27 AVRIL 2022 APRIL 27TH, 2022

Fairmount Le Château Frontenac 1 Rue des Carrières, Québec QC G1R 4P5

> Inscription | Registration

La Fédération des médecins omnipraticiens du Québec, an organization fully accredited in continuing education by the Collège des médecins du Québec, recognizes **6.50 hours** of professional development activity by participating to this Symposium.

Hôte / Hosted by











Mercredi, le 27 avril 2022 – Ville de Québec, QC Fairmont, Le Château Frontenac

Cette journée de pré-conférence est co-organisée par le Réseau Francophone Olympique de la Recherche en Médecine du sport (ReFORM) et the University of Calgary Sport Injury Prevention Research Centre (SIPRC), tous deux reconnus comme centre de recherches en prévention des blessures et protection de la santé de l'athlète par le Comité International Olympique. Sous cette identité multiculturelle internationale, la thématique de cette journée scientifique est dès lors consacrée à la prévention des blessures chez les sportif.ve.s. Au travers des différentes conférences consacrées à la prévention des commotions cérébrales, des lésions d'épaule, à la surveillance épidémiologique et en tenant compte des populations pédiatriques et élite, les participants bénéficieront d'une approche scientifique globale de la prévention lésionnelle et seront au fait des défis qui y sont liés.

Notez qu'il s'agit d'un symposium bilingue avec traduction simultanée disponible.

Wednesday, April 27th, 2022 – Quebec City, QC Fairmont, Le Château Frontenac

This pre-conference day is co-organized by the Réseau Francophone Olympique de la Recherche en Médecine du Sport (ReFORM) and the University of Calgary Sport Injury Prevention Research Centre (SIPRC), both of which are recognized by the International Olympic Committee as research centres for injury prevention and the protection of athletes' health. Under this international multicultural identity, the focus of this scientific day is therefore dedicated to injury prevention in sport. Through the various conferences dedicated to the prevention of concussions, shoulder injuries, epidemiological surveillance and taking into account the pediatric and elite populations, participants will benefit from a global scientific approach to injury prevention and will be aware of the challenges related to it.

Note this is a bilingual conference with simultaneous translation available.

SCHEDULE

PAGE 4 SUMMARY SCHEDULE

PAGE 5-7 DETAILED SCHEDULE Injury Surveillance Pediatrics Elite Sports Concussion Shoulder Injuries Round Table



Summary schedule

7:00 - 8:15 BREAKFAST

8:15 - 8:30 WELCOME

Suzanne Leclerc Carolyn Emery

8:30 - 9:00 OPENING

Ms. **Isabelle Charest**, Minister for Education and Minister Responsible for the Status of Women

Mr. **Jocelyn East**, Manager international/Safety & Integrity, Sport Canada

9:00 - 10:00



SESSION 1 Principles to best practice and Policy in injury prevention

10:00 - 11:00



SESSION 2

Injury prevention in Pediatric Sport Populations

11:00 - 11:30 BREAK



11:30 - 12:30



SESSION 3 Injury prevention in Elite sports

12:30 - 13:30 LUNCH

13:30 - 14:30



SESSION 4 Primary prevention on Concussion

14:30 - 15:30



SESSION 5 Shoulder injury prevention

15:30 - 16:00 BREAK

16:00 - 17:00



ROUND TABLE From Science to the Field of play

17:00 - 17:15 CLOSING

Suzanne Leclerc Carolyn Emery

17:15 - 18:30 NETWORKING

27 avril 2022 / April 27th, 2022

SYMPOSIUM PRÉVENTION DES BLESSURES DANS LE SPORT INJURY PREVENTION IN SPORT



Detailed schedule

9:00 - 10:00



SESSION 1 | Principles to best practice and Policy in injury prevention

In this session we will review basic principles of injury surveillance to evaluate injury prevention strategies in sport. We will provide examples of injury surveillance informing best practice and policy in injury prevention in youth and elite sport.

Speakers:

- Ian Shrier: Injury Surveillance: Some Basic Principles
- Carolyn Emery: Surveillance informing Best Practice and Policy in Youth Sport
- François Bieuzen: Surveillance in Elite Sport: What is the Impact?

Moderators: Christian Nührenbörger, Paul Eliason

10:00 - 11:00



SESSION 2 | Injury prevention in Pediatric Sport Populations

Injury prevention strategies targeting pediatric sport populations are unique, from implementation to impact. In this session we will share examples in elite, community, and school sport contexts.

Speakers:

- Evert Verhagen: Injury Prevention: learn young for a lifetime of benefit
- **François Delvaux**: Preparing the developing youth athlete: Sport specialization, load, and prevention
- Claude Goulet: Injury Prevention in Youth Sport: What is the role of policy

Moderators: Carolyn Emery and Sébastien LeGarrec

27 avril 2022 / April 27th, 2022

SYMPOSIUM PRÉVENTION DES BLESSURES DANS LE SPORT INJURY PREVENTION IN SPORT



Detailed schedule

11:30 - 12:30



SESSION 3 | Injury prevention in Elite sports

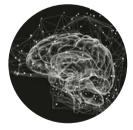
Injury prevention and performance goals are critical for elite athletes. We will share international perspectives on injury prevention across a variety of high-performance sport contexts.

Speakers:

- Grethe Myklebust: Primary Prevention in Handball and Soccer: How can we prevent injuries in female athletes?
- Matt Jordan: Secondary Prevention of ACL Injury in Winter Slope Sports: It's Not All Downhill
- Caroline Giroux: Preventing muscle injuries in elite athletes

Moderators: François Bieuzen and Stephen West

13:30 - 14:30



SESSION 4 | Primary prevention on Concussion

In this session we will discuss pros and limitations on primary prevention strategies on concussion. We will provide examples applied in different settings going to education, neuromuscular training and rule modifications.

Speakers:

- **Suzanne Leclerc**: Setting the ground for injury prevention through better awareness
- Kathryn Schneider: Moving up the chain: C-training strategies to prevent concussion
- Jon Patricios: Contact, Collision & Concussion: Rugby rules!

Moderators: Jean François Kaux and Pierre Frémont

27 avril 2022 / April 27th, 2022

SYMPOSIUM PRÉVENTION DES BLESSURES DANS LE SPORT INJURY PREVENTION IN SPORT



Detailed schedule

14:30 - 15:30



SESSION 5 | Shoulder injury prevention

Shoulder Injury Prevention research has not had the same attention in the injury prevention community as lower extremity injuries. In this session we will share international perspectives on shoulder injury prevention across a variety sport context.

Speakers:

- Félix Croteau: Can these shoulders carry the heavy load? Measuring risk factors in elite overhead athletes
- Amandine Gofflot: Preventive approach for shoulders lesions in parasport
- **Ellen Shanley:** Surprising Findings and Lessons Learned from an Upper Extremity Youth Injury Prevention Program

Moderators: Max Schindler and Eric Gibson

16:00 - 17:00



ROUND TABLE | From Science to the Field of play

In this session we will discuss with scientists and "on the field" stakeholder applications and impacts of primary prevention strategies. With testimony from athletes and coaches we will provide examples of applied strategies on primary prevention.

Speakers:

- Ellen Shanley
- Grethe Myklebust
- Jean François Kaux
- Marie-Ève Croteau
- Danielle Goyette

Moderators: Carolyn Emery and Suzanne Leclerc

BIOGRAPHIES

PAGE 9-10 ORGANIZING COMMITEE

> Suzanne Leclerc Carolyn Emery Géraldine Martens

PAGE 9-18 KEYNOTE SPEAKERS François Bieuzen Félix Croteau François Delvaux Caroline Giroux Amandine Gofflot Claude Goulet Danielle Goyette Matt Jordan Jean François Kaux Grethe Myklebust Jon Patricios Ellen Shanley Kathryn Schneider Ian Shrier Evert Verhagen Marie-Ève Croteau



Organizing Committee



SUZANNE LECLERC

Suzanne Leclerc is the medical director of l'Institut national du sport du Québec (INS Québec). She has completed her PhD on sport related concussion. Dr Leclerc is taking care of national athletes since 1998 and has gone to many Olympic games as a team physician for Canada. She is the lead of the Sport Medicine Advisory Committee since November 2020.

She is one of the founding and executive committee members of ReFORM, the French-Speaking International Olympic Committee Centre for the Prevention of Injury and Protection of Athlete Health, where she leads the research projects dedicated to concussion prevention and management.



CAROLYN EMERY

Carolyn Emery is a physiotherapist and epidemiologist. She is a Professor in the Faculty of Kinesiology and Cumming School of Medicine at University of Calgary and Chair of the Sport Injury Prevention Research Centre at University of Calgary, one of 11 International Olympic Committee Centres for the Prevention of Injury and Protection of Athlete

Health. Carolyn is a Canada Research Chair, Killam Professor, and Fellow of the Canadian Academy of Health Sciences. Her research program focuses on the prevention of injuries and concussions and their consequences in youth sport. She leads the pan-Canadian SHRed Concussions Research Program. Her research has informed practice and policy to reduce the public health burden of sport-related injuries in youth.



Organizing Committee



GÉRALDINE MARTENS

Géraldine Martens is a physiotherapist and research fellow at the University and the University Hospital of Liège, Belgium. She holds a PhD in motricity sciences and currently works as a scientific coordinator for the ReFORM International Olympic Committee Centre for the Prevention of Injury and Protection of Athlete Health where she manages several projects related to

Health where she manages several projects related to athlete's health: concussion prevention and management, shoulder injuries secondary prevention, injury prevention knowledge translation and safeguarding in sports among others.

Keynote speakers



FRANÇOIS BIEUZEN

François Bieuzen is a sports science consultant for elite athletes, specialising in applied sports physiology. He earned his PhD in exercise physiology at the University of Toulon, France. His research interests include training load monitoring, recovery strategies and injury prevention in elite athletes. He started his career at the Institut National du Sport, de

l'Expertise et de la Performance (INSEP) in France and then joined the Institut National du Sport du Québec in 2016 where he is currently the Director of Sport Sciences. François has served as head IST and senior physiologist for numerous national teams in France and Canada and was a member of the Canadian boxing team in Tokyo in 2020 and the Canadian short track speed skating team in Beijing in 2022.



Keynote speakers



FÉLIX CROTEAU

Félix Croteau graduated with a Master's in Physiotherapy in 2011, and then completed his Diploma in sports Physiotherapy as well as a Fellow in Manual Therapy. Félix has been working at the Institut national du sport du Québec since november 2014, where he primarily cares for the national water polo teams. Over the years, he has

travelled with the women's national team to three world championships, two PanAmerican games and the Tokyo Olympic Games. He recently completed his PhD at McGill university with a focus on managing the risk of shoulder injuries in water polo players.



FRANÇOIS DELVAUX

François Delvaux is a physiotherapist and strength & conditioning coach. He is an assistant professor in the Department of Motricity Sciences at the University of Liege, and his research focuses on lower limb sports injuries prevention. François is a Belgian member of ReFORM, the Réseau Francophone Olympique de Recherche en Médecine du Sport, one of the 11 IOC

Centers for the Prevention of Injury and Protection of Athlete Health. He is also an athletic development coach for elite athletes from various sports and a sports reconditioning specialist for SPORTS², the FIFA Medical Center of Excellence in Liege.



Keynote speakers



CAROLINE GIROUX

Caroline Giroux is a research engineer at the laboratory Sport, Expertise and Performance (SEP) of the French National Institute of Sport (INSEP), member of the IOC Research Centre named ReFORM. She is the coordinator of the FULGUR project funded by the French Research Agency in the perspective of the Paris 2024 Olympic and Paralympic Games in

collaboration with the French Federations of Athletics, Rugby and Ice Sports. Caroline achieved a PhD in 2014 at the laboratory SEP in Biomechanics and Neuromuscular Physiology. She also did a post-doc at the laboratory movement, Interaction, Performance in Le Mans. Her research focuses mainly on biomechanical and neuromuscular determinants of performance and muscle injury prevention in elite athletes.



AMANDINE GOFFLOT

Amandine Gofflot is a physiotherapist, teaching assistant and PhD candidate at the University of Liege (Belgium). Her main research topic is the secondary prevention of shoulder injuries and more specifically the criteria for returning to the field after an instability accident. She also devotes herself to clinical practice as a physiotherapist at the University Hospital of Liege.



Keynote speakers



CLAUDE GOULET

Claude Goulet is full Professor in the Department of Physical Education at Université Laval, Québec. He holds a PhD in motor learning. His research is related to safety promotion in sport and physical activities. It covers many spheres of sport participation from informal to organized activities, and from recreational to high-level participation. Claude's research focuses

on the epidemiology, etiology, surveillance, and prevention of sport and physical activity injuries. It also contributes to decision-making in the implementation of injury prevention strategies aiming at improving the public health benefits of sport and physical activity participation.



DANIELLE GOYETTE

Danielle Goyette is the Director of Player Development with the Toronto Maple Leafs. She previously served as Head Coach of the University of Calgary Women's Hockey Team (2007–2021). She has been inducted to the Quebec Sport Hall of

Fame (2010), the Hockey Hall of Fame (2017), the Canada's Sport Hall of Fame (2015) and the

International Ice Hockey Federation (2012). As a former member of the Canadian Women's National team (1991 – 2007), she won 9 World Championships (8 gold, 1 silver) and 3 Olympic Games (1998 – Nagano, Japan, Silver medalist; 2002 – Salt Lake City, USA, Gold medalist; 2006 – Torino, Italy, Gold medalist). She has been named 2nd all-time leading scorer for Team Canada.



Keynote speakers



MATT JORDAN

Matt Jordan is a specialist in player health and performance, and he has been a sport scientist consultant for 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/reinjury prevention. Currently, Matt is an Assistant Professor in the Faculty of Kinesiology at the University of Calgary. He is also the Director of Sport Science at the Canadian Sport Institute Calgary where he helps lead inter-disciplinary performance teams that support Canadian Olympic athletes.



JEAN FRANÇOIS KAUX

Jean-François Kaux is a Physical and Rehabiliation Medicine Specialist and holds a PhD in Medical Sciences. Since 2016, he has been the head of the Department of Physical Medicine, Functional Rehabilitation and Sports Traumatology at the University Hospital of Liège and a lecturer at the University of Liège. His Department (SportS²) is

recognised as a FIMS Collaborative Center, FIFA Medical Centre of Excellence and IOC Research Centre for Injury Prevention and Protection of Athlete Health. He is a member of the medical commission of the Belgian National Olympic Committee. He is the author and co-author of more than 150 scientific articles in French and English.



Keynote speakers



GRETHE MYKLEBUST

Grethe Myklebust is a professor at the Oslo Sports Trauma Research Center. She has served as team PT for the Norwegian female national teams in handball, soccer and beach volleyball for twenty years. Grethe has also worked as a PT at the Olympic games in Seoul in 1988 and Sydney in 2000. She is the past vice president of the Norwegian Society of

Sports Physiotherapy and has also been a member of the Medical Commission in the International Handball Federation (IHF). Grethe's main research area is related to handball and soccer injuries and injury prevention. She has competitive experience at top national level in team handball.



JON PATRICIOS

Jon Patricios has been in sports medicine practice for over 25 years. He is currently Director of Waterfall Sports Orthopaedic Surgery in Johannesburg and Professor in the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg where he leads the Wits Sport and Health (WiSH) Research Group. Jon is founder and

Director of Sports Concussion South Africa, sports concussion consultant to World Rugby, a board member of the international Concussion in Sports Group and on the scientific committee for the International Consensus Conference on Concussion in Sport. Jon has been team physician to school, club, provincial and international sports teams in rugby, cricket, soccer, athletics and basketball.



Keynote speakers



ELLEN SHANLEY

Ellen Shanley is the Director of Care Delivery Optimization & Quality for ATI Physical Therapy and a clinical research scientist. She serves as the Director of Athletic Injury Research, Prevention, and Education for the South Carolina Center for Effectiveness Research in Orthopedics. She also serves as faculty at the University of South Caroling in the School of

the University of South Carolina in the School of Public Health, Clemson University School of Bioengineering and Rocky Mountain University of Health Professions PhD program. Ellen specializes in the treatment of patients with upper extremity injuries. She has published and/or presented on epidemiologic perspectives, identification and modification of risk factors, rehabilitation and returning youth through professional athletes to play.



KATHRYN SCHNEIDER

Kathryn Schneider is an Associate Professor and Clinician Scientist (Physiotherapist) at the Sport Injury Prevention Research Centre, Faculty of Kinesiology at the University of Calgary. Her research focuses on the prevention, detection and treatment of sport-related concussion. Her work has identified a large treatment effect using multimodal physiotherapy and vestibular

rehabilitation. Over the past 8 years, she has worked with many local, provincial and national sport organizations and health care teams to develop and implement evidence-based concussion protocols and processes.



Keynote speakers



IAN SHRIER

Ian Shrier has been practicing sport medicine for over 30 years and is a past President of the Canadian Academy of Sport Medicine. He has a PhD in Physiology, post-doctoral training in Epidemiology and over 290 peer-reviewed publications on topics related to the effects of exercise and sport medicine injuries, return-to-play decision making, injury

epidemiology, causal inference, and meta-analyses. He was the co-Editor in Chief of Review Synthesis Methods, and is an editorial board member of three international sport medicine journals.



EVERT VERHAGEN

Evert Verhagen (1976) is a human movement scientist and epidemiologist. He holds a University Research Chair as a full professor at the Department of Public and Occupational Health of the Amsterdam UMC and the Amsterdam Movement Science Research Institute. He is the Editor in Chief of BMJ Open Sports & Exercise Medicine, the director of the Amsterdam

Collaboration on Health and Safety in Sports (one of the 11 IOC research centers), and director of the Amsterdam Institute of Sports Sciences (AISS). His research revolves around the prevention of sports and physical activity related injuries; including monitoring, cost-effectiveness and implementation issues. He supervises several (inter-)national PhDs and post-docs and has (co-) authored over 300 peer-reviewed publications around these topics.



Paralympic speaker



MARIE-ÈVE CROTEAU

Veteran national team member Marie-Ève Croteau has overcome many challenges to become one of Canada's most successful international Para cyclists. She has been selected on the team three times for the Paralympic Games and has won a medal at two Para Pan American Games. She holds three Crystal Globes, is a two-time World Champion (time trial &

road race), two-time World Vice-Champion (time trial & road race), eight-time Canadian Champion, and holds 29 World Cup medals.

Carolyn Emery, Géraldine Martens, Suzanne Leclerc, Romain Seil, Scientific Committee: Jean-François Kaux, Michel Crema, Philippe Tscholl

ReFORM stands for Réseau Francophone Olympique de la Recherche en Médecine du sport (French-Speaking Olympic network for Research in Sports Medicine) and is a consortium of five Institutions: National Institute of Sport, Expertise and Performance (INSEP), Paris, France, Luxembourg Institute of Research in Orthopedics, Sports Medicine and Science (LIROMS), Luxembourg, Luxembourg, Institut national du sport du Québec (INS Québec), Montréal, Canada, Physical Medicine and Sport Traumatology Department (SportS²), University Hospital of Liège, Liège, Belgium, Department of Orthopaedic Surgery and Traumatology, Geneva University Hospitals, Geneva, Switzerland.

<u>ReFORM</u> has been recognized as a Research Centre for Prevention of Injury and Protection of Athlete Health by the International Olympic Committee in December 2018. ReFORM's mission is to increase knowledge, professional development and clinical application of prevention issues related to contemporary themes within the Francophonie in order to improve health of all athletes. Current projects include documenting prevention practices internationally, improving safeguarding in sports and better disseminate scientific knowledge towards the French-speaking world by making the resources accessible. ReFORM offers a multidisciplinary, multicultural and multicentric approach and collaborates on innovative international research to support better injury prevention practices in sports environments.

UNIVERSITY OF CALGARY

The Sport Injury Prevention Research Centre (SIPRC) is in the Faculty of Kinesiology FACULTY OF KINESIOLOGY Sport Injury Prevention Research Centre at the University of Calgary with multiple collaborative member researchers, 🚯 🔇 🔃 trainees, and community partners nationally and internationally. SIPRC is one of

11 International Olympic Committee (IOC) Research Centres for the Prevention of Injury and Protection of Athlete Health and the Canadian IOC Research Centre since 2009. For over a decade, SIPRC has made strides in the prevention of sport-related injuries and concussions and their consequences in youth across a diversity of school and community sport contexts. Targets for prevention include policy, equipment, and training strategies. SIPRC uses an integrated knowledge translation model in which community, clinical, and school partners (including youth) are engaged in every step of the research process. Injury prevention in youth sport is critical to improving the health and quality of life of Canadian youth and SIPRC research informing best practice and policy has had significant public health impact in reducing the burden of injuries in youth.



