

#### **BIOGRAPHY**

Dr. Matt Jordan has been a performance scientist working with elite athletes over six Olympic Winter Games. Matt holds a Master of Science in Exercise and Neuromuscular Physiology, and a PhD in Medical Science. His research focuses on neuromuscular adaptations to resistance training and knee injury/re-injury prevention. A key method in his research is the development of neuromuscular testing techniques that can be used to monitor recovery after knee injuries to forecast recovery and improve rehabilitation.

Matt's area of expertise is the interface between applied sport science and human performance with a special interest in exercise prescription, neuromuscular adaptations to strength and power training, and athlete monitoring. Matt is currently the Director of Sport Science at the Canadian Sport Institute Calgary (CSIC). He provides technical mentorship and leadership to a multi-disciplinary team of high-performance sport science and sport medicine practitioners and directs a research program out of the CSIC Strength and Power Laboratory. Matt is an Assistant Professor in the Faculty of Kinesiology at the University of Calgary and an Adjunct Professor at Edith Cowan University in Perth, Australia. He is a frequent presenter at international conferences in the areas of injury prevention, athlete monitoring, training program design for elite athletes, and strength and power testing methodologies. Additionally, Matt has been a consultant to numerous professional sport teams and organizations, military special operation forces, tech start-ups and tech companies.



#### **ACADEMIC CREDENTIALS**

PhD, Medical Science, Specialization in Joint Injury and Arthritis University of Calgary/University of Southern Denmark

Master of Science in Exercise and Muscle Physiology University of Calgary

**Bachelor of Kinesiology** University of Calgary

### **EXECUTIVE LEADERSHIP AND BUSINESS TRAINING**

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

### **CURRENT PROFESSIONAL ACTIVITIES**

2021-Present Assistant Professor, Faculty of Kinesiology, Sport Medicine Centre

University of Calgary, Calgary, Canada

2014-Present Director, Sport Science

Canadian Sport Institute Calgary, Calgary, Alberta

2020-Present Adjunct Professor, School of Medical and Health Sciences

Edith Cowan University, Perth, Australia

2000-Present Owner, Jordan Strength Performance Consulting

Calgary, Alberta (www.jordanstrength.com)

2016-Present Scientific Advisor, Plantiga, Vancouver, British Columbia

2016-Present Scientific Advisor, Noraxon, Scottsdale, Arizona

### **RECENT PROFESSIONAL ACTIVITIES**

2017-Present Sport Science Advisor, Alpine Canada, Calgary, Alberta

2017-2021 Adjunct Professor, Faculty of Kinesiology, University of Calgary

2014-2019 Director, Sport Science/Sport Medicine/Physical Preparation, Alpine

Canada Alpin, Calgary, Alberta

2010-2014 Head of Sport Science/Strength & Conditioning, Canadian Alpine Ski

Team (Women's Program), Calgary, Alberta

2000-2014 Strength & Conditioning Coach/Sport Physiologist, Canadian Sport

Institute Calgary, Calgary, Alberta





**Applied Sport Science** 



**Injury Prevention** 

Generating Performance Solutions for Athletes, Coaches, Sports Medicine Professionals, and Sports Organizations

#### LEADERSHIP ACTIVITIES

2020 Conference Co-Organizer, Sport Innovation Summit, Calgary, Canada

2019-Present National Return to Health & Performance Task Force, Calgary, Canada

2019-2020 Scientific Board of Directors, National Academy of Sports Medicine, Phoenix, Arizona

2018-Present Scientific Board of Directors, ALTIS Living Lab, 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

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

2012-Present Total Research and Scholarship Funding Received = \$346,720

(Doctoral Research Funding: Killam Doctoral Scholarship, Alberta Innovates Health Solutions Scholarship, University of Calgary Eyes High Scholarship; Academic Research Funding Received by Students: Own the

Podium Canadian Applied Sport Science Scholarship, MITACS)

2020- CIHR Grant, Real-Time Monitoring of Change of Direction Biomechanics to Prevent Injuries in Youth Soccer,

Faculty of Kinesiology, University of Calgary, Calgary, Canada (Co-Investigator, In Preparation)

2020- Mitacs Grant, Performance-based Sport Concussion and Traumatic Lower Body Injury Prevention Program,

Canadian Sport Institute Calgary/University of Calgary, Calgary, Canada (Co-Investigator, Under Revision)

2020-2021 Mitacs Grant, 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 (Co-Primary Investigator, Accepted)

### **EDITORIAL SERVICES**

2018-Present Review Editor for Elite Sports and Performance Enhancement, Frontiers in Sports and Active Living

### **CURRENT/PAST STUDENT SUPERVISION**

2021-Present Mr. Nathan Boone (Master of Science Candidate, Supervisor, Expected Graduation September 2023). Effects

of ACL injury on neuromuscular control of stretch shorten cycle movements. University of Calgary.

2021-Present	Mr. Daryl Chambers (Master of Science Candidate, Supervisor, Expected Graduation September 2023). University of Calgary.
2020-Present	Ms. Cassidy di Franca (Master of Science Candidate, Co-Supervisor, Expected Graduation June 2023). Changes in countermovement jump force-time waveform after ACL reconstruction. University of Pretoria.
2020-Present	Ms. Isabel Aldrich-Witt (Master of Science Candidate, Co-Supervisor, Expected Graduation June 2022). 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. University of Calgary.
2020-Present	Mr. Matthew Zukowski (Master of Science Candidate, Co-Supervisor, Expected Graduation June 2022). Relationship Between the Functional Force-Velocity Relationship and On-Ice Performance in Elite Sprint Speed Skaters. University of Calgary.
2019-Present	Mr. Aki Matti (PhD Student, Supervisory Committee, Expected Graduation June 2022). <b>Using Inertial Measurement Units to Evaluate Change of Direction Movement Patterns in Youth Soccer Players.</b> University of Calgary.
2018-Present	Mr. Matt Thome (PhD Student, Supervisory Committee, Expected Graduation June 2022). <b>Monitoring Adaptations in Elite Sprinters and Hurdlers.</b> Edith Cowan University.
2018-Present	Mr. Daniel Kadlec (PhD Student, Supervisory Committee, Expected Graduation June 2022). <b>Isolated Assessment of Muscle Strength and Strength Training and Transfer to Sport Skill.</b> Edith Cowan University.
2018-Present	Mr. Drew Lawson (Master of Science Candidate, Co-Supervisor). <b>Relationship Between Lower Limb Strength, Hip Muscle Strength and Landing Ability in ACL Reconstructed Slope Sport Athletes.</b> University of Calgary.
2018-Present	Mr. Marko Haverinen (PhD Student, Supervisory Committee, Expected Graduation September 2022). <b>Training Load and Injuries in Finnish Ice Hockey Players.</b>
2020	Mr. Nate Morris (Master of Science, Co-Supervisor). <b>Effects of Hamstring vs. Patellar Tendon Autograft on the Biomechanics of Quadriceps/Hamstring Strength.</b> University of Calgary.
2019	Mr. Roger Jaswal (Master of Science, Supervisory Committee). <b>Adoption of Technology Amongst High Performance Sport Stakeholders.</b> University of Calgary.
2019	Sean Causier (Master of Coaching). Student Advisor and Mentor. University of British Columbia.
2017-Present	Ms. Carlyn Stilling (Master of Science Candidate, Supervisory Committee, Ongoing). <b>Relationship Between Jump Load, Internal Load, and Patellar Tendinopathy in High School Basketball Players.</b> University of Calgary.
2019	Ms. Lauren Miutz (Master of Science, Supervisory Committee, Graduated June 2019). <b>Feasibility, Reliability, and Concurrent Validation of a Field Test of Exertion in High School Students.</b> University of Calgary.
2018	Ms. Kayla Kashluba (Master of Science, Supervisory Committee, Graduated June 2018). <b>An Intervention Program Designed to Improve Balance and Power Acquisition in U14 Alpine Ski Racers.</b> University of Calgary.

2018	Mr. John Choi (Undergraduate Honours Project, Supervisory Committee, Completed June 2018). <b>The Relationship Between Internal Workload and Lower Extremity Injury in Canadian Youth Basketball Players.</b> University of Calgary.
2018	Doug Brown (Master of Coaching). Student Advisor and Mentor. University of British Columbia.
2016	Mr. Nate Morris (Intern, Canadian Sport Institute Calgary). <b>Reliability of Isometric Leg Extension Rate of Force Development Testing.</b> Canadian Sport Institute Calgary.
2016	Mr. Adam Wasylyshyn (Master of Kinesiology, Research Project Co-Supervisor). <b>Validation and Reliability of a Lower Body Isometric Dynamometer.</b> University of Calgary.
2015	Mr. Sean Wallace (Undergraduate Honours Student, Co-Supervisor). <b>Heart Rate Variability Monitoring in a Female Elite Alpine Ski Racer.</b> University of Calgary.
2016	Mr. Michael Christie (Undergraduate Honours Student, Co-Supervisor). <b>Effects of Hamstrings Tendon Autograft on the Knee Flexor Strength Curve.</b> University of Calgary.
2012	Ms. Kerri McGowan (Undergraduate Honours Student, Co-Supervisor). <b>Automated Analysis of the Vertical Ground Reaction Force in Jumping.</b> University of Calgary.
2004	Ms. Kelsey Andries (Undergraduate Honours Student, Co-Supervisor). <b>Validation of the Muscle Lab Force Plate.</b> University of Calgary.

### RESEARCH COLLABORATIONS

2020-Present	Application of Vertical Jump Interlimb Force-Time Asymmetries for Baseline Testing, United States Olympic Performance Centre, Colorado Springs, Colorado
2019-2020	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

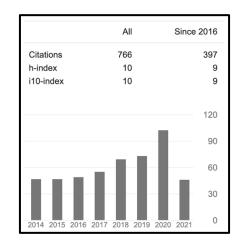
### PUBLISHED BOOK CHAPTERS

Jordan, M. Enhancing Movement Efficiency in Sport. In: High Performance Training for Sports 2<sup>nd</sup> edition. Human Kinetics: Champaign, Illinois.

Jordan, M. Resistance Training for Sport Performance. In: National Academy of Sports Medicine 2<sup>nd</sup> edition. (In Press).

#### GOOGLE SCHOLAR CITATIONS AS OF 2021-04-07

Citations 766 h-index 10 i10-index 10



### PEER REVIEWED PUBLICATIONS

27 Published; 3 Under Review; 3 In Preparation

- 1. Bishop C, Jordan M. An assessment of hopping strategy and inter-limb asymmetry during the triple hop test: a test-retest pilot study. *Symmetry*. 2021: In Press.
- 2. Bishop C, Turner A, **Jordan M**, Harry John, Loturco I, Lake J, Comfort P. A framework to guide practitioners for selecting jump metrics during the countermovement and drop jump tests. *Journal of Strength & Conditioning Research*. 2021: In Press.
- 3. 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: doi.org/10.1007/s00421-021-04639-y
- 4. 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*. 2020: In Press.
- 5. Kadlec D, **Jordan M**, Alderson J, Nimphius S. Test re-test reliability of single and multijoint strength properties in female Australian footballers. *International Journal of Sports Physiology and Performance*. 2021; 7(5): 1-5: doi.org/10.1186/s40798-020-00292-5.

- 6. 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: doi.org/10.1123/ijspp.2020-0813.
- 7. 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: doi.org/10.1002/tsm2.189.
- 8. 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; 4: 24-32.
- 9. 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: doi.org/10.3389/fspor.2020.00012.
- 10. Turpeinen J, Freitas T, Rubio-Aras J, Jordan M, Aagaard P. Contractile rate of force development after ACL reconstruction – a systematic review and meta-analysis. Scandinavian Journal of Medicine and Science in Sport. 2020; 30: 1572-1585: doi.org/10.1111/sms.13733.
- 11. Ghali BM, Owoeye OBA, Stilling C, Palacios-Derflingher L, Jordan M, Pasanen K, and Emery CA. Internal and external workload in youth basketball players with/without patellar tendinopathy. Journal of Orthopaedic and Sports Physical *Therapy.* 2020; 50(7): 402-408: doi/10.2519/jospt.2020.9094.
- 12. 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.
- 13. 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.
- 14. 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. doi.org/10.1016/j.jshs.2018.09.006
- 15. Cuenca-Fernándex 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.
- 16. Jordan M, Doyle-Baker P, Heard M, 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.
- 17. 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.
- 18. Jordan M, Aagaard P, and Herzog W. ACL injury/re-injury in alpine ski racing: a narrative review. Open Access Journal of Sports Medicine. 2017;8(2):71-83.
- 19. 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.

- 20. 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.
- 21. **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. doi.org./10.1111/sms.12314 **(67 Citations)**
- 22. **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.
- 23. **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. **(56 Citations)**
- 24. **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.
- 25. 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.
- 26. 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. **(123 Citations)**
- 27. **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. **(296 Citations)**

### PEER REVIEWED PUBLICATIONS: UNDER REVIEW, IN PREPARATION

- 1. **Jordan M**, Morris N, Nimphius S, Herzog W. An 11-year retrospective analysis of lower limb mechanical muscle function in female elite winter sport athletes. *Frontiers in Sports and Active Living*. 2021: In Preparation
- 2. **Jordan M**, Morris N, Lawson D, Aldrich-Witt I, Barnert J, Herzog W. Forecasting recovery after anterior cruciate ligament injury with generalized additive models. *Journal of Orthopaedic Research*. 2021: **Under Review.**
- 3. 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*. 2021: **Under Review**.
- 4. Thome M, **Jordan M**, Thorpe R, Nimphius S. Validity of global positioning system (GPS) technology to measure maximum velocity sprinting performance in elite sprinters. *International Journal of Sports Physiology and Performance*. 2021: In Preparation.
- 5. 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. *Journal Athletic Training*. 2021: **Under Review**

6. Miutz L, Emery C, Black A, **Jordan M**, Smirl J, Schneider K. Examinations of physical exertion testing in uninjured high-school youth should include both heart rate and a subjective rating of perceived exertion. *Journal Athletic Training*. 2021: In Preparation

#### **CONFERENCE ABSTRACTS**

Total Conference Abstracts: 47

- 1. 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).
- 2. 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).
- 3. 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).
- 4. 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).
- 5. 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).
- 6. 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).
- 7. **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.
- 8. Lawson D, **Jordan M**, Herzog W. (October 21, 2020). Influence of Lead Leg Selection and Drop Landing Characteristics. Sport Innovation Summit. Calgary, Canada.
- 9. 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.
- 10. 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).
- 11. 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).
- 12. 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. 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.

- 13. 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.
- 14. Lawson D, **Jordan M**, Herzog W. Relationship Between Hip Strength Asymmetry and Landing Performance (October 30, 2019). Sport Innovation Summit. Toronto, Canada.
- 15. Lawson D, **Jordan M**, Herzog W. Reliability of Hip Strength Measures Using a Custom-Instrumented Dynamometer. (October 30, 2019). Sport Innovation Summit. Toronto, Canada.
- 16. **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.
- 17. 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.
- 18. Ghali BM, Owoeye 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.
- 19. Lane MD, Barnert JR, **Jordan M** (November 1<sup>st</sup>, 2018). Loaded Countermovement Jump Testing in Female Alpine Skiers. Sport Innovation Summit, Montreal, Quebec, Canada.
- 20. Challis G, Lane M, Groves E, **Jordan M** (November 1<sup>st</sup>, 2018). Reliability of Commonly Derived Countermovement Jump Outcome Measures Using a Dual Force Platform System. Sport Innovation Summit, Montreal, Quebec, Canada.
- 21. Morris N, **Jordan M**, Heard M, Herzog W (November 1<sup>st</sup>, 2018). Knee Flexor Muscle Strength Deficits in Elite Alpine Skiers Following Semitendinosus Autograft ACL Reconstruction Surgery. Sport Innovation Summit, Montreal, Quebec, Canada.
- 22. Morris N, Lane M, Challis G, **Jordan M** (November 1<sup>st</sup>, 2018). Concurrent Validity of a Custom-Built Dynamometer for Assessing Lower Body Isometric Strength. Sport Innovation Summit, Montreal, Quebec, Canada.
- 23. Morris N, Sumar S, **Jordan M**, Heard M, Herzog W (November 1<sup>st</sup>, 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.
- 24. **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.
- 25. 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.
- 26. 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.
- 27. **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.

- 28. **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.
- 29. Challis GG, **Jordan M,** Groves EM. (November 17, 2016). A Comparison of Accuracy and Precision Across Multiple Force Platforms. Sport Innovation Summit, Calgary, Alberta.
- 30. 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.
- 31. **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.
- 32. 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.
- 33. 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.
- 34. 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.
- 35. 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.
- 36. **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).
- 37. **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).
- 38. **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.
- 39. **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.
- 40. **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.
- 41. 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.
- 42. 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.

- 43. **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.
- 44. **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.
- 45. **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.
- 46. **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.
- 47. **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 8<sup>th</sup> Annual ECSS Conference*. Salzburg, Austria: Department of Sport Science and Kinesiology University of Salzburg, (p. 379).

### SELECTED HIGHLIGHTS OF RECENT SCIENTIFIC PRESENTATIONS AND KEYNOTE PRESENTATIONS

**Jordan MJ** (November 6, 2021). Getting Back to Health and Performance after Knee Injuries: Why Strength Matters. The Woods Forum (National Conference, **Invited Presenter**).

**Jordan MJ** (September 17, 2021). The Hamstring Conundrum: Data-Led Approach to Rehabilitation after ACL Reconstruction. Brazilian Biomechanics Conference. (International Conference, **Keynote**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (February 26, 2021). Assessing Vertical Jump Force-Time Asymmetries: Performance, Injury and Return to Sport Forecasting. Sports Biometrics Conference. Online (International Conference, **Invited Presenter**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (April 15, 2020). Monitoring the Uncertain Journey Back from ACL Injury – A Case Study. Vail Injury Prevention Conference. Vail, Colorado (Professional Conference, **Invited Presenter**).

**Jordan MJ** (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**).

**Jordan MJ** (September 14, 2019). Managing the Uncertain Journey Back from ACL Injury. The ALTIS High Performance Think Tank. Tahoe, California (Professional Conference, **Invited Presenter**).

**Jordan MJ** (June 25-26, 2019). Assessing Asymmetries and Performance with Dual Force Plate Systems. The STTAR Summit, Philadelphia 76ers. Philadelphia, Pennsylvania (Professional Conference, **Invited Presenter**).

**Jordan MJ** (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**).

**Jordan MJ** (December 1, 2018). Building Individual Resilience Against ACL Injury/Reinjury with Strength Training. International Conference on Strength Training, Perth, Australia (International Conference, **Keynote Presenter**).

**Jordan MJ** (November 30, 2018). Evaluating Mechanical Muscle Function in ACL Reconstructed Elite Athletes. International Conference on Strength Training, Perth, Australia (International Conference, **Invited Presenter**).

Jordan MJ, Barnert J, Robinson S, MacGregor K, Van Den Berg F, Drager K, Thornley L (November 5, 2017). A Conversation on Return to Performance Planning and Team Integration After Knee Injuries. Montreal, Quebec (National Conference, Invited Panel).

**Jordan MJ** (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**).

**Jordan MJ** (October 12, 2018). Assessing Athlete Readiness in Elite Level Slope Sports. United States Olympic Committee Professional Development Conference (International Conference, **Invited Presenter**).

**Jordan MJ** (June 23, 2018). Assessing Concentric/Eccentric Force Asymmetries. The NHL Professional Hockey Athletic Trainers Society Annual Meeting. Orlando, Florida (Professional Conference, **Invited Presenter**).

**Jordan MJ** (May 18, 2018). Monitoring Training Load: Why Measuring What Matters, Matters. Varala Sports Institute Professional Coaching Conference. Tampere, Finland (Professional Conference, **Invited Presenter**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

Stellingwerff T, McCluskey P, **Jordan M**, Clarke D, Murray C. (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (January 25, 2017). Neuromuscular Monitoring After ACL Injury: Return to Sport and Return to Podium. The 2017 Sports Science Summit (International Conference, **Invited Presenter**).

**Jordan MJ** (September 17, 2016). How Monitoring Strength Abilities After ACL Reconstruction Led to a Better Conversation. United Kingdom Strength and Conditioning Association 12<sup>th</sup> Annual Conference. Leicester, UK (International Conference, **Keynote Presenter**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

**Jordan MJ** (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**).

### HIGHLIGHTS OF RECENT SEMINARS

Jordan MJ (March 23, 2021). Seminar on Assessing and Monitoring Interlimb Force-Time Asymmetries. Houston Texans.

Jordan MJ (March 12, 2021). Monitoring the Uncertain Journey Back from ACL Injury – From Case Study to Prospective Study. Simon Fraser University Sports Analytics Meeting. Burnaby, Canada.

Jordan MJ (September 10, 2020). Monitoring the Return to Sport Transition After ACL Injury: From Case Study to Prospective Study. Human Performance Laboratory. University of Calgary. Calgary, Canada

Jordan MJ (April 10, 2020). Assessing Vertical Jump Force-Time Asymmetries. National Basketball Association Trainers Meeting. (Online)

Jordan MJ (January 27, 2020). Assessing Vertical Jump Force-Time Asymmetries. Golden State Warriors Basketball Club. San Francisco, United States of America.

Jordan, MJ (November 30, 2018). Eccentric Muscle Actions and Assessing Eccentric Abilities. Edith Cowan University. Perth, Australia.

Jordan, MJ (November 30, 2018). Research Directions for Assessing Athletes with ACL Injury. Murdoch University. Perth, Australia.

Jordan, MJ (November, 2018). Neuromuscular Profiling and Assessment Workshop. Institute for Human and Machine Cognition. Pensacola, Florida.

Jordan, MJ (October, 2018). Neuromuscular Profiling and Assessment Workshop. Kansas City Football Club. Kansas City, Kansas.

Jordan, MJ (July, 2018). Neuromuscular Profiling and Assessment Workshop. Jacksonville Jaguars. Jacksonville, Florida.

Jordan, MJ (July 2-3, 2018). Neuromuscular Profiling and Assessment Workshop. Irish Rugby Federation. Dublin, Ireland.

Jordan, MJ (May 11, 2018). From Elite Athlete to Average Joe: Preparing for Life After Sport. Game Plan Summit. Calgary, Canada.

Jordan, MJ (May 3, 2018). Preparing for the Beijing Olympic Winter Games: Perspectives from Sport Science/Sport Medicine. Own the Podium/Canadian Olympic Committee Pyeongchang Olympic Debrief. Calgary, Canada.

Jordan MJ (April 17, 2018). Assessing Concentric/Eccentric Force Asymmetries: From the Strength Lab to the Weight Room. University of Calgary Varsity Athletics Strength and Conditioning Meeting. Calgary, Alberta.

#### HIGHLIGHTS OF RECENT PERFORMANCE CONSULTATIONS FOR SPORT AND HUMAN PERFORMANCE ORGANIZATIONS

























### PROFESSIONAL MEMBERSHIPS

2020-Present Sport Scientist Canada Professional Member

2012-Present European College of Sport Science (ECSS)

1999-Present Certified Strength and Conditioning Specialist (CSCS), National Strength and Conditioning Association