11000	2019

ACADEMIC SERVICE

Participation in Thesis Defences and Candidacies

Date	Name	Exam	Role	Institution
2025-08-20	Leah Kaluta	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2025-08-14	Rachel Ghitler	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2025-08-13	Adam Bradshaw	MSc Defence	Committee Member	Biomed. Engineering, University of Calgary
2025-06-17	Dana Lowry	PhD Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2025-05-21	Esthevan Machado	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2025-04-14	Patrick Whitman	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2025-04-02	Brooklyn Wiggins	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2025-02-18	Reid van Der Vleuten	PhD Candidacy	Committee Member	Faculty of Kinesiology, University of Calgary
2024-10-02	Elise Lacoste	PhD Candidacy	Committee Member	Faculty of Kinesiology, University of Calgary
2024-10-02	Chris Rusling	PhD Candidacy	Committee Member	Faculty of Kinesiology, University of Calgary
2024-09-20	Amy Parker	PhD Defence	Viva Examiner	Nottingham Trent University, United Kingdom
2024-08-08	Brynn Lindstrom	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2024-06-10	Devon Stuart	MSc Defence	Neutral Chair	Neuroscience, University of Calgary
2024-06-07	Brooke Dennett	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2024-01-20	Parker Scott	MSc Defence	External Examiner	University of Saskatchewan
2023-11-28	Timi Ajayi	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2023-10-09	Luca Maestroni	PhD Defence	Viva Examiner	Middlesex University, United Kingdom
2023-09-08	Allison Caswell	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2023-09-06	Reyna Crawford	MSc Defence	Internal Examiner	Faculty of Kinesiology, University of Calgary
2023-08-14	Joshua Cairns	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2023-06-26	Franzi Onasch	PhD Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2023-06-13	Eric Golberg	PhD Candidacy	External Examiner	University of Alberta
2023-06-13	Bryce Twible	MSc Defence	External Examiner	University of Alberta
2023-06-08	Joshua Keough	MSc Defence	External Examiner	McMaster University
2023-05-17	Jenny Zhang	PhD Candidacy	Internal Examiner	Faculty of Kinesiology, University of Calgary
2023-05-03	Aki Matti Alanen	PhD Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2023-04-12	Olivia Bruce	PhD Defence	Internal Examiner	Biomedical Engineering, University of Calgary
2022-08-30	Angela Senevirathna	MSc Defence	Committee Member	Biomedical Engineering, University of Calgary
2022-06-19	Lauren Miutz	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2022-07-20	Rachel McDougall	MSc Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2022-05-30	Lauren Miutz	PhD Defence	Neutral Chair	Faculty of Kinesiology, University of Calgary
2022-12-17	Roger Jaswal	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary
2021-01-18	Matt Thome	PhD Defence	Committee Member	Edith Cowan University
2020-06-23	Valeria Volkova	PhD Candidacy	Internal Examiner	Faculty of Kinesiology, University of Calgary
2019-12-18	Franzi Onasch	PhD Candidacy	Committee Member	Faculty of Kinesiology, University of Calgary
2019-01-18	Matt Thome	PhD Candidacy	Committee Member	Edith Cowan University
2019-10-30	Dan Kadlec	PhD Defence	Committee Member	Edith Cowan University
2018-10-30	Dan Kadlec	PhD Candidacy	Committee Member	Edith Cowan University
2018-06-12	Kayla Kashluba	MSc Defence	Committee Member	Faculty of Kinesiology, University of Calgary

Guest Lectures University of Calgary

2025-08-26 New Academic Welcome Event Panelist. Foundations for Success: Insights for New Faculty at UCalgary

- 2025-08-25 What can we learn from elite athletes when it comes to getting back to things we love after injury? Exercise is better than medicine, but progression is everything. McCaig Institute for Bone and Joint Health. Science on Tap – A Community Knowledge Translation Presentation.
- 2018-Present Annual Guest Lecturer, Training Load Monitoring and Injury Prevention, KNES 377. Instructor: Dr. Kati Pasanen
- 2022-2023 Annual Guest Lecturer, Resistance Training Testing and Programming, KNES 605. Instructor: Dr. John Holash
- 2022 Guest Lecture, Resistance Training Testing and Programming. KNES 600. Instructor: Dr. Martin MacInnis
- 2022 Presenter, University of Calgary Kinesiology Student's Association Career Meeting
- 2018-2021 Annual Guest Lecturer, Resistance Training Testing and Programming. KNES 600. Instructor: Dr. Louis Passfield
- 2019 Presenter, University of Calgary Kinesiology Student's Association Career Meeting

University of Calgary Committees

- 2025-2026 Faculty of Kinesiology Research Committee, University of Calgary
- 2025-2026 Graduate Awards Competition Committee, University of Calgary
- 2024-2025 University Appeals Committee, University of Calgary
- 2024-2025 Mental Health Committee, University of Calgary
- 2023-2024 Academic Appeals Committee, Faculty of Kinesiology, University of Calgary
- 2022-2024 Active Living Advisory Committee, Faculty of Kinesiology, University of Calgary, Faculty Representative
- 2022-Present Conjoint Health and Research Ethics Board Review Board, University of Calgary, Ethics Reviewer
- 2021-Present University of Calgary Dinos Athlete Sport Science Integrated Support Team (ASSIST) Committee

Grant and Scholarship Review Committees

- 2025 Faculty of Kinesiology Summer Studentship Reviewer, University of Calgary
- 2024 Graduate Awards Competition Reviewer, Graduate Studies, University of Calgary
- 2023 Faculty of Kinesiology Summer Studentship Reviewer, University of Calgary
- 2022 Graduate Awards Competition Reviewer, Graduate Studies, University of Calgary
- 2021 Faculty of Kinesiology Scholarship Working Group, University of Calgary

Conference Organization and Chairing

- 2025 From Data to Discovery, Dinos Athlete Sport Science Integrated Support Team Workshop, Calgary, Alberta
- 2025 Elite Basketball Rehab Scientific Congress, University of Las Vegas, Las Vegas, Nevada
- 2024 Elite Basketball Rehab Scientific Congress, University of Las Vegas, Las Vegas, Nevada
- 2024 From Data to Discovery, Dinos Athlete Sport Science Integrated Support Team Workshop, Calgary, Alberta
- 2021 Committee Chair, Sport Performance Innovation Summit, Own the Podium, Calgary, Alberta, (National Conference)

- 2019 Return to Sport Task Force Conference, Canadian Sport Institute Calgary/Own the Podium, Calgary, Alberta (National Conference)
- 2018 Return to Sport Task Force Workshop, Canadian Sport Institute Calgary/Own the Podium, Calgary, Alberta (National Workshop)
- 2016 Organizing Committee, Sport Performance Innovation Summit, Own the Podium, Calgary, Alberta (National Conference)
- 2012 Committee Chair, University of Calgary High Performance Strength & Conditioning Conference, Calgary, Alberta

Conference Abstract Review Committee

- 2023 Abstract Review Committee, XXIV International Society of Biomechanics Conference, Fukoka, Japan
- 2019 Abstract Review Committee, XV International Society of Biomechanics Conference, Calgary, Alberta

Journal Article Reviews

Total peer reviewed scientific article reviews: n=35; currently review 3-5 articles per year

- 2021-Present Review Editor for Elite Sports and Performance Enhancement, Frontiers in Sports and Active Living
- 2018-Present Review Editor for Biomechanics and Control of Human Movement, Frontiers in Sports and Active Living

HIGHLIGHTS OF PERFORMANCE CONSULTATIONS FOR SPORT AND HUMAN PERFORMANCE ORGANIZATIONS



LAY ARTICLES, PODCASTS AND MEDIA

Articles

The 80 second repeated squat jump test. Vald Practitioner's Guide to ACL (2024):

<https://resources.valdperformance.com/practitioners-guide-to-acl>

Top three force plate metrics and what are they telling us: A view of 6 experts. Dan Cohen, Eric Leidersdorf, Phil Graham-Smith, Paul Read, Chris Bishop, Matt Jordan. Sportsmith: <https://www.sportsmith.co/articles/top-three-force-plate-metrics-and-what-are-they-telling-us-a-view-of-6-experts/>

Strength Training for Life: How Muscle Strength and Power Directly Affect our Functionality and Longevity. Impact Magazine (2024): <https://impactmagazine.ca/health/strength-training-for-life/>

Going skiing? These exercises can prevent season-ending injuries. Washington Post (2024):

<https://www.washingtonpost.com/travel/tips/ski-injury-prevention-acl/>

For a ski season without injury, start training early. New York Times (2023):

https://www.nytimes.com/2023/10/26/well/move/skiing-injuries-workouts.html?unlocked_article_code=1.80w.xjJP.UHlmg03G016d&smid=nytcore-ios-share&referringSource=articleShare

Jordan M (2023). Selecting the right metrics for vertical jump testing. Sportsmith:

<https://www.sportsmith.co/articles/selecting-the-right-metrics-for-vertical-jump-testing/>

Jordan M (2022). Modern pillars of strength, assessment and training. Simplifaster:

<https://simplifaster.com/articles/periodization-assessment-models-matt-jordan/>

Jordan M (2021). Deciphering, understanding and optimizing athlete movement efficiency. Sportsmith:

<https://www.sportsmith.co/articles/deciphering-understanding-and-optimising-athlete-movement-efficiency/>

Jordan M (2021). What's in your shoe? Simplifaster: <https://simplifaster.com/articles/plantigas-ai-powered-wearable-insole/>

Jordan M (2021). Sport science; what is the point? Altis: <https://altis.world/articles/sport-science-what-is-the-point/>

Jordan M (Winter, 2016). Preparatory Quadriceps/Hamstrings Activity in Elite Skiers: Time to Train for Fatigue? High Performance SIRCuit. http://sirc.ca/resources/sircuit/high-performance_pp5-7.

Jordan M (2015). Tips from the top. Interviews with leading strength S&C coaches. Journal of Australian Strength and Conditioning. 23(3). pp. 55-57.

Jordan M. (2012). Long May You Reign. Impact Magazine. (July/August). pp. 26-28.

Jordan M (2010). Maximal Power Output: Training and Design Variables for Performance Enhancement. High Performance SIRCuit. 1(1). <http://sirc.ca/hpsircuit/>

Jordan M (2007). The Pull Up. Kickstart Magazine. (Winter). p. 17.

Jordan M (2006). Recovery and Regeneration Strategies. Kickstart Magazine. (Fall). pp. 17-18.

Jordan M (2006). Shoulder Savers. Kickstart Magazine. (Summer). pp. 17-18.

Jordan M (2006). The Planning and Organization of Strength Training into the Training Plan Part 2. Kickstart Magazine. (Spring). pp. 17-18.

Jordan M. (2006). The Planning and Organization of Strength Training into the Training Program. Kickstart Magazine. (Winter). pp. 18-19.

Jordan M (2006). Specificity in Strength Training. Impact Magazine.

Jordan M (2005). Eccentric Training Methods. Kickstart Magazine. (Winter). p. 13.

Jordan M (2005). Core Stability Part II. Kickstart Magazine. (Fall). p. 13

Jordan M (2005). Core Stability Part 1. Kickstart Magazine. (Summer). p. 12-13.

Jordan M (2005). Contrast loading: Its role in the development of power for the martial artist. Kickstart Magazine. (Winter). pp. 16-17.

Jordan M (2004). Hormonal training: A novel strength training method to affect body composition. Kickstart Magazine. (Winter Issue). pp. 12-13.

Jordan M. (2004). Strength training for the martial arts: Alternatives to the squat. Kickstart Magazine. (Fall Issue). pp. 14-15

Jordan M. (2004). Strength training for the martial arts: Part II, developing muscle hypertrophy. Kickstart Magazine. (Summer Issue). pp. 12-14.

Jordan, M. (2004). Strength training for the martial arts: Part 1, dispelling the myths. Kickstart Magazine. (Spring Issue). pp. 11-13.

Jordan M. (2004). Facts on flexibility. Family Health. (Spring Issue). pp 4-6.

Jordan M (2002). Effects of Strength Training on Speed Skating. Speed Skating Times.

Jordan MJ, Maw, S., Poole, J. (2001). Development of Leg Power. Coach's Report. 8(2).

Podcasts, Media and Interviews

A Clean Sheet: The Gabe Landeskog Story, 2025-07-23: <https://www.freshtapemedia.com/portfolio/a-clean-sheet>

Move the Needle Human Performance Podcast, 2025-06-10. Dr. Matt Jordan: Jumping, Braking & Application: <https://podcasts.apple.com/ca/podcast/dr-matt-jordan-jumping-breaking-application/id1695907028?i=1000711127526>

Your Body's Way Podcast, 2025-05-07. A strength training masterclass for women with Matt Jordan: <https://podcasts.apple.com/ca/podcast/your-bodys-way/id1643539342?i=1000706766609>

VALDCAST, 2025-04-02. Matt Jordan – Embracing science. From asymmetries and squats to strength & conditioning: <https://podcasts.apple.com/ca/podcast/matt-jordan-embracing-science-from-asymmetries-and/id1799485938?i=1000701951410>

Performance Talk Podcast, 2024-12-30. End of 2024 Performance Influencers Roundtable: <https://podcasts.apple.com/ca/podcast/end-of-2024-performance-influencers-roundtable/id1794126495?i=1000688545038>

Leave Your Mark Episode 400, 2024-12-03. Stories of high performance with me, Jer Sheppard and Matt Jordan: <https://podcasts.apple.com/ca/podcast/leave-your-mark/id1367473181?i=1000679064407>

The High Performance Hockey Podcast, 2024-06-03. What Matters with Stu McMillan and Dr. Matt Jordan: <https://podcasts.apple.com/ca/podcast/what-matters-with-stu-mcmillan-and-dr-matt-jordan/id1602770320?i=1000657633278>

Performance Talk Podcast, 2024-01-01, Performance Influencers: <https://podcasts.apple.com/ca/podcast/performance-round-table-influencers/id1454514628?i=1000639808192>

Power Athlete Podcast, 2023-12-10, Deep Dive into Peak Performance: <https://powerathlethq.com/ep-739-deep-dive-into-peak-performance/>

University of Calgary Today, 2023-08-04, Dinos Athletics helps researchers get a leg up on traumatic knee injuries:
<https://ucalgary.ca/news/dinos-athletics-helps-researchers-get-leg-traumatic-knee-injuries>

Training Science Podcast, 2023-06-15, Everything You Need to Know about Strength Training:
<https://podcasts.apple.com/ca/podcast/everything-about-strength-power-training-does-not-need/id1605691990?i=1000617184028>

The High Performance Hockey Podcast, 2022-08-15, Thinking like a Scientist, Return to Play and Mentorship, with Dr. Matt Jordan: <https://podcasts.apple.com/ca/podcast/thinking-like-a-scientist-mentorship-and-return-to/id1602770320?i=1000576099112>

Performance Talk Podcast, 2022-10-24, <https://podcasts.apple.com/ca/podcast/episode-88-matt-jordan/id1454514628?i=1000583679787>

Speed and Power Podcast, 2022-02-09, Addressing Movement Asymmetry, Strength Reserve and Movement Economy:
<https://podcasts.apple.com/ca/podcast/dr-matt-jordan-addressing-movement-asymmetries-strength/id1527568824?i=1000550546249>

Just Fly Performance Podcast Episode #202, 2022-01-20, Matt Jordan on Bringing Clarity to a Complex World of Data in Training and Sport Science: <https://www.just-fly-sports.com/podcast-202-matt-jordan/>

Pacey Performance Podcast, 2021-12-09, Deciphering, understanding and optimizing athlete movement efficiency:
<https://www.sportsmith.co/listen/deciphering-understanding-and-optimising-athlete-movement-efficiency/>

Evel Chat Podcast, 2021-06-18, Cells See Signals a Chat with Dr. Matt Jordan:
<https://podcasts.apple.com/ca/podcast/evelchat-16-cells-see-signals-a-chat-with-dr-matt-jordan-phd/id1545196068?i=1000526075801>

The Smart Athlete Podcast Episode #69, 2021-01-28, Measure, Motivate, Mastery:
<https://www.youtube.com/watch?v=hO8wquFKjc>

Leave Your Mark Podcast, 2020-10-06, A Performance Conversation with Dr. Matt Jordan:
<https://podcasts.apple.com/ca/podcast/a-performance-conversation-with-dr-matt-jordan/id1367473181?i=1000493875409>

Physical Preparation Podcast, 2020-08-21, Dr. Matt Jordan on the Science and Practice of ACL Rehab:
<https://podcasts.apple.com/ca/podcast/dr-matt-jordan-on-the-science-and-practice-of-acl-rehab/id1011924486?i=1000488815368>

Performance Talk Podcast Episode #36, 2020-05-18: <https://performancetalk.captivate.fm/episode/episode-36-2020-matt-jordan>

Lee Taft Performance Podcast, 2020-04-14, Using Science with Coaching with Dr. Matt Jordan:
<https://podcasts.apple.com/ca/podcast/thinking-like-a-scientist-mentorship-and-return-to/id1602770320?i=1000576099112>

Inform Performance Podcast, 2020-03-20, Force velocity Individualisation & changing post-Injury movement patterns :
<https://informperformance.podbean.com/e/matt-jordan-director-of-sports-science-at-the-canadian-sports-institute-calgary/>

Pacey Performance Podcast, 2020-03-12: <https://www.strengthofscience.com/pacey-performance-podcast/pacey-performance-podcast-283-matt-jordan/>

Jer Red Podcast, 2019-05-04: Dr. Matt Jordan on Injury, Science vs. Experience, and Higher-Level Thinking:
<https://podcasts.apple.com/ca/podcast/dr-matt-jordan-on-injury-science-vs-experience-and/id955319545?i=1000431028981>

End of Three Fitness Podcast, 2019-05-15: <https://www.endofthreefitness.com/matt-jordan/>

Leave Your Mark Podcast, 2018-08-20: <https://media2.cdn.shoutengine.com/podcasts/b869c046-f69a-48f9-97a6-e408579fcdab/audio/30bfcca7-3feb-45b5-86cc-41ec2dcd9629.mp3>

Art of Coaching Podcast, 2018-12-16: Walking the Line of Being a Prestenter, Research and Coach: <https://podcasts.apple.com/ca/podcast/e7-dr-matt-jordan-walking-the-line-of-being/id1438273764?i=1000451236569>

Global Calgary. Learning About the Olympics, 2018-02-23: <https://globalnews.ca/video/4043756/learn-more-about-the-new-alpine-team-event-at-the-pyeongchang-olympics>

CBC Radio One. The Science of Making an Olympian, 2018-02-18: <http://www.cbc.ca/news/technology/science-of-making-an-olympian-1.4525053>

University of Calgary Today, 2018-02-12: <https://www.ucalgary.ca/utoday/issue/2018-02-15/dozens-athletes-have-matt-jordan-thank-their-olympic-success>

Return to Play on the Road to Pyeong Chang, 2018-02-12: <https://globalnews.ca/video/4020382/speed-skater-denny-morrison-road-to-the-pyeongchang-olympics>

Hmmr Media. Science of Speed with Matt Jordan, October 12, 2015: <http://www.hmmrmedia.com/2015/10/hmmr-podcast-episode-19-science-of-speed-with-matt-jordan/#>

Pacey Performance Podcast #46, 2015-08-12: <http://www.paceyperformance.co.uk/podcast/pacey-performance-podcast-46-matt-jordan/>

Sports Coach Radio. S&C Strength and Power Coach Matt Jordan: Injury Free Explosiveness, October 14, 2014: <http://sportscoachradio.com/sc-strength-power-coach-matt-jordan-injury-free-explosiveness/>

Sochi Bound Trainer Has High Hopes for Team Canada, Utoday, University of Calgary, January 29, 2014: <http://www.ucalgary.ca/utoday/issue/2014-01-29/sochi-bound-trainer-has-high-hopes-team-canada>

Athletes on Edge. CTV Sports, Calgary, December, 2013: <http://calgary.ctvnews.ca/video?clipId=267446>

Fitness Fanatics – Global Sports, Kelowna, July 26, 2013: <http://globalnews.ca/video/745217/fantastic-fitness-fanatics>

Training for Elite Alpine Skiers. Global Sports, Calgary, July 2013: <http://globalnews.ca/video/641172/alpine-skiers-x-training-regimen>

Nick Ring – Walking the Walk. November 2012: <http://www.ufc.ca/news/Nick-Ring-Walking-the-Walk>.

Vibrer pour se muscler. La Presse. October 2011: <http://www.cyberpresse.ca/vivre/sante/201110/20/01-4459063-vibrer-pour-se-muscler.php>.

In-Your-Face Fitness: How to build come-hither biceps. Special to the Los Angeles Times, Los Angeles Times, September 19, 2011: <http://articles.latimes.com/2011/sep/19/health/la-he-fitness-biceps-20110919>.

Ottawa Steps Up to the Podium with Sports Cash. Calgary Herald, Calgary, March 5, 2010, <http://www2.canada.com/calgaryherald/news/story.html?id=0d93eaba-2f87-4683-941c-d85215386e6b&p=1>

Training Like an Olympian. Avenue Magazine. February 2010.

Exercises to Keep the Athlete's Body in Balance. Canadian Broadcasting Corporation (CBC). 2008-12-02.

Toning machines may not give good vibrations, experts warn. Canadian Broadcasting Corporation (CBC). 2007-01-17: <http://www.cbc.ca/news/story/2007/01/17/vibration-machines.html>).