

Detailed Program

Sunday, July 28th

8:30am-8:40am	Opening Remarks - Brent Edwards	Olympic Ballroom	
8:40am-9:20am	Keynote 1 - Chair - Brent Edwards	Olympic Ballroom	
	Personalization of biomechanical models for injury prevention	Thor Besier	S9
9:20am-10:20am	Session 1 - Wearables - Chairs - Thor Besier & Gillian Weir	Olympic Ballroom	
09:20am-09:30am	Consolidation of the atypical rearfoot strike pattern in distance runners and linkage to tibial shocks	Pieter Van den Berghe	S146
09:30am-09:40am	Foot strike angle calculation during running based on in-shoe pressure measurements	Julian Fritz	S147
09:40am-09:50am	Impact of self-selected customized orthotics on lower limb biomechanics and fatigue	Benjamin Dourthe	S22
09:50am-10:00am	Ground reaction force estimation in football using inertial measurement units during alternate lateral bounding	Francesca d'Andrea	S77
10:00am-10:10am	Tibial accelerations in two different age groups of runners	Sang-Kyoon Park	S107
10:10am-10:20am	Machine learning as a tool to predict impact loading during over-ground distance running	Rud Derie	S74
10:20am-10:40am	Coffee Break	Foyer	
10:40am-11:00am	Invited 1 - Chair - Sharon Dixon	Olympic Ballroom	
	The Researcher - From a perspective within the athletic footwear industry	Helen Woo	S8
11:00am-12:00pm	Session 2 - Imaging - Chairs - Sarah Ridge & Colin Firminger	Olympic Ballroom	
11:00am-11:10am	Effects of foot orthoses on soft tissue morphology and skin sensitivity over three months	Joanna Reeves	S32
11:10am-11:20am	Tendon and muscle fascicle length changes during running with compliant and stiff footwear cushioning	Michael Esposito	S64
11:20am-11:30am	Statistical shape modeling describes anatomic variation in the foot	Bryan Conrad	S203
11:30am-11:40am	Motorized self-lacing technology reduces foot-shoe motion in basketball shoes during dynamic cutting tasks	Casey Myers	S189
11:40am-11:50am	The habitual motion path: evidence from an MRI study on cartilage volume changes after 75 minutes of running in different footwear conditions	Steffen Willwacher	S55
11:50am-12:00pm	Effect of habitual foot strike patterns on muscle and bone properties of the foot	Alessandro Garofolini	S142
12:00pm-1:00pm	Lunch	Foyer	
1:00pm-1:40pm	Keynote 2 - Chair - Benno Nigg	Olympic Ballroom	
	The future of health: science-informed product development	Breanne Everett	S10
1:40pm-1:50pm	iFAB Announcement - Isabel Sacco	Foyer	
1:50pm-2:50pm	Session 3 - Clinical - Chairs - Isabel Sacco & Alessandra Matias	Olympic Ballroom	
1:50pm-2:00pm	The influence of running footwear on knee loading post-meniscectomy	Vanessa Walters	S169
2:00pm-2:10pm	Biomechanical effects of three types of foot orthoses on a posterior tibial tendon dysfunction population during a stair climbing task	Dominic Chicoine	S104
2:10pm-2:20pm	Cost-effectiveness of offloading-improved custom-made footwear to prevent plantar foot ulcer recurrence in high-risk patients with diabetes	Sicco Bus	S205
2:20pm-2:30pm	Plantar pressure relief in pes cavus and pes planus: smart passive gait retraining using deformable insoles	Fatemeh Farhadi	S28
2:30pm-2:40pm	Changes in foot function between baseline and 1 year follow-up in west point cadets	Christopher Chao	S171
2:40pm-2:50pm	Children's foot size versus children's shoe size when they return to store	Michael Haley	S130
2:50pm-3:00pm	Open		
3:00pm-5:00pm	Poster Session	Explorer Room	
5:00pm-6:30pm	Open		
6:30pm-8:30pm	Welcome Reception	Rockies	

Detailed Program

Monday, July 29th

8:30am-8:50am	Invited 2 - Chair - Irene Davis	Olympic Ballroom	
	Relationships between footwear, foot structure, and foot muscle strength	Sarah Ridge	S3
8:50am-9:50am	Session 4 - Minimalist - Chairs - Irene Davis & Caleb Johnson	Olympic Ballroom	
8:50am-9:00am	Relating foot morphology and plantar pressure in shod and barefoot populations	Qichang Mei	S23
9:00am-9:10am	Daily activity in minimal footwear increases foot strength	Rory Curtis	S151
9:10am-9:20am	Effect of footwear on plantar flexor fine-wire electromyography activity in walking	Annamária Péter	S120
9:20am-9:30am	Do comfort perception and plantar foot sensitivity change in response to longitudinal exposure to minimal shoe and barefoot running?	Kathryn Mills	S110
9:30am-9:40am	The impact of hard versus soft soled runners on the spatio-temporal measures of gait in young children and a comparison to barefoot walking	Simone Cranage	S109
9:40am-9:50am	Barefoot, minimal, and shod walking in habituated runners	Jereme Outerleys	S198
9:50am-10:10am	Invited 3 - Chair - Irene Davis	Olympic Ballroom	
	Minimal footwear in osteoarthritis patients: not just for running	Isabel Sacco	S4
10:10am-10:30am	Coffee Break	Foyer	
10:30am-12:00pm	Session 5 - Musculoskeletal Loading and Injury - Chairs - Richard Kent & Emily Matijevich	Olympic Ballroom	
10:30am-10:40am	Cleat stiffness influences ankle inversion in football players with history of ankle sprain	Kevin Ford	S172
10:40am-10:50am	Finite element modelling of tibial vibrations during running	Lise Sissler	S75
10:50am-11:00am	Influence of performance running footwear on muscle soreness and damage	Brett Kirby	S188
11:00am-11:10am	The run alternate study: examining the effect of training and footwear variability in the prevention of running pain and injuries	Michael Ryan	S202
11:10am-11:20am	Impact of variable stiffness shoes on medial knee contact forces	Ethan Steiner	S39
11:20am-11:30am	Ground reaction forces don't indicate tibial forces: implications for injury prevention, shoe design & wearable tech	Emily Matijevich	S70
11:30am-11:40am	Effect of longitudinal bending stiffness and running speed on a probabilistic achilles tendinopathy model	Colin Firminger	S66
11:40am-11:50am	Changes in lower limb biomechanics and estimated tibial stress with different running footwear	Sharon Dixon	S144
11:50am-12:00pm	Cut-off frequencies matter: the effects of filtering strategies and footwear on internal knee abduction moments in running	Patrick Mai	S44
12:00pm-1:00pm	Lunch	Foyer	
1:00pm-1:40pm	Keynote 3 - Chair - E.C. "Ned" Frederick	Olympic Ballroom	
	Footwear and injury prevention in elite American football	Richard Kent	S7
1:40pm-9:00pm	Social Activities/Free Evening		

Detailed Program

Tuesday, July 30th

8:30am-9:10am	Keynote 4 - Chair - Matt Nurse	Olympic Ballroom	
	Shoes, running economy and distance running performance	Rodger Kram	S2
9:10am-10:20am	Session 6 - Performance - Chairs - Wouter Hoogkamer & Ryan Alcantara	Olympic Ballroom	
9:10am-9:20am	Creating footwear for performance running	Emily Farina	S134
9:20am-9:30am	Relationships between biomechanics, anthropometrics, and running economy as a function of shoe mechanical feature variations	Nicolas Flores	S48
9:30am-9:40am	Relationship between sprint performance and bending stiffness of sprint spikes during start and maximal velocity phase of sprinting	Shingo Sudo	S98
9:40am-9:50am	Running shoe optimal stiffness and speed	Aubree McLeod	S207
9:50am-10:00am	Effect of shoe midsole hardness and resilience on running performance	Jaemin Ryue	S141
10:00am-10:10am	Dual density midsole design improves running economy and performance when fatigued	Chris Bishop	S136
10:10am-10:20am	Insole stiffness and energetic cost: a musculoskeletal modelling approach	Michael Asmussen	S33
10:20am-10:40am	Coffee Break	Foyer	
10:40am-11:00am	Invited 4 - Chair - Martyn Shorten	Olympic Ballroom	
	Making athletes better with products and services	Matt Nurse	
11:00am-12:00pm	Session 7 - Comfort and Perception - Chairs - Helen Woo & Kathryn Mills	Olympic Ballroom	
11:00am-11:10am	Relationship between the shoe energy return perception and the biomechanics of lateral jumps	Cédric Morio	S46
11:10am-11:20am	The influence of forefoot posting on biomechanical and perception measures during running	Gillian Weir	S90
11:20am-11:30am	The influence of preference grouping methods on characteristics of recreational runners	Sabina Manz	S40
11:30am-11:40am	Using plantar pressure to predict insole comfort in running	Fan Yang	S15
11:40am-11:50am	Understanding 'ride' perception in running using reliable testers: ankle joint mechanics matter	Marlene Giandolini	S59
11:50am-12:00pm	Diversity of shoe preference - preferred ride feel for each runner	Hideya Okamoto	S102
12:00pm-1:00pm	Lunch	Foyer	
1:00pm-1:20pm	Invited 5 - Chair - Darren Stefanyszyn	Olympic Ballroom	
	The "forgotten footwear": developing occupational footwear for underground coal miners	Julie Steele	S5
1:20pm-2:20pm	Session 8 - Alternative Footwear - Chairs - Julie Steele & Joshua Mattock	Olympic Ballroom	
1:20pm-1:30pm	The development of a multi-insole shoe for occupations requiring prolonged standing	Jennifer Anderson	S139
1:30pm-1:40pm	Spatial and temporal analysis of plantar pressures during walking in indigenous and commercial minimal shoes	Kristiaan D'Août	S153
1:40pm-1:50pm	Flip-flop style footwear modifies ankle biomechanics and tibialis anterior activity during gait	Sébastien Pavailler	S84
1:50pm-2:00pm	Effects of textured footwear on cognition and muscle activity	Jordyn Vienneau	S12
2:00pm-2:10pm	Does the sport of weightlifting need special shoes?	Robert Needham	S155
2:10pm-2:20pm	Using dynamic foot morphology data to design spacesuit footwear	Abhishektha Boppana	S132
2:20pm-2:40pm	Coffee Break	Foyer	
2:40pm-3:30pm	Session 9 - Traction - Chairs - Darren Stefanyszyn & Anja-Verena Behling	Olympic Ballroom	
2:40pm-2:50pm	Actual and perceived traction in football boots: a series of traction adaptation studies	Bahador Keshvari	S35
2:50pm-3:00pm	Does apparent outsole tread groove design represent mechanical traction?	Shariman Ismail	S10
3:00pm-3:10pm	Required traction during common rugby movements	Zach Barrons	S165
3:10pm-3:20pm	Evaluation of the effects of traction on ankle kinematics during a side cut using bfPCA	Manuela Ramirez	S25
3:20pm-3:30pm	The influence of shoe-floor contact area, load and velocity on dynamic friction in indoor sports footwear: a small-scale tribology study	Lasse Master	S61
3:30pm-4:30pm	Footwear Biomechanics Group Annual General Meeting	Olympic Ballroom	
4:30pm-6:30pm	Open		
6:30pm-10:30pm	Closing Banquet & Award Ceremony	Olympic Ballroom	