IOC World Conference on Prevention of Injury & Illness in Sport

April 7 - 9, 2011
Grimaldi Forum Monaco
Monte-Carlo, Principality of Monaco
The IOC World Conference on Prevention of Injury and Illness in Sport is a continuation of the 1st and 2nd World Congress on Sports Injury Prevention, organised by the Oslo Sports Trauma Research Center in 2005 and 2008.
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## IOC World Conference on Prevention of Injury & Illness in Sport
### Monte-Carlo, April 7 - 9, 2011

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[www.ioc-preventionconference.org](http://www.ioc-preventionconference.org)
Dear Future Participants,

Protecting the health of athletes is the number one priority for the International Olympic Committee (IOC), through its Medical Commission. As health risks are inherent to the practice of sport, one of its main roles is to provide effective medical advice and care for the athlete. Therefore, there is a need for improved prevention and management. This is why the IOC supports the organisation of the World Conference on Prevention of Injury and Illness in Sport, the aim of which is to review and discuss the latest developments, risk factors and prevention programmes, as well as the need for further research into athletes’ injuries and illnesses. This Conference will be the perfect platform for physicians, physical therapists, biomechanists and other scientists to share their assessment of sports injuries and illnesses and provide not only important epidemiological information, but also guidelines for their prevention.

More than ever, we must make joint efforts in order to identify and minimise risk factors in sport and maximize safe sports participation!

We look forward to your participation in Monaco in April 2011!

Arne Ljungqvist
IOC Chairman of the Medical Commission
Honorary President IOC World Conference on Prevention of Injury & Illness in Sport

Jacques Rogge - IOC President

While sport improves health and well-being, it also entails a risk of injury and disease. This is why protecting the health of the athlete is a key task for the International Olympic Committee (IOC).

Through its Medical Commission, chaired by Professor Arne Ljungqvist, the IOC has, throughout the years, looked at whether the health benefits of sports participation outweigh the risks of injury and long-term disability, especially for high-level athletes, as well as concentrating in recent years on many prevention issues.

In keeping with its commitment, the International Olympic Committee, in conjunction with the Monaco Biennale, has decided to take over responsibility for the World Conference on Prevention of Injury and Illness in Sport. I take this opportunity to express my sincere thanks to the Oslo Sports Trauma Research Centre which organised the first prevention congresses in Oslo and Tromsø.

I am convinced that this Conference will be an ideal platform for a thorough and constructive exchange of views, considering the latest research on illnesses and injuries in sport with the aim of taking concrete measures to implement new and improved injury prevention strategies, for high-level and recreational athletes alike. I wish here to thank HSH Sovereign Prince Albert II and all the Principality of Monaco for welcoming the IOC World Conference on Prevention of Injury and Illness in Sport.

My thanks go also to our partners and all contributing authors, for their support and involvement in the Conference.

I look forward to seeing you in Monaco in April 2011!

HSH Prince Albert II of Monaco

I am truly delighted at the prospect of hosting the “IOC World Conference on Prevention of Injury & Illness in Sport” from 7 to 9 April 2011, in Monaco.

I would like to express my gratitude to the organizers for having chosen the Principality of Monaco as the venue for this event.

I see this as a further sign of recognition for our determination in favour of sport and our attachment to Olympic values, as well as our commitment to the discipline of sport medicine, all too often overlooked.

This meeting will bear on an even more cutting-edge field, that of the prevention of injury and illness in sport.

In most medical specialities, the crucial importance of prevention programmes is now recognized. And preventive strategies are becoming an objective as determinant as curative strategies.

There can be no doubt that this gathering will represent a new step in the growing awareness of the importance of preservation of athletes’ health, as early as possible.

From this time, I would like to extend my sincere welcome to all participants in this Conference and my heartfelt wishes for its success.

Gerhard Heiberg
IOC Chairman of the Marketing Commission
Honorary President IOC World Conference on Prevention of Injury & Illness in Sport

Dear Participants,

Sport offers society a unique opportunity for individual and social development. It is important to continue promoting sports activities, which are decisive factors for health and well-being. However, sports also entails a certain risk of injury - sometimes with dire consequences for health and performance. It is therefore important that all stakeholders - sports organisations, health professionals, scientific researchers, coaches and athletes - consider appropriate safety measures.

It is clear today that injury prevention and illness in sport is the new focus of sports medicine.

The 3rd World Conference on Prevention of Injury and Illness in Sport which will be under the responsibility of the International Olympic Committee, and bring together scientists and practitioners to investigate and develop new concepts to enhance safety in sport through a beneficial cooperation.

I look forward to your contribution to an interesting programme and to a very important step towards a safer sports participation.

I will be delighted to welcome you in the unique Principality of Monaco in April 2011.
Welcome to the IOC World Conference on Prevention of Injury & Illness in Sport

Lars Eidebretsen, MD PhD
IOC Medical & Scientific Department
Head of Scientific Activities

Fredrik S. Bendiksen, MD
President
Organising Committee

Roald Bahr, MD PhD
Chair
Scientific Committee

Dear colleagues,

Based on the success of the inaugural 1st World Congress on Sports Injury Prevention in 2005 in Oslo and the subsequent 2nd World Congress in 2008, where 700 participants from 56 countries participated, the International Olympic Committee has decided to accept the invitation to take over responsibility for the congress from the founders at the Oslo Sports Trauma Research Center.

The 3rd World Congress on Sports Injury Prevention, will now be the IOC World Conference on Prevention of Injury and Illness in Sport, held in Monaco in April 7-9, 2011. As reflected by the change in title, the scope of the congress is expanded from sports injury prevention to also include the prevention of other health problems associated with sports participation. The aim is to present evidence-based information on methods to prevent injuries and now also illness and other health problems associated with sports participation, from a multidisciplinary perspective. The final programme is the result of a “bottom-up” approach, where we have invited the sports medicine community to suggest invited lectures, panel discussions, and symposia. We invited a number of recognised experts in the area of injury and illness prevention as members of the scientific committee. The 17-member strong scientific committee has had a challenging task, considering that of the more than 100 proposals received the core program allowed for only 5 keynote lectures and 21 symposia. As you can see from the final programme, the result is an amazing array of state-of-the-art lectures covering a wide range of topics, featuring as many as 94 invited speakers.

However, there is still a chance to become part of the programme! We will have a number of workshops and free communication sessions; these will not be determined until this fall. There is now a call for abstracts (submission deadline: September 1) and workshop proposals (also with a September 1 deadline). We encourage you to submit your proposals.

Monaco has been chosen as venue for this conference, and will serve as the perfect setting for this event. The aim is that the IOC World Conference on Prevention of Injury & Illness in Sport in Monaco 2011 will become the benchmark against which future congresses in sports medicine will be measured.

We look forward to welcoming you in Monaco.

Also, do consider signing up for the 3rd IOC Advanced Team Physician Course, which will be held in Calvi, Corsica just before the conference. This is a unique opportunity to learn about many of the specific skills a team physician needs. The ATPC will be geared towards the practical issues of working with high-level athletes, with a strong focus on active participation – reviewing and discussing complex cases covering the range of clinical sports medicine.
Organising Committee

President
Fredrik S. BENDIKSEN, MD

Members

Cherine FAHMY, Project Officer
IOC Medical & Scientific Department
Head of Logistics and Social Events

Lucia TEPPATI
Senior Project Leader
Publi Créations SAM - Monaco

Scientific Committee

Chair
Roald BAHR, MD, PhD
Professor & Chair, Oslo Sports Trauma Research Center, Department of Sports Medicine, Norwegian School of Sport Sciences, Oslo, Norway

Juan Manuel ALONSO, MD PhD
Health Department Royal Spanish Athletics Federation, Madrid, Spain; IAAF Medical and Anti-doping Commission, Monaco

John A. BERGFELD, MD
Director, Cleveland Clinic Sports Health, Cleveland, Ohio, USA; President, International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS)

Anthony CLOUGH, BDS LDS RCS Hon Lecturer
Dept Sports Dentistry, Eastman Institute, University College London, UK

Jiri DVORAK, MD
Professor of Neurology, Schulthess Clinic Zurich, Switzerland; FIFA Chief Medical Officer, Chairman, FIFA Medical Assessment and Research Centre (F-MARC); Deputy Editor, Spine

Lars ENGBRETSEN, MD PhD
Professor and Co-Chair, Oslo Sports Trauma Research Centre, Oslo, Norway; Chair, Division of Neuroscience and Musculoskeletal Medicine, Orthopaedic Centre, Ullevål University Hospital, Oslo, Norway

Toru FUKUBAYASHI, MD
Professor, Faculty of Sports Science, University of Waseda, Japan

Karim KHAN, MD PhD
Professor, Centre for Hip Health and Musculoskeletal Research, University of British Columbia, Vancouver, Canada; Editor-In-Chief, British Journal of Sports Medicine

Michael KJÆR, MD PhD
Professor & Head, Institute of Sports Medicine, Sports Medicine Research Centre, University of Copenhagen, Bispebjerg Hospital, Copenhagen, Denmark; Editor-In-Chief, Scandinavian Journal of Medicine & Science in Sports

Paul McCORERY, MBBS PhD
Associate Professor and NHMRC Clinical Research Fellow, The University of Melbourne, School of Physiotherapy, Australia

Willem MEEUWISSE, MD PhD
Professor, Chair, Sport Injury Prevention Research Group, University of Calgary, Sport Medicine Centre, Calgary, Canada; Editor-In-Chief, Clinical Journal of Sports Medicine

Margo Lynn MOUNTJOY, MD CCFP FCFP
Assistant Clinical Professor, McMaster University of School of Medicine, Guelph, Ontario, Canada; IOC Medical Commission; FINA Bureau - Sports Medicine

Antonio PELLICCIA, MD Professor
Post-Graduate School of Sports Medicine Scientific Director, Institute of Sport Medicine and Science; Italian National Olympic Committee, Rome, Italy

Per RENSTRÖM, MD PhD Professor Emeritus
Section of Sports Orthopaedic Surgery, Karolinska Institute, Stockholm, Sweden

Martin SCHWELLNUS, MBCh, MSc(Med) MD FACSM, FFIMS, Professor
UCT/MRC Research Unit for Exercise Science and Sports Medicine, Department Human Biology, Faculty of Health Sciences, University of Cape Town, South Africa

Sandra SHULTZ, PhD ATC CSCS
Associate Professor, Department of Exercise and Sport Science, University of North Carolina at Greensboro, USA, Co-Director of the Applied Neuromechanics Research Laboratory and UNCG

Yves VANLANDEWYCK, MD PhD PT
Professor of Rehabilitation Sciences, Faculty of Kinesiology and Rehabilitation Sciences, Katholieke Universiteit, Leuven, Belgium
International Olympic Committee
Medical and Scientific Department
Director in charge: Patrick SCHAMASCH

www.olympic.org
GRIMALDI FORUM
10, Avenue Princesse Grace
Tel.: +377 99 99 20 00
www.grimaldiforum.com

With 35,000 sqm. of modular premises and state-of-the-art technologies, the Grimaldi Forum Monaco is a wonderful tool to buildup events. Since its opening in 2000, about 100 events are organised each year. Many events management and international corporate companies are attracted by the glass and steel structure as well as its tailor-made services dedicated to the 3 auditoria, 22 breakout rooms, 2 inter-connecting exhibitions halls and 2 banqueting areas.

A permanent team of 150 professionals, representing 46 different professions, accompanies event organisers in their projects, from the space-layout design to the construction of settings, as well as for logistics, catering, hospitality, communications, etc.

The Grimaldi Forum Monaco can host all types of professional events: conventions, seminars, product launches, exhibitions, fairs, congresses.

Ideally located in the heart of Monaco, the Grimaldi Forum Monaco is situated within walking distance of hotels, restaurants and other leisure activities.

The Grimaldi Forum Monaco is one of the first congress centres in Europe to have successfully obtained the ISO 14001:2004 international standard in environmental management.
Programme at a Glance

**Wednesday, April 6**

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<th>Session</th>
<th>Venue</th>
<th>Chair(s)</th>
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<tbody>
<tr>
<td>16.00-20.00</td>
<td>Registration</td>
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<tr>
<td>18.30-19.30</td>
<td>Welcome Reception - Hall Diaghilev</td>
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**Thursday, April 7**

**Auditorium Prince Pierre**

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<th>Session</th>
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<tr>
<td>09.00-09.30</td>
<td>Opening Ceremony</td>
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<tr>
<td>09.30-10.30</td>
<td>Keynote Lecture: Sudden cardiac death (Jonathan Drezner, USA &amp; Antonio Pelliccia, Italy)</td>
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**10.30-11.00 Coffee Break**

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<th>Time</th>
<th>Session</th>
<th>Venue</th>
<th>Chair(s)</th>
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<tbody>
<tr>
<td>11.00-12.30</td>
<td>Session A</td>
<td>Room Camille Blanc</td>
<td>Margo Mountjoy (Canada)</td>
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<tr>
<td>11.00-12.30</td>
<td>Session B</td>
<td>Room Van Dongen</td>
<td>Ajit Chaudhari (USA)</td>
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<tr>
<td>11.00-12.30</td>
<td>Session C</td>
<td>Room Auric</td>
<td>Co-chairs: Toru Fukubayashi (Japan), Peter Jenoure (Switzerland)</td>
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<tr>
<td>11.00-12.30</td>
<td>Free Communications I</td>
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<tr>
<td>11.00-17.50</td>
<td>Session D</td>
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<tr>
<td>11.00-17.50</td>
<td>Session E</td>
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<td>Evert Verhagen (The Netherlands)</td>
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**12.30-13.45 Lunch**

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<tr>
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<td>Louis-Philippe Boulet (Canada), Sandra Anderson (Australia)</td>
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<td>13.45-16.15</td>
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**16.15-16.45 Coffee Break**

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<td>16.45-18.15</td>
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<td>Evert Verhagen (The Netherlands)</td>
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<tr>
<td>16.45-18.15</td>
<td>Free Communications IV</td>
<td></td>
<td>Co-chairs: Willem Meeuwisse (Canada), Paul McCrory (Australia)</td>
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**18.15-19.30 Wine & Cheese Reception with Poster discussions**

*Hall Diaghilev*
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<thead>
<tr>
<th>Time</th>
<th>Session/Workshop</th>
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<td><strong>09.30-09.15</strong></td>
<td><strong>KEYNOTE LECTURE: Sports tendinopathy</strong> (Michael Kjær, Denmark)</td>
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<td>16.30-18.00</td>
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<td>16.30-18.00</td>
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<td>16.30-18.00</td>
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<td>20.00</td>
<td><strong>Gala Dinner at Salle des Etoiles</strong></td>
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### Programme at a Glance

#### Saturday, April 9

**Auditorium Camille Blanc**

**08.30-09.15**

**KEYNOTE LECTURE:** Implementation research *(Caroline Finch, Australia)*

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<tr>
<td>09.30-12.30</td>
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<td>Auditorium Camille Blanc</td>
<td>Andrew McIntosh <em>(Australia)</em></td>
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<td><strong>Symposium 15</strong></td>
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<td></td>
<td><strong>Sports helmets</strong></td>
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<td>09.30-12.30</td>
<td><strong>SESSION B</strong></td>
<td>Room Van Dongen</td>
<td>Paul McCrory <em>(Australia)</em></td>
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<tr>
<td>09.30-12.30</td>
<td><strong>Symposium 16</strong></td>
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<td>Per Renström <em>(Sweden)</em></td>
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<td></td>
<td><strong>Groin injuries</strong></td>
<td></td>
<td>Per Hölmich <em>(Denmark)</em></td>
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<tr>
<td>09.30-12.30</td>
<td><strong>SESSION C</strong></td>
<td>Room Auric</td>
<td>Paul McCrory <em>(Australia)</em></td>
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<td><strong>Symposium 17</strong></td>
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<td>Hugh Seward <em>(Australia)</em></td>
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<td>11.15-12.30</td>
<td><strong>Cont. (Symposium 16)</strong></td>
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<td>Carolyn Emery <em>(Canada)</em></td>
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<td>12.30-13.45</td>
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<td>13.45-15.15</td>
<td><strong>Symposium 18</strong></td>
<td>Room Poulenc 1</td>
<td>Per Renström <em>(Sweden)</em></td>
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<td>13.45-15.15</td>
<td><strong>Australian football</strong></td>
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<td>Per Hölmich <em>(Denmark)</em></td>
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<td><strong>Symposium 19</strong></td>
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<td></td>
<td><strong>Adolescent athletes</strong></td>
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<td>13.45-15.15</td>
<td><strong>Free Communications VII</strong></td>
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<td>Co-chairs: Toru Fukubayashi <em>(Japan)</em></td>
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<td></td>
<td><strong>Workshops</strong></td>
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<td>Jiri Dvorak <em>(Switzerland)</em></td>
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<td>15.15-15.45</td>
<td>Coffee Break</td>
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<td>15.45-17.15</td>
<td><strong>Symposium 20</strong></td>
<td>Room Poulenc 2</td>
<td>Kevin Guskiewicz <em>(USA)</em></td>
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<td><strong>Concussion</strong></td>
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<td>15.45-17.15</td>
<td><strong>Symposium 21</strong></td>
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<td>Chair: Caroline Finch <em>(Australia)</em></td>
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<td></td>
<td><strong>The challenge of implementation</strong></td>
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<td>15.45-17.15</td>
<td><strong>Free Communications VIII</strong></td>
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<td>Co-chairs: Per Renström <em>(Sweden)</em></td>
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<td><strong>Workshops</strong></td>
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<td>Fredrik Bendiksen <em>(Norway)</em></td>
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<tr>
<td>17.15-18.00</td>
<td><strong>KEYNOTE LECTURE:</strong> Education and implementation - the FIFA model <em>(Jiri Dvorak, Switzerland, Astrid Junge, Switzerland, Colin Fuller, UK)</em></td>
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<tr>
<td>18.00-18.30</td>
<td><strong>CLOSING LECTURE:</strong> The health of the Olympic athlete <em>(Lars Engebretsen, Switzerland)</em></td>
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<td>19.30</td>
<td><strong>Faculty Event</strong> <em>(by invitation)</em></td>
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SCIENTIFIC PROGRAMME
Wednesday, April 6

16.00
Hall Diaghilev
Registrations open

18.30-19.30
Hall Diaghilev
Welcome Reception hosted by the Minister of State of the Principality of Monaco

Thursday, April 7

09.00-09.30
Auditorium
Prince Pierre
Opening ceremony

09.30-10.30
Auditorium
Prince Pierre
**Keynote lecture 1**

Sudden cardiac death in athletes: Transforming uncertainty into effective models for prevention

Speakers:
- Jonathan Drezner MD Associate Professor
  University of Washington, Seattle, USA
- Antonio Pelliccia MD Professor
  Institute of Sport Medicine and Science, Rome, Italy

10.30-11.00
Coffee break
Hall Diaghilev

11.00-12.30
Auditorium
Camille Blanc
**Session A - Symposium 1**

Preventing the female athlete triad
Chair: Margo Mountjoy (Canada)

**Programme:**

- **Margo Mountjoy (Canada):** What is the extent of the problem?
- **Anne B. Loucks (USA):** Evolution of our current understanding of the female athlete triad
- **Nancy I. Williams (USA):** Bioenergetics as a guide for preventing the female athlete triad
- **Mary Jane De Souza (USA):** Practical methods for preventing the female athlete triad
- **Margo Mountjoy (Canada):** Effects of preventing the female athlete triad on sports performance

**Speakers:**
- Margo Mountjoy MD Assistant Clinical Professor
  McMaster University School of Medicine, Guelph, Ontario, Canada
- Mary Jane De Souza PhD Professor
  Pennsylvania State University, University Park, PA, USA
- Anne B. Loucks PhD Professor
  Ohio University, Athens, OH, USA
- Nancy I. Williams ScD Professor
  Pennsylvania State University, University Park, PA, USA
11.00-12.30  
Session B - Symposium 2

Getting to the core: Scientific evidence for core stability in sport injury prevention

Chair: Ajit Chaudhari (USA)

Programme:

11.00-11.03  
• Ajit Chaudhari (USA): Introduction - the pervasiveness of core stability

11.03-11.21  
• Ajit Chaudhari (USA): Trunk motor control and its influence on running mechanics

11.21-11.39  
• Thomas Best (USA): Core training to prevent hamstring/groin re-injury

11.39-11.57  
• Reed Ferber (Canada): Hip muscle training to prevent low back pain

11.57-12.15  
• James Oñate (USA): Development of large-scale screening programs assessing core stability for injury prevention

12.15-12.30  
• Chaudhari, Best, Ferber, Oñate: Panel discussion - Does the evidence support core stability training to prevent injury?

Speakers:

- Ajit Chaudhari PhD Assistant Professor  
Ohio State University, Columbus, OH, USA

- Thomas Best MD PhD FACSM Professor  
Ohio State University, Columbus, OH, USA

- James Oñate PhD Associate Professor  
Ohio State University, Columbus, OH, USA

- Reed Ferber PhD Assistant Professor  
University of Calgary, Calgary, AB, Canada

11.00-12.30  
Session C - Free Communications I

Chairs: Toru Fukubayashi (Japan) & Peter Jenoure (Switzerland)

11.00-11.10  
• A. Nilstad (USA), E. Kristianslund, T. Krosshaug, K. Steffen, G. Myklebust, R. Bahr, T.E. Andersen (Norway): A simple clinical screening test can identify elite female football players with increased knee valgus angles (#1)

11.10-11.20  
• T. Florenes, L. Nordsletten, S. Heir, R. Bahr (Norway): Injuries to World Cup nordic skiers and telemarkers - data from two seasons (#2)

11.20-11.30  
• C. Raschner, H.P. Platzer, C. Patterson, J. Werner, C. Hildebrandt (Austria): The relationship between ACL injuries and physical fitness in junior Austrian alpine ski racers - a 10 year longitudinal study (#3)

11.30-11.40  

11.40-11.50  

11.50-12.00  
• J. Agel, J. Schisel (USA): Practice injury rates in collegiate sports (#6)

12.00-12.10  

12.10-12.20  
• N. Ruest, M. Nguyen, T. Embree, B.H. Rowe, B.E. Hagel (Canada): Mountain bike terrain park injuries: An emerging cause of morbidity (#8)

12.20-12.30  
• W. van Mechelen, D.C.M. Collard, M. Chinapaw, E.A.L.M. Verhagen (The Netherlands): Magnitude and economic burden of sports and physical activity-related injuries in Dutch 10-12 year old children (#9)
11.00-13.50  Session D - Workshops  
**Room Poulenc 1**

11.00-11.50  
- **Tim Hewett** *(USA)* & **Andrew Gregory** *(USA)*: How to set up an ACL injury prevention program for adolescent athletes (#1)

12.00-12.50  
- **Alex Diamond** *(USA)*, **Sarah Haverstick** *(USA)* & **Moira Donahue** *(USA)*: Expanding the role of the sports medicine specialist - creating relationships with an injury prevention coalition (#2)

13.00-13.50  
- **Grethe Myklebust** *(Norway)* & **Yonatan Kaplan** *(Israel)*: Risks and predictive factors for a safe return to sport: The ACL injury as a model (#3)

11.00-13.50  Session E - Workshops  
**Room Poulenc 2**

11.00-11.50  
- **Simon Kemp** *(UK)* & **Andy Smith** *(UK)*: Pitchside immediate care of the athlete in collision and contact sports - secondary injury prevention initiatives for potential catastrophic cervical spine injury (#21)

12.00-12.50  
- **Patrick Coudert** *(Monaco)*: The importance of the electronic shared medical folder in sports medicine - the concrete implementation within two Olympic federations (#22)

13.00-13.50  
- **Bruno Lussiez** *(Monaco)*, **Didier Fontes** *(Monaco)* & **Jean-Philippe Ringwald** *(Monaco)*: The ligamentous lesions of the wrist in sports traumatology - from prevention to surgical treatment (#23)

12.30-13.45  
**Lunch**  
**Hall Diaghilev**

13.45-16.15  Session A - Symposium 3  
**Auditorium Camille Blanc**

**Respiratory health of elite athletes: How to prevent airway dysfunction**  
Co-chairs: **Louis-Philippe Boulet** *(Canada)* & **Sandra Anderson** *(Australia)*

**Programme:**

13.45-14.00  
- **Ken Fitch** *(Australia)*: Overview of respiratory health of athletes

14.00-14.15  
- **Don McKenzie** *(Canada)*: Respiratory physiology and adaptation to high-level exercise training

14.15-14.30  
- **Kenneth Rundell** *(USA)*: Detrimental effects of air pollution in athletes and their prevention

14.30-14.45  
- **Pascale Kippelen** *(UK)*: Mechanisms of airway injury during high-level exercise

14.45-15.00  
- **Sandra Anderson** *(Australia)*: Assessment and prevention of exercise-induced asthma in athletes

15.00-15.15  
- **Valerie Bougault** *(France)*: Prevention of airways dysfunction in swimmers

15.15-15.30  
- **Malcolm Sue-Chu** *(Norway)*: Winter sports athletes: Long-term effects of cold air exposure

15.30-15.45  
- **Louis-Philippe Boulet** *(Canada)*: Cough and upper airways disorders in athletes: Mechanisms and prevention

15.45-16.15  
- **Fitch, McKenzie, Rundell, Kippelen, Anderson, Bougault, Sue-Chu, Boulet**: Round-table on prevention

**Speakers:**
- Louis-P. Boulet MD FRCPC Professor  
  Quebec Heart & Lung Institute, Quebec, QC, Canada
- Don C. McKenzie MD PhD Professor  
  University of British Columbia, Vancouver, BC, Canada
- Ken Fitch MD Professor  
  University of Western Australia, Crawley, Western Australia
- Kenneth W. Rundell PhD FACSM Professor  
  Marywood University, Scranton, PA, USA
- Pascale Kippelen PhD Lecturer  
  Brunel University, Uxbridge, Middlesex, United Kingdom
Session B - Symposium 4

The Athletic Periodic Health Examination: How can we use screening to maximize prevention?

Chair: Willem Meeuwisse (Canada)

Programme:

13.45-14.10  • Willem Meeuwisse (Canada): Principles of screening: Early detection of disease in athletes?

14.10-14.25  • Mats Börjesson (Sweden): Making the most of the cardiology examination in the athletes: Standardizing ECG criteria for accurate detection

14.25-14.40  • Roald Bahr (Norway): What is the best practice for musculoskeletal screening if prevention is the objective?

14.40-14.55  • Bill Roberts (USA): Health screening for adolescent athletes

14.55-15.10  • Liz Joy (USA): Screening college-aged athletes

15.10-15.25  • Jiri Dvorak (Switzerland): Pre-participation screening for professional athletes

15.25-15.40  • Gordon Matheson (USA): Improving the predictive value of the PHE: Use of registries for athletic populations

15.40-16.15  • Meeuwisse, Börjesson, Bahr, Roberts, Joy, Dvorak, Matheson: Panel discussion - In what settings should the PHE be mandatory? What should be included in the PHE? How is the PHE best delivered?

Speakers:

- Willem Meeuwisse MD PhD Professor
  University of Calgary, Calgary, AB, Canada
- Elizabeth Joy MD MPH Associate Professor
  University of Utah, Salt Lake City, UT, USA
- Roald Bahr MD PhD Professor
  Oslo Sports Trauma Research Center, Oslo, Norway
- William O. Roberts MD MS Professor
  University of Minnesota Medical School, St Paul, MN, USA
- Jiri Dvorak MD Professor
  Schulthess Clinic, Zurich, Switzerland
- Gordon O. Matheson MD PhD Professor
  Stanford University, Stanford, CA, USA
- Mats Börjesson MD PhD Associate Professor
  Sahlgrenska University Hospital, Göteborg, Sweden
Session C - Free Communications II

Room Auric

13.45-14.55

**Chairs:** Sandra Shultz (USA) & Juan Manuel Alonso (Spain)

- S. Richmond, C.A Emery, P.K Doyle-Baker, A. Nettel-Aguirre (Canada): Preventing lower extremity sport injury through a high intensity neuromuscular training program in a junior high school setting (#11)
- J. Parkkari, H. Taanila, J. Suni, V. Mattila, O. Ohrankämäen, P. Vuorinen, P. Kannus, H. Pihlajamäki (Finland): A neuromuscular training and educational counselling programme to decrease the risk of lower limb injury in young men during military service: A population based cluster randomised study (#12)
- T. McGuine, A. Brooks, S. Hetzel (USA): The effect of a lace-up ankle brace on ankle injury rates in adolescent basketball players (#13)
- E. Lamme (Canada): The business of injury prevention in circus performance (#14)
- M. Mountjoy, A. Junge (Switzerland): Preventing injuries in water polo: Have we scored? (#16)

15.05-16.15

Session C - Free Communications III

Room Auric

**Chairs:** Fredrik Bendiksen (Norway) & Karim Khan (Canada)

- D. Webner, J. Drezner, J. Horneff, W. Roberts (USA): Sudden cardiac arrest and death in United States marathons (#17)
- H. Berge, G. Gjerdalen, T.E. Andersen, K. Steine, E. Solberg (Norway): Elevated blood pressure in Norwegian elite football players is associated with both increased sympathetic activity and LV mass (#18)
- M. Schwellnus, M. Collins, N. Drew (South Africa): Risk factors associated with exercise associated muscle cramping (EAMC) - a prospective cohort study in ironman triathletes (#19)
- M. Schwellnus, W. Derman, M. Lambert, C. Redhead, T. Page (South Africa/New Zealand): Epidemiology of illness during the super 14 rugby tournament - a prospective cohort study (#20)
- C. Tremblay, B. Hamilton, M. Sala, J. Paoloni, H. Chalabi (Qatar): Prevalence of haemoglobinopathy in sportsmen in Qatar (#21)
- M. Schwellnus, M. Lichaba, M. Collins (South Africa): The incidence and risk factors for pre-race respiratory tract symptoms in ironman triathletes (#22)

14.00-17.50

Session D - Workshops

Room Poulenc 1

- Anthony Clough (UK) & Paul Piccininni (Canada): The physician’s role in the prevention of dental and orofacial injuries (#4)
- Toru Fukubayashi (Japan), Sadao Niga (Japan), Jindo Hatanaka (Japan): Active athletic training improves and prevents groin pain syndrome (#5)
- James Zachazewski (USA) & Joanne Borg-Stein (USA): Practical training of core, hip girdle and proximal lower extremity strength and flexibility in the female athlete (#6)
- A. Grethe Myklebust (Norway) & Tim Hewett (USA): Avoiding ACL injuries - how to do it! (#7)
**Session E - Workshops**

14.00-17.50

Room Poulenc 2

14.00-14.50
- **Geoffrey Verrall** (Australia): Training adaptation of the hamstring muscle: A cutting edge practical guide to individual athlete and team based prevention programs (#24)

15.00-15.50
- **Jim Macintyre** (USA) & **Andrea Matich** (USA): The foot bone’s connected to the leg bone: The importance of kinetic chain dysfunction in overuse injuries (#25)

16.00-16.50
- **Simon Kemp** (UK) & **Gary Henderson** (UK): Completing the injury prevention cycle - how should we be coaching the tackle in rugby union? (#26)

17.00-17.50
- **Catherine Ortega** (USA), **Greg Zuest** (USA) & **Larry Leverenz** (USA): Prevention of lower extremity injuries with use of biomechanical evaluations (#27)

**16.15-16.45**

Coffee break

**16.45-18.15**

Session A - Symposium 5

**Prevention of shoulder and elbow injuries in sport**

Chair: **Marc Safran** (USA)

Programme:

16.45-17.00
- **Marc Safran** (USA): Prevention of overuse injuries of the shoulder in baseball and tennis

17.00-17.15
- **Mark Hutchinson** (USA): Prevention of overuse injuries of the elbow in baseball and tennis

17.15-17.30
- **Gregory Bain** (Australia): Prevention of overuse injuries of the shoulder and elbow in cricket

17.30-17.45
- **Lyndon Gross** (USA): Prevention of traumatic injuries of the shoulder in rugby, boxing and martial arts

17.45-18.00
- **François Kelberine** (France): Prevention of traumatic injuries of the elbow in rugby, boxing and martial arts

18.00-18.15
- **Safran, Hutchinson, Bain, Gross, Kelberine**: Panel discussion - Implementing prevention programs in team sports

Speakers:
- Marc R. Safran MD Professor
  Stanford University, Redwood City, CA, USA
- Mark R. Hutchinson, MD Professor
  Chicago, IL, USA
- Gregory Bain MD Associate Professor
  University of Adelaide, Adelaide, Australia
- Lyndon Gross, MD, PhD
  St Louis University, St Louis, MO, USA
- François Kelberine MD
  Clinique Provençale Parc Rambot, Aix en Provence, France

**16.45-18.15**

Session B - Symposium 6

**Behaviour - a key factor for injury prevention**

Chair: **Evert Verhagen** (The Netherlands)

Programme:

16.45-17.00
- **Evert Verhagen** (The Netherlands): Why we must not overlook behaviour when preventing injuries

17.00-17.20
- **Barbara Morrongiello** (Canada): Attitudes, emotions, and cognitions - influences on risk taking

17.20-17.40
- **Albi Sole** (Canada): Lessons learned - what does avalanche safety teach us?

17.40-18.00
- **Peta White** (Australia): Looking beyond the athlete - peer behaviour and injury prevention

18.00-18.15
- **Verhagen, Morrongiello, Sole, White**: Panel discussion - Is behaviour an important piece in the injury prevention puzzle?
Speakers:
- Evert Verhagen PhD
  VU University Medical Center, Amsterdam, The Netherlands
- Barbara Morrongiello PhD
  University of Guelph, Guelph, ON, Canada
- Albi Sole MSc UIAGM
  Outdoor Council of Canada, University of Calgary, Calgary, AB, Canada
- Peta White PhD
  University of Ballarat, Ballarat, Victoria, Australia

16.45-18.15
Room Auric

Session C - Free Communications IV

Chairs: Willem Meeuwisse (Canada) & Paul McCrory (Australia)

16.45-16.55
• D. Patton, A. McIntosh, S. Kleiven (Australia/Sweden): Brain loading in concussive head impacts: Implications for injury prevention (#24)

16.55-17.05
• G. Fife, W. Pieter, D. O’Sullivan, D. Cook, T. Kaminski (USA/Philippines/South Korea/UK): Effects of Olympic style taekwondo kicks on an instrumented head-form and resultant head injury measures (#25)

17.05-17.15
• C. Lebrun, M. Mrazik, D. Naidu, J. Matthews-White, A. Game (Canada): The impact of fitness level on self-report of concussion symptoms (#26)

17.15-17.25
• D. Patton, A. McIntosh, K. Thai (Australia): Development of a high performance jockey helmet (#27)

17.25-17.35
• K. Schneider, C. Emery, J. Kang, G. Schneider, W. Meeuwisse (Canada): Are pre-season reports of neck pain, dizziness and/or headaches risk factors for concussion in male youth ice hockey players? (#28)

17.35-17.45
• J. Hides, W. Stanton, M.D. Mendis, J. Gildea (Australia): Effect of stabilization training on trunk muscle size, motor control, low back pain and player availability among elite Australian rules football players (#29)

17.45-17.55
• K. De Mey, L. Danneels, B. Cagnie, A. Cools (Belgium): Are kinetic chain rowing exercises relevant in shoulder and trunk injury prevention training? (#30)

17.55-18.05
• F. Wilson, C. Simms, G. Gormley, C. Gissane (Ireland/UK): The effect of fatigue on frontal plane angular changes in the lumbar spine of elite rowers (#31)

18.05-18.15

18.15-19.30
Wine & Cheese Reception with Poster discussions
**Friday, April 8**

**Keynote lecture 2**

**Sports tendinopathy: From effective training to overuse injury - implications for prevention**

**Speaker:**

Michael Kjær Dr. Med. MD Professor  
Institute of Sports Medicine Copenhagen, Copenhagen, Denmark

**Session A - Symposium 7**

**Current challenges in the prevention of sudden cardiac death in athletes**

**Chair:** Jonathan Drezner (USA)

**Programme:**

09.30-09.45  
• Jonathan Drezner (USA): What is the scope of the problem? A critical review of SCD incidence

09.45-10.00  
• Mats Börjesson (Sweden): Cardiovascular screening in athletes: Do current strategies meet the WHO standard

10.00-10.15  
• Kimberly Harmon (USA): Strengths and limitations of using history and physical examination to identify athletes at risk

10.15-10.30  
• Antonio Pelliccia (Italy): The Italian experience: Lessons learned and remaining questions

10.30-10.45  
• Jonathan Drezner (USA): Obstacles to ECG screening in the U.S.: Medical-legal, cost, infrastructure, and perceptual realities

10.45-11.15  
**Coffee break**

11.15-11.30  
• Jiri Dvorak (Switzerland): The FIFA model: Is world-wide screening possible?

11.30-11.45  
• Domenico Corrado (Italy): ECG interpretation in athletes

11.45-12.00  
• Sanjay Sharma (UK): Race, gender, and sport-specific considerations in the cardiovascular screening of athletes

12.00-12.30  
• Drezner, Börjesson, Harmon, Pelliccia, Dvorak, Corrado, Sharma: Discussion

**Speakers:**

- Jonathan Drezner MD Associate Professor  
  University of Washington, Seattle, WA, USA

- Mats Börjesson MD Associate Professor  
  Sahlgrenska University Hospital, Göteborg, Sweden

- Kimberly Harmon MD Clinical Associate Professor  
  University of Washington, Seattle, WA, USA

- Antonio Pelliccia MD Professor  
  Institute of Sports Science, Rome, Italy

- Jiri Dvorak MD Professor  
  Schulthess Clinic, Zurich, Switzerland

- Domenico Corrado MD PhD Professor  
  University of Padua, Padova, Italy

- Sanjay Sharma MD Professor  
  King’s College Hospital, London, United Kingdom
Session B - Symposium 8

Hamstring injuries in football

Chair: Per Hölmich (Denmark)

Programme:

09.30-09.45
- Per Hölmich (Denmark): Incidence of hamstring injuries in football

09.45-10.05
- Anthony Schache (Australia): Mechanism of hamstring injuries in football

10.05-10.25
- David Connell (Australia): Diagnostic imaging of the hamstring muscle complex

10.25-10.45
- Malachy McHugh (USA): Viscoelastic properties of the hamstring muscle-tendon unit in relation to injury

10.45-11.15 Coffee break

Hall Diaghilev

11.15-11.35
- Jesper Petersen (Denmark): Eccentric strength training is highly effective in hamstring injury prevention - the results of a RCT including 942 football players

11.35-11.55
- Per Aagaard (Denmark): Effects of eccentric exercise on the prevention and rehabilitation of hamstring muscle injury: Biomechanical and neural aspects

11.55-12.05
- Anthony Schache (Australia): Prevention and management strategies of hamstring injuries in football - practical considerations

12.05-12.30
- Hölmich, Schache, Connell, McHugh, Petersen, Aagaard: Panel discussion

Speakers:
- Per Hölmich MD Associate Research Professor
  Amager Hospital, Copenhagen, Denmark
- Anthony Schache PT PhD
  University of Melbourne, Melbourne, Victoria, Australia
- David Connell MD
  Olympic Park Medical Imaging, Melbourne, Australia
- Malachy McHugh PhD
  Nicholas Institute of Sports Medicine and Athletic Trauma, New York, NY, USA
- Jesper Petersen MD PhD
  Amager Hospital, Copenhagen, Denmark
- Per Aagaard PhD Professor
  University of Southern Denmark, Odense, Denmark

Session C - Free Communications V

Chairs: Lars Engebretsen (Norway) & Anthony Clough (UK)

09.30-09.40
- M. Posthumus, M. Collins, L. Van Der Merwe, D. O’Cuinneagain, W. Van Der Merwe, W.J. Ribbons, M.P. Schwellnus, S.M. Raleigh (South Africa/UK): Matrix metalloproteinase genes on chromosome 11q22 and the risk of anterior cruciate ligament (ACL) rupture (#33)

09.40-09.50
- M.J. Laguette, S. Prince, M. Collins (South Africa): Sequence variants within the 3’-UTR of the COL5A1 gene alters MRNA stability: Implications for musculoskeletal soft tissue injuries (#34)

09.50-10.00
- Y. Nakagawa, S. Mukai, Y. Hattori, T. Nakamura (Japan): Spondylolysis decreases sports performance in sumo wrestlers-radiological changes of lumbar spine in high school and collegiate sumo wrestlers (#35)

10.00-10.10
- M.J. Philippon, R.F. LaPrade, K.K. Briggs, J.D. Stull (USA): Screening of asymptomatic elite youth hockey players: Clinical and MRI exam (#36)

10.10-10.20
- G. Coughlan, B. Green, P. Pook, E. Toolan, S. O’Connor (Ireland): The relationship between physical game demands and injury rehabilitation in international rugby union: A global positioning system analysis (#37)

10.30-10.40  • A. Leumann, L. Ebner, V. Von Tscharner, V. Valderrabano (Switzerland/Canada): Neuromuscular patterns in chronic ankle instability (#39)

11.15-12.25  Session C - Free Communications VI

Room Auric

Chairs: Martin Schwellnus (South Africa) & Michael Kjær (Denmark)

11.15-11.25  • J. Zwerver, S.W. Bredeweg, I. van den Akker-Scheek (The Netherlands): Prevalence of jumper’s knee among non-elite athletes from different sports; a cross-sectional survey (#40)

11.25-11.35  • M. Hägglund, M. Waldén, J. Zwerver, J. Ekstrand (Sweden/The Netherlands): Epidemiology of patellar tendon injury in elite male soccer players (#41)

11.35-11.45  • H. Visnes, R. Bahr (Norway): Training volume as a risk factor for the development of jumper’s knee? Data from the patellar tendinopathy cohort 2006-2010 (#42)

11.55-12.05  • S. Zijlstra, I. Buist, S.W. Bredeweg (The Netherlands): The effectiveness of a preconditioning program on the incidence of running-related injuries in female novice runners: A randomized controlled trial (#44)

12.05-12.15  • N. Mahieu, D. Van Tiggelen, M. De Muynck, M. Dumalin, E. Witvrouw (Belgium): Blood flow of the Achilles tendon during military training (#43)

09.30-12.20  Session D - Workshops

Room Poulenc 1

09.30-10.20  • Catherine Ortega (USA), Larry Leverenz (USA) & Greg Zuest (USA): Anatomy of a shoe - preventing injuries from the ground up (#8)

10.30-11.20  • Bill T. Vicenzino (Australia), Thomas W. Kaminski (USA): Taping and bracing interventions for those with ankle instability (#9)

11.30-12.20  • Tönu Saartok (Sweden), Per Renström (Sweden) & Tommy Eriksson (Sweden): A modified ankle taping method for improved and sustained biomechanics during athletics (#10)

09.30-12.20  Session E - Workshops

Room Poulenc 2

09.30-10.20  • James Miller (USA) & Cees Rein van den Hoogenband (The Netherlands): A delicate balance in aquatic sports - the shoulder (#28)

10.30-11.20  • Margo Mountjoy (Canada) & Cees Rein van den Hoogenband (The Netherlands): Is it safe to go in the water? - injury & illness prevention in aquatic sports (#29)

11.30-12.20  • Heinz Liesen (Germany), Jochen Baumeister (Germany), Marjolijn Cordes (Germany) & Christiane Lerc (Germany): Fun & function - injury prevention in female youth soccer (#30)

12.30-13.40  Lunch
**Keynote lecture 3**

**Injury mechanism research - the need for a multi-disciplinary approach**

**Speaker:**

Tron Krosshaug PhD Associate Professor
Oslo Sports Trauma Research Center, Oslo, Norway

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**Session A - Symposium 9**

**Solving the mystery of non-contact ACL injuries - how do they happen?**

**Chair:** Tron Krosshaug (Norway)

**Programme:**

14.30-14.35  
**Tron Krosshaug** (Norway): Research approaches to study injury mechanisms in sports

14.35-14.50  
**Eric G. Meyer** (Ireland): Using cadaver knee simulation models to study non-contact ACL injury mechanisms

14.50-15.05  
**Timothy E. Hewett** (USA): What can be learnt from motion analysis studies of cutting and jump landings?

15.05-15.20  
**Choongsoo S. Shin** (South Korea): Injury simulation using the computer

15.20-15.35  
**Bing Yu** (USA): Combining research approaches to understand the mechanisms of injury

15.35-15.45  
**Hideyuki Koga** (Japan): A new hypothesis for ACL injury mechanisms, based on video analysis

15.45-16.00  
**Krosshaug, Meyer, Hewett, Shin, Yu, Koga:** Panel discussion

**Speakers:**

- Tron Krosshaug PhD Associate Professor  
  Oslo Sports Trauma Research Center, Oslo, Norway

- Eric G. Meyer PhD Research Fellow  
  Trinity College Dublin, Dublin, Ireland

- Timothy E. Hewett PhD FACSM Professor Director  
  Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA

- Choongsoo S. Shin PhD Assistant Professor, Director  
  Sogang University, Seoul, South Korea

- Bing Yu PhD Associate Professor  
  University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

- Hideyuki Koga MD PhD Assistant Professor  
  Oslo Sports Trauma Research Center, Oslo, Norway & Tokyo Medical and Dental University, Tokyo, Japan

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**Session B - Symposium 10**

**Cost analyses for sports injury prevention: The hows and whys**

**Chair:** Evert Verhagen (The Netherlands)

**Programme:**

14.30-14.45  
**Caroline Finch** (Australia): Why cost-effectiveness and cost-benefit studies need to be a critical component of sports injury prevention research

14.45-15.05  
**Evert Verhagen** (The Netherlands): Approaches to collecting and analyzing meaningful injury cost data

15.05-15.25  
**Simon Gianotti** (New Zealand): Cost analyses derived from continuous registration systems

15.25-15.45  
**Claude Goulet** (Canada): Cost data in practice - does it have an impact on public policies adoption?

15.45-16.00  
**Finch, Verhagen, Gianotti, Goulet:** Panel discussion - Cost-effectiveness analyses - burden or benefit for the field?
Speakers:
- Evert Verhagen PhD
  VU University Medical Center, Amsterdam, The Netherlands
- Caroline Finch PhD Professor
  Monash University, Melbourne, Australia
- Simon Gianotti PhD
  Accident Compensation Commission, Wellington, New Zealand
- Claude Goulet PhD Professor
  Laval University, Québec City, QC, Canada

14.30-16.00
Room Auric

**Session C - Symposium 11**

Understanding sports injuries to further develop paralympic sports and protect paralympic athletes throughout their career

Chair: Nick Webborn (UK)

Programme:

14.30-14.50
• Nick Webborn (UK): A lifetime sports injury prevention model

14.50-15.10
• Stuart Willick (USA): Developing paralympic wintersports on the basis of systematic sports injury surveys

15.10-15.25
• Marco Bernardi (Italy): Energy expenditure, exercise intensity and the risk of injury in sports for disabled individuals

15.25-15.40
• Bartosz Molik (Poland): Athletes performance in team games - relationships with classification level, age and anthropometric factors - prevention of injuries in team games

15.40-16.00
• Webborn, Willick, Bernardi, Molik: Panel discussion - The triad sports injuries, rule changes & equipment development

Speakers:
- Nick Webborn MD
  University of Brighton, Eastbourne, United Kingdom
- Stuart Willick MD Associate Professor
  University of Utah Orthopaedic Center, Salt Lake City, UT, USA
- Marco Bernardi MD Associate Professor
  Università di Roma, Rome, Italy
- Bartosz Molik PT PhD Head of the Department Sport for People with Disabilities
  The Jozef Pilsudski University of Physical Education, Warszawa, Poland

14.30-18.20
Session D - Workshops
Room Poulenc 1

14.30-15.20
• Eamonn Delahunt (Ireland) & Jay Hertel (USA): Practical tips for balance testing and training (#11)

15.30-16.20
• Toru Fukubayashi (Japan) & Maiko Kudo (Japan): KAATSU training can prevent the muscle atrophy and accelerate the post-operative rehabilitation (#12)

16.30-17.20
• Per Hölmich (Denmark) & Jesper Petersen (Denmark): Designing and conducting a randomized prevention study - the practical experience from running three large-scale studies (#13)

17.30-18.20
• Marie-Elaine Grant (Ireland): Sports tendinopathy: Useful evaluations techniques and pratical prevention (#14)

14.30-17.20
Session E - Workshops
Room Poulenc 2

14.30-15.20
• Timothy D. Noakes (South Africa): Muscle or mind or both - which determines exercise performance? (#31)

15.30-16.20
• Gordon Matheson (USA), Liz Joy (USA), Mike Fredericson (USA), Connie Lebrun (Canada) & Aurelia Nativ (USA): Female athlete triad - sport participation criteria (#32)

16.30-17.20
• Margo Mountjoy (Canada) & Jim Miller (USA): Dive, swim, score, perform - how to prevent injury & illness in the aquatic disciplines (#33)

16.00-16.30
Coffee break
16.30-18.00  
**Session A - Symposium 12**

Exercise-associated hyponatremia: Dilution, depletion or a likely combination of both?

*Chair: Tamara Hew-Butler (USA)*

**Programme:**

16.30-16.40  
- **Tamara Hew-Butler (USA):** Overview on the worldwide incidence of Exercise-Associated Hyponatremia (EAH) and current pathophysiological debate

16.40-17.00  
- **Timothy D. Noakes (South Africa):** EAH and the history of water intoxication during exercise

17.00-17.20  
- **Ronald J. Maughan (UK):** EAH and sweat sodium losses during exercise

17.20-17.40  
- **Joseph G. Verbalis (USA):** EAH and non-osmotic arginine vasopressin secretion during exercise

17.40-18.00  
- **Hew-Butler, Noakes, Maughan, Verbalis:** Panel discussion

**Speakers:**

- Tamara Hew-Butler DPM PhD, FACSM, Assistant Professor, Exercise Science
  Oakland University, Rochester, MI, USA

- Timothy D. Noakes OMS MBChB MD DSc FFEM (UK) Discovery Health Professor
  University of Cape Town, Cape Town, South Africa

- Ronald J. Maughan PhD Professor
  Loughborough University, Loughborough, United Kingdom

- Joseph G. Verbalis MD Professor
  Georgetown University Medical Center, Washington, DC, USA

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16.30-18.00  
**Session B - Symposium 13**

Preventing injuries through return to play decisions

*Chair: Dan Garza (USA)*

**Programme:**

16.30-16.45  
- **Gordon Matheson (USA):** Variability inherent in the “typical” return-to-play decision

16.45-17.00  
- **Nick Mohtadi (Canada):** Evidence for return-to-play decisions

17.00-17.15  
- **Lisa Arendt (USA):** The role of non-medical factors in return-to-play decisions

17.15-17.30  
- **Ian Shrier (Canada):** A systematic approach to independent factors in return-to-play decisions

17.30-17.45  
- **Geoffrey Verrall (Australia):** Monitoring in return-to-play decisions

17.45-18.00  
- **Matheson, Mohtadi, Arendt, Verrall:** Panel discussion - Future directions for research in return-to-play decisions

**Speakers:**

- Daniel C. Garza MD Assistant Professor
  Stanford University School of Medicine, Stanford, CA, USA

- Gordon O. Matheson MD PhD Professor
  Stanford University School of Medicine, Stanford, CA, USA

- Nicholas G. Mohtadi MD Clinical Professor
  University of Calgary, Calgary, AB, Canada

- Elizabeth Arendt MD Professor
  University of Minnesota, Minneapolis, MN, USA

- Ian Shrier MD PhD Professor
  McGill University, Montreal, QC, Canada

- Geoffrey Verrall MBBS
  SPORTSMED.SA Sports Medicine Clinic, Adelaide, Australia
Session C - Symposium 14

Beyond the initial acute injury: The challenges in studying exacerbations, reinjuries, overuse and chronic injuries

Chair: Ian Shrier (Canada)

Programme:

16.30-16.50 • Ian Shrier (Canada): Pitfalls from the past
16.50-17.10 • Roald Bahr (Norway): New directions for the study of overuse injuries
17.10-17.25 • Colin Fuller (UK): New directions for the study of chronic injuries
17.25-17.40 • Willem Meeuwisse (Canada): New directions for the study of 2nd injuries
17.40-18.00 • Shrier, Bahr, Fuller, Meeuwisse: Panel discussion

Speakers:
- Ian Shrier MD PhD Professor
  McGill University, Montreal, QC, Canada
- Roald Bahr MD PhD Professor
  Oslo Sports Trauma Research Center, Oslo, Norway
- Colin Fuller PhD FRSC FFSEM (Hon) Professor
  University of Nottingham, Nottingham, United Kingdom
- Willem Meeuwisse MD PhD Professor
  University of Calgary, Calgary, AB, Canada

20.00 Gala dinner

Salle des Etoiles
Sporting Monte-Carlo
Saturday, April 9

08.30-09.15

Keynote lecture 4

**No longer lost in translation - the art and science of implementation research**

Speaker:

Caroline Finch PhD Professor
Monash University, Melbourne, Australia

09.30-12.30

Session A - Symposium 15

**Sports helmets now and in the future**

Chair: Andrew McIntosh (Australia)

Programme:

09.30-09.35
• Andrew McIntosh (Australia): Introduction

09.35-09.50
• Paul McCrory (Australia): Evidence base for sports helmets

09.50-10.05
• Svein Kleiven (Sweden): Biomechanics of sports head injury and helmet design

10.05-10.20
• Andrew McIntosh (Australia): Performance standards for sports helmets

10.20-10.35
• Massimo Varese (Italy): A manufacturer’s perspective on sports helmet development

10.35-10.50
• Rick Greenwald (USA): Enhancing helmet function and new technologies

10.50-11.15

Coffee break

11.15-11.21
• Michael Turner (UK): Equestrian helmets

11.21-11.27
• Thor Einar Andersen (Norway): Helmets in football

11.27-11.33
• Andrew McIntosh (Australia): Helmets in rugby football

11.33-11.39
• Svein Kleiven (Sweden): Cycle helmets

11.39-11.45
• Rick Greenwald (USA): American football helmets

11.45-11.55
• Roald Bahr (Norway): Helmets in alpine sports

11.55-12.00
• Paul McCrory (Australia): Helmets in projectile sports

12.00-12.30
• McIntosh, McCrory, Kleiven, Varese, Greenwald, Turner, Andersen, Bahr: Panel discussion

Speakers:

- Andrew McIntosh BappSci MBiomedE PhD Associate Professor
  University of New South Wales, Sydney, NSW, Australia
- Paul McCrory MBBS PhD Associate Professor
  The University of Melbourne, Melbourne, Victoria, Australia
- Svein Kleiven PhD Research Leader
  KTH - Royal Institute of Technology, Huddinge, Sweden
- Massimo Varese BE MQuality Mgt
  Dainese S.p.a., Vicenza, Italy
- Rick Greenwald PhD
  Simbex 10, Lebanon, NH, USA
- Michael Turner MB BS MD FFSEM (UK + Ire)
  British Horseracing Authority, London, United Kingdom
- Thor Einar Andersen MD PhD PT Associate Professor
  Oslo Sports Trauma Research Center, Oslo, Norway
- Roald Bahr MD PhD Professor
  Oslo Sports Trauma Research Center, Oslo, Norway
Session B - Symposium 16

Groin injuries - the long and winding road towards prevention
Co-chairs: Per Renström (Sweden) & Per Hölmich (Denmark)

Programme:
09.30-09.50 • Anthony Schache (Australia): The aetiology of groin injuries - an important factor for prevention?
09.50-10.05 • David Connell (Australia): Imaging groin injuries - ultrasound, MRI and X-ray
10.05-10.20 • Per Hölmich (Denmark): Risk factors for groin injuries - are they the target of prevention?
10.20-10.40 • Kristian Thorborg (Denmark): Evaluation of hip muscle strength, range of motion and physical capacity - based on science

Coffee break
10.40-11.15 Hall Diaghilev

11.15-11.35 • Holly Silvers (USA): The Santa Monica groin injury prevention study in male soccer
11.35-11.55 • Per Hölmich (Denmark): The Copenhagen groin injury prevention study in male soccer
11.55-12.10 • Kristian Thorborg (Denmark): How should future prevention studies be designed?
12.10-12.30 • Schache, Connell, Hölmich, Thorborg, Silvers: Panel discussion

Speakers:
- Per AFH Renström MD Professor
  Karolinska Hospital, Stockholm, Sweden
- Per Hölmich MD Associate Research Professor
  Amager University Hospital, Copenhagen, Denmark
- Anthony Schache PT PhD
  University of Melbourne, Melbourne, Victoria, Australia
- David Connell MD
  Olympic Park Medical Imaging, Melbourne, Australia
- Kristian Thorborg PT PhD
  Amager Hospital, Copenhagen, Denmark
- Holly J. Silvers PT PhD
  Santa Monica Orthopaedic Sports Medicine/Research Foundation, Santa Monica, CA, USA

Session C - Symposium 17

Injury prevention in child and adolescent sport: International evidence-based perspectives
Chair: Carolyn Emery (Canada)

Programme:
09.30-09.35 • Carolyn Emery (Canada): Introduction and overview of session
09.35-09.50 • Grethe Myklebust (Norway): Identifying youth athletes at risk - pre-participation evaluation
09.50-10.05 • Willem Meeuwisse (Canada): Injury prevention in the elite youth athlete
10.05-10.20 • Evert Verhagen (The Netherlands): Injury prevention in sport and recreation - a focus on school and community settings
10.20-10.35 • Barbara Morrongiello (Canada): Psychosocial factors in injury prevention in youth sport and recreation
10.35-10.50 • Brent Hagel (Canada): Evidence for risk compensation in youth sport and recreation

Coffee break
10.50-11.15 Hall Diaghilev
11.15-11.30 • Carolyn Emery (Canada): Evaluating policy in youth sport
11.30-11.45 • Caroline Finch (Australia): Challenges in implementing safety programs in children and adolescents
11.45-11.55 • Carolyn Emery (Canada): Future directions for research in injury prevention in child and adolescent sport
11.55-12.30 • Emery, Myklebust, Meeuwisse, Verhagen, Morrongiello, Hagel, Finch: Panel discussion - Where do we go from here? Moving the research agenda forward in injury prevention in child and adolescent sport

Speakers:
- Carolyn Emery PT PhD Associate Professor
  University of Calgary, Calgary, AB, Canada
- Grethe Myklebust PT PhD Associate Professor
  Oslo Sport Trauma Research Centre, Oslo, Norway
- Willem Meeuwisse MD PhD Professor
  University of Calgary, Calgary, AB, Canada
- Evert Verhagen PhD Senior Researcher
  VU University Medical Center, Amsterdam, The Netherlands
- Barbara Morrongiello PhD Professor
  University of Guelph, Guelph, ON, Canada
- Brent Hagel PhD Assistant Professor
  University of Calgary, Calgary, AB, Canada
- Caroline Finch PhD Professor
  Monash University, Melbourne, Australia

09.30-12.20 Session D - Workshops

09.30-10.20 • Marc Herremans (Belgium) & Heiko van Vliet (Switzerland): Compex™ and NMES in injury prevention among wheelchair athletes (#15)
10.30-11.20 • Kai-Håkon Carlsen (Norway), André Moreira (Portugal) & Sergio Bonini (Italy): Allergy & asthma in sports and exercise (#16)
11.30-12.20 • Wolfram Müller (Austria) & Ron Maughan (UK): Body composition problems in sports, solution approaches, ultrasound fat measurement, and assessment of hydration status (#17)

09.30-12.20 Session E - Workshops

09.30-10.20 • Marc Safran (USA) & Mark Hutchinson (USA): Evaluation of the shoulder and elbow in the throwing athlete - factors associated with injury and prevention (#34)
10.30-11.20 • Margo Mountjoy (Canada) & Naama Constantini (Israel): Hungry for gold - the team doctor’s role in preventing the triad & eating disorders (#35)
11.30-12.20 • Domenico Corrado (Italy), Martin Borggreve (Germany), Fiorenzo Gaita (Italy) & Nadir Saoudi (Monaco): Atrial fibrillation in athletes (#36)

12.30-13.45 Lunch
### Session A - Symposium 18

**A ‘whole of sport’- approach to reduce injuries in Australian football**

Co-chairs: Paul McCrory (Australia) & Hugh Seward (Australia)

**Programme:**

13.45-13.50  • Hugh Seward (Australia): An introduction to Australian football
13.50-14.00  • Adrian Anderson (Australia): The National Sporting Organisation’s role and responsibility to promote safety in Australian football
14.00-14.10  • John Orchard (Australia): Injury surveillance in Australian football
14.10-14.20  • Hugh Seward (Australia): The reduction of posterior cruciate ligament knee injuries through rule changes
14.20-14.30  • Paul McCrory (Australia): Reducing brain and spinal injuries
14.30-14.40  • Michael Makdissi (Australia): Monitoring outcomes of concussion management
14.40-14.45  • John Orchard (Australia): Identifying ground surface conditions as a risk factor for ACL injury
14.45-14.55  • Caroline Finch (Australia): Knowledge translation and establishing community prevention programs for Australian football
14.55-15.05  • Ross Smith (Australia): Choosing a strategic direction and priorities for research
15.05-15.15  • Seward, Anderson, Orchard, McCrory, Makdissi, Finch, Smith: Panel discussion

**Speakers:**

- Hugh Seward MBBS  
  AFL Medical Officers Association, Newtown, Victoria, Australia
- Adrian Anderson LLB MBA  
  AFL Football Operations, Docklands, Victoria, Australia
- John Orchard MD PhD Adjunct Associate Professor  
  University of Sydney, Sydney, NSW, Australia
- Paul McCrory MBBS PhD Professor  
  University of Melbourne, Parkville, Victoria, Australia
- Michael Makdissi MBBS PhD  
  University of Melbourne, Parkville, Victoria, Australia
- Caroline Finch PhD Professor  
  Monash University, Melbourne, Australia
- Ross Smith PhD  
  AFL Research Board, Docklands, Victoria, Australia

### Session B - Symposium 19

**How to start an argument with your teenager: Preventing injuries in adolescent athletes**

Chair: Andrew Gregory (USA)

**Programme:**

13.45-13.55  • Andrew Gregory (USA): Overview of injury prevention in adolescent athletes
13.55-14.15  • Tim Hewett (USA): Prevention of ACL injuries in adolescent athletes
14.15-14.35  • Julie Gilchrist (USA): Prevention of concussion in adolescent athletes
14.35-14.55  • Jordan Metzl (USA): Preventing overuse injuries in adolescent performance sport athletes
14.55-15.15  • Gregory, Hewett, Gilchrist, Metzl: Panel discussion - How do you set up an injury prevention program for adolescent athletes?
Saturday, April 9

Speakers:
- Andrew J.M. Gregory MD FAAP FACSM Assistant Professor
  Vanderbilt University School of Medicine, Nashville, TN, USA
- Tim Hewett PhD FACSM Professor
  Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA
- Julie Gilchrist MD FAAP Commander
  Centers for Disease Control & Prevention, Atlanta, GA, USA
- Jordan Metzl MD FAAP
  Hospital for Special Surgery, New York, NY, USA

13.45-15.15
Room Auric

**Session C - Free Communications VII**

Chairs: Toru Fukubayashi (Japan) & Jiri Dvorak (Switzerland)

13.45-13.55
• T. Bere, T.W. Florenes, T. Krosshaug, H. Koga, L. Nordsletten, C. Irving, E. Muller, R.C. Reid, V. Senner, R. Bahr (Norway/Japan/Canada/Austria/Germany): Mechanisms of anterior cruciate ligament injury in World Cup alpine skiing: A systematic video analysis of 20 cases (#47)

13.55-14.05
• H. Koga, T. Bere, R. Bahr, T. Krosshaug (Norway): Kinematics of a slip-catch mechanism for anterior cruciate ligament injury in World Cup alpine skiing (#48)

14.05-14.15
• Y. Oh, J. Ashton-Miller, E. Wojtys (USA): Comparison of the effects of valgus loading and internal axial tibial torque on ACL strain during a simulated jump landing (#49)

14.15-14.25
• E. Kristianslund, T. Krosshaug (Norway): Sidestep cutting technique affects knee valgus loading (#50)

14.25-14.35
• T. Savage, C. Fantini, G.P. Brüggemann (Germany): A comparison of muscular activation patterns during running and landing (#51)

14.35-14.45
• S. Bredeweg, I. Buist (The Netherlands): No relationship between running related injuries and kinetic variables (#52)

14.45-14.55
• J. Usman, A.S. McIntosh, B. Fréchède (Australia/France): An analysis of impact forces in an active shoulder tackle in rugby (#53)

14.55-15.05
• K. Liu, G. Gustavsen, T.W. Kaminski (USA): Exploring dynamic stability in a group of intercollegiate athletes (#54)

15.05-15.15
• E. Kristianslund, R. Bahr, T. Krosshaug (Norway): Kinematics and kinetics of accidental ankle sprain in 3D motion analysis lab (#55)

13.45-16.35
Room Poulenc 1

**Session D - Workshops**

13.45-14.35
• Stéphane Bermon (Monaco) & Ola Rønsen (Norway): Preventing infection in athletes (#18)

14.45-15.35
• Tristan Lascar (Monaco) & Valerie Bernard (Monaco): You said subacromial impingement? (#19)

15.45-16.35
• Margo Mountjoy (Canada) & Saul Marks (Canada): Sexual harassment & abuse in sport - the team doctor’s role in prevention (#20)

13.45-16.35
Room Poulenc 2

**Session E - Workshops**

13.45-14.35
• Nebojša Nikoli (Croatia) & Stephen Wilson (Australia): Ten commandments for the coach with the sailing team on the go (ISAF medical guidelines for coaches) (#37)

14.45-15.35
• Nicholas Potter (USA): Evidence based clinical biomechanical assessment (#38)

15.45-16.35
• Robert Magnussen (France) & Priscilla Tu (USA): Preventing injuries in young throwing athletes - an evidence-based approach (#39)

15.15-15.45
Coffee break
15.45-17.15  Session A - Symposium 20

Prevention of sport-related concussion and long-term effects of recurrent mild traumatic brain injury: Is research driving clinical practice?
Chair: Kevin Guskiewicz (USA)

Programme:
15.45-16.05  • Michael McCrea (USA): Concussion assessment tools: Eliminating the guesswork in concussion management
16.05-16.25  • Anthony L. Petraglia (USA): Neuroprotective interventions for preventing concussions and neurodegeneration
16.25-16.45  • Steven Broglio (USA): Equipment and biomechanical considerations for concussion prevention
16.45-17.00  • Kevin Guskiewicz (USA): Athlete education and behavior modification in preventing concussion
17.00-17.15  • McCrea, Petraglia, Broglio, Guskiewicz: Panel discussion

Speakers:
- Michael McCrea PhD ABPP
  Waukesha Memorial Hospital, Waukesha, WI, USA
- Anthony L. Petraglia MD
  University of Rochester Medical Center, Rochester, NY, USA
- Steven Broglio PhD ATC Assistant Professor
  University of Illinois, Urbana, IL, USA
- Kevin Guskiewicz PhD ATC Professor
  University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

15.45-17.15  Session B - Symposium 21

From the field to the politicians and back again - the challenge of implementation
Chair: Caroline Finch (Australia)

Programme:
15.45-15.50  • Caroline Finch (Australia): Introduction and overview of session
15.50-16.05  • Grethe Myklebust (Norway): Working with individual players
16.05-16.20  • Carolyn Emery (Canada): Working with groups of players and teams
16.20-16.35  • Evert Verhagen (The Netherlands): Working with schools and communities
16.35-16.50  • Caroline Finch (Australia): Working with policy agencies and peak sports bodies
16.50-17.15  • Finch, Myklebust, Emery, Verhagen: Panel discussion and questions

Speakers:
- Caroline Finch PhD Professor
  Monash University, Melbourne, Australia
- Grethe Myklebust PT PhD Assistant Professor
  Oslo Sports Trauma Research Centre, Oslo, Norway
- Carolyn Emery PT PhD Associate Professor
  University of Calgary, Calgary, AB, Canada
- Evert Verhagen PhD Senior Researcher
  VU University Medical Center, Amsterdam, The Netherlands
Session C - Free Communications VIII

Room Auric

Chair: Per Renström (Sweden) & Fredrik Bendiksen (Norway)

15.45-16.05 • A. Nilstad, R. Bahr, T.E Andersen (Norway): Text messaging as a new method for injury registration in sports - a methodological study in elite female football (#56)

15.55-16.05 • A. van Hespen, J.P. Stege, J.H. Stubbe (The Netherlands): Soccer and futsal injuries in the Netherlands (#57)

16.05-16.15 • M. Waldén, M. Hägglund, K. Kristenson, J. Ekstrand (Sweden): The influence of climate type on injury epidemiology in European professional football (#58)


16.25-16.35 • A. van Beijsterveldt, M. Krist, I. van de Port, F. Backx (The Netherlands): Cost-effectiveness of an injury prevention program in Dutch male amateur soccer (#60)

16.35-16.45 • G. Bianchi, O. Brügger, S. Niemann, C. Furrer (Switzerland): Evaluation of a national campaign in snow sports (#61)


16.55-17.05 • J. Vriend, E. Kemler (The Netherlands): Evidence in practice: An overview of effective measures to prevent sports injuries (#63)

17.05-17.15 • E. Diener-Martin, O. Bruegger, B.W. Martin (Switzerland): Physical activity promotion and safety prevention: What is the relationship in different population groups? (#64)

Keynote lecture 5

Transferring science to life: Has FIFA found the recipe?

Speakers:
Jiri Dvorak MD Professor
Schulthess Clinic, Zurich, Switzerland

Colin Fuller PhD FRSC FFSEM (Hon) Professor
University of Nottingham, Nottingham, United Kingdom

Astrid Junge PhD
FIFA Medical Assessment & Research Center, Zurich, Switzerland

Closing lecture

Lars Engebretsen (Switzerland): The IOC Medical Commission and the health of the Olympic athlete

19.30 Faculty Event (by invitation)

Collateral session

Thursday, April 7 - 12.00-14.00 - Room Lifar

Round-table Lunch Symposium sponsored by DJO

H. Riepenhof (Germany), M. Herremans (Belgium), H. van Vliet (Switzerland)

The role of NMES (Compex™) in athlete recovery and injury prevention
Free Communications - Posters

65 J. Abellán, F. Esparza, A. Blanco, M. Martínez, G. Ruiz Merino, A. Lisón (Spain): Radiological evidence of femoroacetabular impingement in asymptomatic athletes

66 G. Abrams, A. Sheets, S. Corazza, T. Andriacchi, M. Safran (USA): Injury potential evaluation of the upper extremity and torso of three tennis serve types using a novel markerless motion system

67 J. Agel, E Harvey (USA/Canada): Measurement of activity return after injury

68 Withdrawn


70 N. Andrew, B.J. Gabbe, R. Wolfe, P.A. Cameron (Australia): Twelve-month health related quality of life and functional outcomes of hospitalised orthopaedic sport and active recreation injuries

71 N. Andrew, B.J. Gabbe, R. Wolfe, P.A. Cameron (Australia): The impact of serious sport and active recreation injuries on physical activity levels

72 E. Arendt, J. Agel, A. Moore (USA): First time lateral patella dislocations: Characterizing their readiness for return to activity

73 S. Baltsezak, G. Dilliway (UK): The effects of Tai Chi class on subjective exercise experiences: A preliminary study in community sports centre settings

74 A. Benjaminse, M. Bisschop, P. Schoenmakers, E. Otten (The Netherlands): From explicit to implicit learning in ACL injury prevention?

75 J. Bjørneboe, R. Bahr, TE Andersen (Norway): Risk of injury in Norwegian male professional football

76 C. Blake, J.C. Murphy, C. Gissane, E. O'Malley (Ireland/UK): A prospective study of injury in elite gaelic games

77 H. Broughton, S. Cromie, T. Trimble (Ireland): An information resource linking performance to prevention of sports injuries - a preliminary inquiry

78 K. Buckley, P. O’Halloran, J. Oates (Australia): Voice and vocal health in elite sports coaching: Considerations for elite football coaching staff

79 I. Buist, S.W. Bredeweg (The Netherlands): Higher risk of injury in overweight novice runners

80 P. Bukhala, T. Kilika (Kenya): Patterns of injuries during the Great Lakes Open Athletics Championships held in Kenya

81 A. Burston, R.R. Hammill, J. Beazell, S. Saliba, J.M. Hart, C.D. Ingersoll (USA): The effect of a one-time abdominal muscle training session on the ability to contract the transverse abdominus in low back pain patients

82 D. Buttitiant, J. Berry, S. Ullah, C.F Finch (Australia): Relationship between training-playing loads and injury risk in elite Australian footballers

83 A.C.A. Carvalho, L.C. Hespanhol Junior, L.O.P. Costa, A.D. Lopes (Brazil): The association between runners’ lower limb alignment with running-related injuries: A systematic review

84 G. Cerulli, A. Caraffa, F. Ponteggia, G. Potalivo, R. Rende, V. Conti, E. Benvenuti (Italy): Injury prevention methods among athletes: How are they really performed?

85 A. Clough, P.J. Clough, I. Kelly, F. Earle (UK): Rugby players and whiplash. Where are all the cases?

86 A.V. September, E-M. Nell, K. O Connell, J. Cook, C.J. Handley, M.P. Schwellnus, M Collins (South Africa/ Australia): Investigations of genes encoding proteins within the inflammatory pathway provides insight into the genetic susceptibility of Achilles tendinopathy

87 N. Cortes, E. Greska, R. Kollock, J. Onate (USA): Sequential fatigue progressively alters lower extremity biomechanics


89 C. Barrios, N. de Bernardo, P. Vera, C. Laíz, M. Hadala (Spain): Clinical patterns and injury exposure rates in elite road cycling are changing over the last decade

90 O. de Hon, I. Eijs, A. Havenga (The Netherlands): Dutch elite athletes and anti-doping policies

92. L.D. Mendonça, G.M. Amaral, H.V.R. Marinho, A.A. Silva, S.T. Fonseca (Brazil): Isokinetics: Which value is better to report?


97. L.D. Mendonça, N.F.N. Bittencourt, T.R.T Santos, A.A. Silva, S.T. Fonseca (Brazil): Correlation of age, sex, body mass index and sports modality to patellar rotation in jumping athletes


100. E. Delahun, B.L. McEntee, C. Kennelly, G.F. Coughlan, B.S. Green (Ireland): The adductor squeeze test: Which is the optimal test position for eliciting maximum squeeze values and adductor muscle activity?


102. P. Edouard, J-B. Morin, J. Pruvost, A. Kerspern (France): Injuries in high-level heptathlon and decathlon

103. P. Edouard, L. Beguin, F. Farizon, P. Calmels (France): Rotator cuff strength weakness in recurrent anterior shoulder instability physiopathology

104. P. Edouard, J. Pruvost, J-L. Edouard, J-B. Morin (France): A pilot study about causes of dropouts in high-level decathlon competitions

105. C. Ekegren, R. Quested, A. Brodrick (UK): Epidemiology of injuries among elite pre-professional ballet students

106. F. Esparza, J. Abellán, P. Ibañez, J.M. Sánchez Ayuso (Spain): Description of plantar pressure distribution in athletes

107. T. Flørenes, J. Bjørneboe, T.E. Andersen, S. Heir, R. Bahr (Norway): What is more dangerous - football, skiing or snowboarding?


111. J. Genin, R. Mann, D. Theisen (Luxembourg): Determining the running-related injury risk factors in long distance runners


M. Hadala, N. de Bernardo, P. Vera, C. Laíz, C. Barrios (Spain): Pre-season screening of core muscle balance and control tests in the lumbar spine in professional road cyclists. Can we prevent uncontrolled movement?

L. C. Hespanhol Junior, A. C. A. Carvalho, L. O. P. Costa, A. D. Lopes (Brazil): The prevalence of musculoskeletal injuries in runners: A systematic review

C. Hildebrandt, E. Mildner, C. Höbenreich, C. Raschner (Austria): Accident prevention in recreational alpine skiing: How good is the familiarity about the FIS-regulations?

T. Hosea, J. Hannafin, J. Bran, D. O’Hara, P. Seuffert (USA): Etiology of low back pain in young athletes: Role of sport type


Y. Ikeda, M. Yoshida, K. Sugawara, M. Katayose (Japan): The difference of hip adductor longus activity between side-foot kicks and instep kicks


J. Jacobsson, T. Timpka, J. Ekberg, J. Kowalski, S. Nilsson, P. Renström (Sweden): The Swedish athletics study: Design of a protocol for large-scale epidemiological studies in individual sports

P. Jones, D. Kerwin, G. Irwin, L. Nokes (UK): Stance leg frontal plane stability during lateral bounds

Y. Kaplan (Israel): The epidemiology and prevention of injuries in American Flag Football (AFF)

Y. Kaplan (Israel): Prevention of ankle sprains in sport: A systematic literature review


K. Kotila, B. Andersen, L. Kirkegaard (Denmark): Development of sports injury awareness programs for athletes and coaches


K. Lagowska, J. Jeszka (Poland): Are young female athletes at risk of amenorrhea? Analysis of body composition, nutritional and endocrine factors
C. Lerch, M. Cordes, J. Baumeister (Germany): Effectiveness of injury prevention programs in female youth soccer: A systematic review

A. Leumann, R. Fortuna, D. Longino, T. Leonard, D. Hart, V. Valderrabano, W. Herzog (Switzerland/Canada): Altered molecular metabolism of knee joint tissues in a botox induced quadriceps muscle weakness model in the rabbit


A.D. Lopes, H.J. Barreto, J.O. Neto, J.G. Neto (Brazil): A survey of the participation in competitive sports despite musculoskeletal complaints

A.D. Lopes, B.T. Saragiotto, T.P. Yamato, F. Adami, L.O.P. Costa (Brazil): Musculoskeletal pain in recreational runners prior to race participation: A cross-sectional survey in 1049 runners

H. Magnúsdóttir, T. Sveinsson, Á. Árnason (Iceland): Gender difference in jumping and landing among 15 - 18 years old Icelandic national youth soccer players


U. McCarthy Persson, C. Arthurs (Ireland): Dynamic postural stability in Gaelic football players during a single leg drop-landing, a comparison of ankle tape and lace-up brace

A. McIntosh, C. Caponecchia, J. Usman (Australia): Tackling risk compensation - a psycho-physical approach to measuring behaviour change

A. McIntosh, R. Dutfield, M. Grimison (Australia): Injury and safety in junior rugby union football

G. Leporace, L. Metsavaht, J. Praxedes, G. Pereira, S. Pinto, D. Chagas, F. Chame, L.A. Batista (Brazil): Influence of a preventive training program on the lower limbs kinematics and vertical jump height of male volleyball athletes

S. Migliorini, M. Merlo (Italy): The hamstring syndrome in endurance athletes

C. Mouton, R. Krecke, D. Theisen (Luxembourg): A new approach to evaluate anterior knee joint laxity

T. Munehiro, K. Kitaoka, H. Tsuchiya (Japan): Effect of low-load eccentric training before high-intensity eccentric exercise on delayed onset muscle soreness, revealed by C-FOS expression in the spinal dorsal horn in rats


G. Ornon, D. Fritschy, J-L. Ziltener, J. Menetrey (Switzerland): Professional ice hockey injuries: A 4 years prospective study

O.B.A. Owoeye (Nigeria): Pattern and management of sports injuries presented by Lagos state athletes at the 16th National Sports Festival (Kada games 2009) in Nigeria


D. Palmer-Green, G. Hunter, R. Jaques, C. Fuller, C. Price (UK): Methods for epidemiological study of injury and illness in Great Britain Olympic sport: the injury/illness performance project (IIPP)


M.J. Philippon, R.F. LaPrade, K.K. Briggs, J.D. Stull (USA): Association of strength and range of motion with alpha angles in elite youth hockey players

M.J. Philippon, J.D. Stull, R.F. LaPrade (USA): ‘At risk’ positioning and hip biomechanics of the peewee ice hockey sprint start

M. Posthumus, C. Saunders, AV. September, M. Collins (South Africa): The polygenic profiles in participants with Achilles tendinopathy and controls

E. Rafnsson (Iceland): Injuries in Icelandic male team handball players

P. Richardson (Australia): Translating theory into practice (and practice into theory) - does context influence sports injury prevention research?


I. Sannicandro, A. Piccinno, R.A. Rosa, S. De Pascalis (Italy): Functional asymmetry in the lower limb professional soccer players

I. Sannicandro, A. Piccinno, R.A. Rosa, S. De Pascalis (Italy): Correlation between functional asymmetry of professional soccer players and sprint

M. Sanomura, K. Irie (Japan): Relationship between leg and foot alignment and dynamic knee valgus during single-leg squat, single-leg drop landing and cutting tasks


R. Sasaki, Y. Urabe, Y. Yamanaka, E. Fujii, Y. Matsubayashi (Japan): The correlation between whole body reaction time and the onset timing of lower extremity muscles during landing


T. Savage, A. McIntosh, B. Fréchède (Australia): Interrater reliability assessment of a qualitative video analysis protocol to assess injury mechanisms and risks


Y. Shimokochi, E. Meyer (Japan/USA): Sagittal plane body positions influence tibial anterior shear force during single-leg landing


P. Silva, J. Watt, B. Soni, T. Hlaing, K. Pulya (UK): Atrial fibrillation in a tetraplegic paralympic athlete

C. Silveira Bolling, T. Marcio Magalhães Pinheiro, A. Martinez Hernaez (Brazil/Spain): Dance injuries: Assessment of risk factors by qualitative method

C. Silveira Bolling, M. Mendes de Almeida Gomide, D. Rocha Costa Reis (Brazil): Indoor soccer’s injuries profile and the correlation with game volume


T. Timpka, J. Jacobsson, J. Ekberg, I. Nordenfeldt (Sweden): What is a sports injury?

H. Toda, K. Yamamoto, M. Yoshida, M. Katayose (Japan): Relationship between clavicle length and scapular resting alignment in healthy subject

U. Tranæus, U. Johnson (Sweden): Psychosocial risk factors preceding overuse injury in floor-ball


Y. Urabe, N. Kamiya, Y. Yamanaka, M. Shintaku (Japan): New device production for preventive measures against the hallux-valgus deformity

J. Usman, A.S. McIntosh (Australia): A two-dimensional video analysis of shoulder injuries in rugby tackles

J. Usman, A.S. McIntosh, J.P. Best (Australia): The epidemiology of shoulder injuries in rugby union football

A. van Beijsterveldt, M. Krist, I. van de Port, F. Backx (The Netherlands): Compliance with an injury prevention program in Dutch adult male amateur soccer


H. van der Worp, M. van Ark, J. Zwerver, I. van den Akker-Scheek (The Netherlands): Risk factors for patellar tendinopathy in basketball and volleyball players: A cross-sectional survey

M. van Middelkoop, S. Rakhshandehroo, M. Bruens, B.W. Koes, S.M.A. Bierma-Zeinstra (The Netherlands): Injuries of the upper body extremities in recreational climbers: Incidence and risk factors

D. Van Tiggelen, S. Cowan, Y. Thijs, P. Coorevits, E. Witvrouw (Belgium/Australia): Intrinsic risk factors and the effects of prophylactic bracing on the development of patellofemoral pain in male subjects

J. Vetvicka, M. Handl (Czech Republic): Beijing 2008 Olympic Games meant danger for the health of athletes? Monitoring of air pollution during Games of XXIX. Olympiade by PM10


H. Visnes, R. Bahr (Norway): Jumping ability and change of jumping ability as a risk factor for developing jumper’s knee? Data from the patellar tendinopathy cohort 2006-2010

V. Vleck, F. Bessone Alves (Portugal): Cross-training and injury risk in British Olympic distance triathletes

V. Vleck, F. Bessone Alves (Portugal): Triathlon injury review

Withdrawn

C. Wijdicks, S. Spiridonov, R. LaPrade (USA): A prospective study of injuries in NCAA intercollegiate ice-hockey goaltenders

F. Wilson, C. Simms, J. Gormley, C. Gissane (Ireland/UK): Kinematics of lumbar spine motion in rowing during a fatiguing protocol: A comparison of ergometer and boat rowing

F. Wilson, C. Gissane, A. Byrne (Ireland/UK): A prospective study of injuries in elite soccer referees and assistant referees
Workshop Programme

#1 A. Gregory (USA), T. Hewett (USA): How to set up an ACL injury prevention program for adolescent athletes
For high-risk athletes, a combination of screening and training could help to identify and prevent the estimated 40,000 knee injuries a year in female high school and collegiate athletes. Workshop participants will evaluate their current screening and prevention programs. Existing ACL injury prevention programs and screening for young athletes will be reviewed. Participants will learn how to develop an ACL injury prevention and screening program for adolescent athletes.

#2 A. Diamond (USA), S. Haverstick (USA), M. Donahue (USA): Expanding the role of the sports medicine specialist - creating relationships with an injury prevention coalition
Unintentional injury is the leading killer of children ages 14 and under. To alter these statistics, collaboration is essential, especially with today’s limited resources. This workshop will demonstrate how sports medicine specialists can become involved in a prevention program in their community. Audience members will be exposed to strategies on how to identify an organization with whom to collaborate and on how to work with service, business and government organizations. Participants will hear the clinical and research opportunities available regarding sports injury prevention. A successful, real-life model will be reviewed.

#3 Y. Kaplan (Israel), G. Myklebust (Norway): Risks and predictive factors for a safe return to sport: The ACL injury as a model
Workshop participants will be introduced to the multi-factorial combination of subjective and objective measures that have been elucidated as risk and predictive factors for a safe return to sport following ACL injury. These include anterior knee pain, meniscus injuries, the patient’s psychological profile and quadriceps strength. The predictive factors that exist concerning ACL re-rupture include previous injury and return to high-level sporting activity. The risk relates both to the previously injured leg as well as to the contra lateral side.

#4 A. Clough (USA), P. Piccininni (Canada): The physician’s role in the prevention of dental and orofacial injuries
Introducing Sports Dentistry to Sports Physicians to improve their ability to identify and treat pathologic or traumatic dental conditions that may prevent or adversely affect athletic performance. A dental assessment should be part of the overall pre-participation examination for all athletes. Numerous dental conditions can adversely affect or even prevent the participation of an athlete in their sport. Dental trauma needs to be properly managed both immediately and on a long-term basis. This workshop will enable physicians to play an active role in all of the above by identifying the key dental issues to screen an athlete for. It will review the diagnosis and treatment of the most common dental injuries. And it will provide details on current topics of interest including the harmful effects of sport beverages and the role of mouthguards in both injury and concussion prevention.

#5 S. Niga (Japan), T. Fukubayashi (Japan), J. Hatanaka (Japan): Active athletic training improves and prevents groin pain syndrome in football players
We considered that undiagnosed groin pain (groin pain syndrome) in football players is due to dysfunctions of mobility, stability, and coordination of trunk and lower extremities. We will show the examination of groin pain syndrome as well as the demonstration of this special athletic training technique. We will demonstrate the technique of passive mobilization to release the contracture by “strong intensive massage”. Furthermore, we will show the technique of dynamic mobilization training by leg swinging with effective pelvic motion, stabilization training, coordination training using “cross motion” synchronized shoulder motion.

#6 J. Zachazewski (USA), J. Borg-Stein (USA): Practical training of core, hip girdle and proximal lower extremity strength and flexibility in the female athlete
This interactive hands-on workshop will provide the participant with an opportunity to learn:
1. To properly instruct the athlete on core strengthening/flexibility of the abdominals, lumbar control musculature, glutes and pelvic floor muscles
2. Properly educate the female athlete on hip girdle flexibility and strengthening with emphasis on hip abduction and external rotator strength
3. Inform the female athlete on key dynamic balance and control exercise for the spine/lower limb kinetic chain.

#7 T. Hewett (USA), G. Myklebust (Norway): Techniques for preventing ACL injuries
The purpose of this workshop is to demonstrate techniques used for neuromuscular training for ACL injury prevention. We will compare and contrast components of the most and least efficacious programs. We will summarize the Norwegian and Cincinnati approaches. Use of these training techniques to decrease the incidence of knee and ACL injury in female athletes by even a percentage could have significant effects on the number of knee injuries and ACL injuries, specifically in female athletes.

#8 C. Ortega (USA), L. Leverenz (USA), G. Zuest (USA): Anatomy of a shoe-preventing injuries from the ground up
An inappropriate match of shoe to foot type can predispose an individual to injury. Further, the health care provider who can assess shoe compatibility as well as need for orthotic intervention will be better equipped to prevent injuries for their athletes/patients. This 50-minute workshop will provide attendees with skills to assess appropriate shoe fit and perform a quick orthotic screen to assess compatibility of fit for injury prevention.

#9 B.T. Vicenzino (Australia), T.W. Kaminski (USA): Taping and bracing interventions for those with ankle instability
This workshop will cover the evidence of efficacy and mechanisms underpinning the use of taping and bracing in...
the management of ankle instability. Sufficient detail will be provided through dynamic media (video and hands on demonstration) to allow practitioners a practical insight into the techniques’ applications. Following participation in this interactive, practically-based workshop, participants should be able to: (1) Describe the current evidence relating to both efficacy and mechanism of action of taping and bracing in the management of ankle instability; (2) Apply evidence from the literature to their clinical decision making process in the use of taping and bracing in the management of ankle instability; and (3) Apply taping and bracing in managing ankle instability.

#10 T. Saartok (Sweden), P. Renström (Sweden), T. Eriksson (Sweden): A modified ankle taping method - for improved and sustained biomechanics during athletics

Taping after ankle sprains should be individually optimized, with the aim to address the biomechanical as well as the proprioceptive effects of taping. The taping material continues to evolve and so does the biomechanical considerations of taping. The goal of this workshop is to present a cost-effective and durable taping technique of lateral ankle sprains, which simultaneously can prevent hyperpronation, thereby maintaining an optimal HKA-axis for athletic performance.

#11 E. Delahun (Ireland), J. Hertel (USA): Practical tips for balance testing and training

This workshop will focus on techniques for non-instrumented measures of balance performance (Modified Romberg test, Balance Error Scoring System, Star Excursion Balance Test, etc.) with interactive demonstrations and dynamic media (video) presentation of balance exercises which can be used in prevention and rehabilitation programs in sports medicine. Following participation in this interactive, practically-based workshop, participants should be able to: (1) Carry out a non-instrumented balance assessment in subjects with ankle instability; (2) Design and implement a progressive balance training program for subjects with ankle instability based on current available published literature and the experience of the workshop facilitators; and (3) Assess the effectiveness of the implemented balance training program.

#12 T. Fukubayashi (Japan), M. Kudo (Japan): KAATSU training can prevent the muscle atrophy and accelerate the post-operative rehabilitation.

KAATSU training is the Low-intensity resistance training combined with restricted venous blood flow. This training only consists of lapping the elastic belt (KAATSU belt) to both thighs with suitable pressure. This method not only produces the thigh muscle hypertrophy but also may accelerate the maturation of tendon and ligament. We would like to demonstrate the method of KAATSU training to the ACL reconstructed athletes in this workshop. This training may accelerate the post-operative rehabilitation and prevent the re-injury.

#13 P. Hölmich (Denmark), J. Petersen (Denmark): Designing and conducting a randomized prevention study - the practical experience from running three large-scale studies

Large-scale RCTs are difficult and a prevention-RCT can cause even more problems. We will illustrate how to get from the idea to the protocol and from there to the study itself. The practical problems including logistics, co-workers, allies in the sports community and keeping track of all participants will be discussed. The ability to focus on the primary end-point of the study is extremely important and closely connected to the ability to limit the amount of data.

#14 M-E Grant (Ireland): Sports tendinopathy: Useful evaluations techniques and practical prevention

The risk of developing tendinopathy can be determined by extrinsic factors such as intensive training and intrinsic factors related to the athlete’s physical characteristics which, can cause excessive loading on tendons. This workshop will demonstrate practical methods of identifying those athletes at risk based on current research findings. Participants will be shown: useful evaluation techniques to assess, biomechanical predisposition, kinetic chain function, musculotendinous flexibility, functional muscle strength, etc. Demonstration of practical preventative strategies and corrective measures to facilitate maintenance of tendon homeostasis. Targeted physiotherapy eccentric exercise techniques will be demonstrated with particular reference to the Achilles and Patellar tendons.

#15 M. Herreman (Belgium), H. Van Vliet (Switzerland): Compex™ and NMES in injury prevention among wheelchair athletes

In this workshop we would like to bring forward the importance and advantages of to-days Neuro Muscular Electro Stimulation.

As examples we will discuss following subjects: • The effect of NMES on muscle properties like - strength, - endurance and - volume • How can we influence the Athletes “Chair Stability”, - example: Basket ball players. • Active recovery through NMES.

#16 K.H. Carlse (Norway), A. Moreira (Portugal), S. Bonini (Italy): Assessment of airways inflammation and bronchial hyperresponsiveness in athletes

Different techniques are used to demonstrate bronchial hyperreactivity and inflammation in athletes with suspected asthma or exercise-induced respiratory complains. In this workshop an interactive discussion will address the principles, rationale, diagnostic value, research outreach of these different techniques including some of the more recently introduced: e.g. exhaled breath condensate, exhaled air temperature, induced sputum, FeNO, EVH, exercise, mannitol and methacoline challenges.

#17 Wolfram Müller (Austria), Ron Maughan (UK): Body composition problems in sports, solution approaches, ultrasound fat measurement, and assessment of hydration status

In sports that are classified or determined by body mass, athletes often manipulate body mass in ways that may be inconsistent with health and performance. Any proposal to implement...
regulations that might impose safe practices in these sports requires simple and reliable methods for assessing body fat content and hydration status. This session will review the use of ultrasound for assessment of body fatness and methods that may assess hydration status.

#18 S. Bermon (Monaco), O. Rønsen (Norway): Preventing infection in athletes
Infectious problems and particularly Upper Respiratory Tract Infections (URTI) are quite common in athletes whatever level of practice or sports considered. Infectious episode is the first reason (all medical conditions considered) for an athlete not to train or to compete. However, infection rates vary according to the training volume and intensity. Participants will learn about recent insights in Exercise Immunology as well as practical prevention measures.

#19 T. Lascar (Monaco), V. Bernard (Monaco): Electromyographic investigations in the prevention of subacromial impingement in athlete's shoulder
The physiotherapy and especially isometric evaluation of the shoulder, allowed us to prevent subacromial impingement by rebalancing the muscles of the shoulder girdle. Recently we insist on the control of the anterior tilt of the scapula, in this way protecting the supraspinatus, and the biceps tendon. When we have a subacromial impingement, especially in athletes, we routinely perform an electromyographic study, in order to rule out a LTN (long thoracic nerve) implication in this disease, and adapt the treatment. In case of objective elements of isolated paralysis of the serratus anterior, with patients who do not recover within 3 to 6 months, we propose a surgical release of the thoracic portion of the LTN. This procedure is safe and efficient, and allows to avoid rotator cuff tear, or even irreversible palsy of the serratus anterior.

#20 M. Mountjoy (Canada), S. Marks (Canada): Sexual harassment & abuse in sport - the team doctor's role in prevention
Establishing an action plan for the prevention of sexual harassment & abuse as well as a strategy for the management of suspected abuse. Sexual harassment & abuse occur in all sports and at all levels with an increased risk at the elite level. The physical and psychological consequences of sexual harassment and abuse are significant for the athlete, their team and for the health & integrity of sport in general. The sports medicine health professional has an integral role to play in the prevention of sexual harassment & abuse in sport. This workshop provides sport health care professionals with a practical guide on prevention strategies and advice on the recognition and management of suspected abuse.

#21 S. Kemp (UK), A. Smith (UK): Pitchside immediate care of the athlete in collision and contact sports - secondary injury prevention initiatives for potential catastrophic cervical spine injury
Optimal immediate management of a suspected spinal injury is a key element of an effective catastrophic spinal injury prevention strategy. The workshop will provide opportunities for delegates to refresh their skills in this area, observe the demonstration of an assessment and extrication of an athlete with a suspected significant cervical spine injury and question the presenters about the challenges of programme development and implementation.

#22 P. Coudert (Monaco): The importance of the electronic shared medical folder in sports medicine - the case study of the medical follow-up of sportsmen from two French Olympic Federations.
This workshop will help participants understand how to deliver better diagnosis, improve the prevention of injuries, refine the statistics research on common pathologies and contribute to making science progress in sport medicine through the electronic medical folder and the information sharing between healthcare professionals.

#23 B. Lussiez (Monaco), D. Fontes (Monaco), J. P. Ringwald (Monaco): The ligamentous lesions of the wrist in sports traumatology treatment
Sports activity may lead to trauma of the wrist, occurring in fractures and/or ruptures of the ligaments of the wrist. These lesions, if missed or neglected lead to instability and artrosis. Anatomical and biomechanical study of the main ligaments of the wrist is presented. The different types of lesions need precise clinical and radiological investigations for an early diagnosis. The complete ruptures of the intrinsic ligaments need early arthroscopically assisted surgery. Immunobilization and rehabilitation under control of the medical team permits the return to sports activities. Prevention of these traumas is studied with analysis of the different types of wrist protection.

#24 G. Verrall (Australia): Training adaptation of the hamstring muscle: A cutting edge practical guide to individual athlete and team based prevention programs
Hamstring muscle strain injury is the most common injury in sports requiring interval sprinting. Workshop participants will be able to evaluate their individual athletes and their team training program against an optimum training of the hamstring muscle for the purpose of injury prevention. This will be done by assessing common risk factors, injury epidemiology, injury mechanism and rehabilitation programs on their effect of the hamstring muscle adaptation.

#25 J. Macintyre (USA), A. Matich (USA): The foot bone's connected to the leg bone: The importance of kinetic chain dysfunction in overuse injuries
Overuse injuries are not random events. They are frequently associated with underlying biomechanical abnormalities (The “Culprit”) which cause functional joint or tendon overload resulting in the presenting injury (The Victim”). This workshop will discuss the role of kinetic chain dysfunction in overuse injuries. It will discuss common “Culprits” in injury, and the importance of identifying them. It will include examination clues to the common dysfunctions, and touch on some of their solutions.
A delicate balance in aquatic sports - the shoulder

A key recommendation of a recent video study on injury risk in the rugby union tackle (CW Fuller et al. Br. J. Sports Med 2010 44: 159-167) was that existing injury prevention and coaching programmes should be reviewed to take account of the specific types of tackles identified in the study. Workshop participants will hear of the challenges of integrating evidence based injury risk management into the coaching of a key complex skill at age-group, community adult and elite adult levels and proposals for a new tackle curriculum will be outlined.

Prevention of lower extremity injuries with use of biomechanical evaluations

The ability to identify predispositions to lower extremity overuse injuries can decrease the incidence through preventive education. This workshop will provide attendees with techniques to assess predisposition to athletic injuries of the lower extremity. The biomechanical evaluation includes shoe assessment, sacro-iliac joint dysfunction screening as well as flexibility and muscular assessment to identify predispositions to injury and provide guidelines for preventive strategies.

#28 J. Miller (USA), C. van den Hoogenband (The Netherlands):
A delicate balance in aquatic sports - the shoulder

Aquatic Disciplines are practiced worldwide at all levels of development, including a growing presence of masters. The pattern of injuries is determined by the approach to training with inherent trauma and overuse injuries. Many of these patterns are established when the athlete is just being initiated into training. This workshop provides an overview of the problem, cause, and corrections to guide coaches, athletes, trainers and medical professionals in changing this pattern of injury. The concepts will be applied to all levels of aquatic sport - age group, elite and masters.

#29 M. Mountjoy (Canada), C. van den Hoogenband (The Netherlands):
Is it safe to go in the water? - injury & illness prevention in aquatic sports

Establishing practical strategies for health care professionals on the prevention of injuries and illness in aquatic athletes. Aquatic sports are practiced worldwide at a recreational and elite level in the disciplines of swimming, diving, synchronized swimming, open water swimming and water polo. In an injury surveillance study from the Beijing Olympic Games, the aquatic sports ranked comparatively low in injury incidence in comparison to the other International Federations. Evidence from an injury and illness prevalence study from the 2009 FINA World Championships does however show that injury and illness are significant in aquatic sports. This workshop provides a practical guide for sports health care professionals on preventing injuries and illnesses with the goal of keeping swimming safe!

#30 H. Liesen (Germany), J. Baumeister (Germany), M. Cordes (Germany), C. Lerch (Germany):
Fun & Function - injury prevention in female youth soccer

Youth soccer players should receive special interest in injury prevention programs. Interventions should not only mean function but should also motivate young players to perform the exercise regularly. In this context playful, joyful and soccer related exercises may help. This workshop tries to cover the special needs of youth soccer intervention programs and will demonstrate 11+ based exercises for female youth soccer injury prevention which includes fun & function.

#31 T. Noakes (South Africa):
The Central Governor Model of Exercise Regulation

The traditional teaching holds that human exercise performance is «limited» by the development of fatigue in either the peripheral skeletal muscles (peripheral fatigue) or in the brain (central fatigue). An alternate model - the Central Governor Model - proposes that exercise is regulated under all conditions to insure that homeostasis is maintained in all bodily systems during exercise. This workshop will present the evidence supporting the theory that, in health, exercise performance is always «regulated», not «limited».

#32 G. Matheson (USA), L. Joy (USA), M. Fredericson (USA), C. Lebrun (Canada), A. Nattiv (USA):
Female athlete triad - sport participation criteria

Treating menstrual dysfunction and low bone density, two components of the Female Athlete Triad, do not treat the root cause, which is low energy availability. A lack of objective measurement tools for low energy availability coupled with a culture that values caloric restriction for certain sports combine to make it difficult to know when to restrict athletes from sport participation for health reasons. This workshop reviews the background evidence on this problem and makes concrete suggestions for inclusion and exclusion criteria based on factors important to health.

#33 M. Mountjoy (Canada) & J. Miller (USA):
Dive, swim, score, perform: How to prevent injury & illness in the aquatic disciplines

Establishing prevention strategies for injuries and illness in aquatic athletes. Aquatic sports are practiced worldwide in all of its disciplines of swimming, diving, water polo, synchronized swimming & open water marathon swimming. An injury and illness surveillance study from the 2009 FINA World Championships showed discrepancy amongst the 5 aquatic disciplines in the incidence & type of injuries seen. This workshop provides a practical guide for sports health
care professionals on preventing injuries and illnesses in the 5 disciplines of FINA with the goal of keeping it safe for athletes of all levels to enjoy the 5 aquatic sports.

**#34 M. Safran (USA), M. Hutchinson (USA): Evaluation of the shoulder and elbow exam and prevention**

Shoulder and elbow injuries in the athlete are prevalent, and many are preventable. We will discuss which athletes are at risk of these injuries. We will focus on key features from the history and physical examination to identify those at risk. Pitfalls in the examination will be demonstrated. We will focus on the role kinetic chain, and review key injury prevention exercises, such that by the end of the workshop, the participant will be able to help identify those athletes at risk for injury to the shoulder and elbow.

**#35 M. Mountjoy (Canada), N. Constantini (Israel): Hungry for gold - the team doctor's role in preventing the female athlete triad**

Establishing a prevention strategy for the Female Athlete Triad for sport health care professionals. Female athletes comprise 48% of all athletes competing at the Olympic Games. Female athletes participate and compete in all sports globally and at all levels. The female athlete triad can occur in all sports with a higher incidence in the artistic sports, weight classification sports and endurance sports. The health sequelae of this disorder are often devastating and life-long and include disordered eating and low energy availability, under nutrition, amenorrhea, injury, fracture, and irreversible bone loss. This workshop provides a practical guide for the sports health care professional on prevention strategies for the female athlete triad and illustrates the IOC Triad prevention project debuted at the Youth Olympic Games 2010.

**#36 D. Corrado (Italy), M. Borggrefe (Germany), F. Gaita (Italy), N. Saoudi (Monaco): Atrial fibrillation in athletes**

Atrial fibrillation is one of the most frequent causes of symptoms in athletes and may occur during or after periods of strong physical activities. Workshop participants will evaluate various aspects of the association between these two conditions and of its diagnostic in athletes. The methods to prevent its occurrence or control its clinical impact will be presented. The recently introduced catheter ablation techniques will be described and discussed in this peculiar situation.

**#37 N. Nikoli (Croatia), S. Wilson (Australia): Ten Commandments for the coach with the sailing team on the go (ISAF Medical Guidelines)**

Modern sportsman travel frequently and must be able to deal not only with the environmental problems but also with problems related to mode of transportation, major time zone changes, different food, housing and different approaches and levels of medical care at new competing destinations. Subjects of pre-competition/pre-travel consultation, vaccination, acclimatization, time zone change, nutrition, re-hydration, first aid, injuries, overstraining, diarrhoea, treatment and prevention, antibiotic of choice, personal protection, security precautions and risk behaviour will be presented. Participants will learn how this approach can be effectively used in training and education of any sportsman and easily administered as a part of pre-competition service, decreasing the chance of unwanted influence to their health and abilities.

**#38 N. Potter (USA): Evidence based clinical biomechanical assessment**

Athletes don’t get injured because they are not doing enough, it is usually because they are already doing a lot, with subtle biomechanical dysfunctions. Workshop participants will review the current literature to identify which altered biomechanical variables most often correlate with injury. Participants will then learn how to implement a comprehensive evidence based biomechanical assessment program, which is clinically efficient and effective. This program may be implemented as a pre-competition screen to prevent injury or following an injury to identify underlying biomechanical dysfunctions contributing to the current condition.

**#39 R. Magnussen (France), P. Tu (USA): Preventing injuries in young throwing athletes - an evidence-based approach**

Overuse injuries are becoming more common now that athletes are specializing in sports at younger ages. Workshop participants will review common upper extremity injuries seen in young throwing athletes and the best evidence-based approaches to preventing these injuries. This will include discussion of proper conditioning, throwing mechanics, and the appropriate age for certain types and amounts of pitches each day, as well as potential pitfalls to following pitching safety rules.
Keynote Speakers

Jonathan Drezner, MD Associate Professor
Dr. Drezner is an Associate Professor in the Department of Family Medicine at the University of Washington, and Team Physician for the Seattle Seahawks (NFL) and the University of Washington. He is Research Director of the National Registry for AED Use in Sports and Vice President of the American Medical Society for Sports Medicine.

Antonio Pelliccia, MD Professor
Antonio Pelliccia, MD Scientific Director of the Institute of Sport Medicine and Science, Italian Olympic Committee, Rome, Italy. Professor of Sport Cardiology at Post-graduate School of Sport Medicine, University of Rome. Recognized expertise in the field of exercise, sport and cardiovascular disease.

Michael Kjær, Dr. Med. MD Professor
He was educated as a Medical doctor from University of Copenhagen 1984, and became Specialist in Rheumatology 1995. He is Head of Institute of Sports Medicine, Dept of Orthopedic Surgery, Bispebjerg Hospital in Copenhagen and Clinical Professor in Sports Medicine at University of Copenhagen, Denmark. His research group focus on adaptation of tendon and skeletal muscle to mechanical loading and physical training, with special emphasize on physiological-pathological adaptation to overloading and regeneration of tissue.

Tron Krosshaug, PhD Associate Professor
Tron Krosshaug, Associate Professor at the Oslo Sports Trauma Research Center & Department of Sports Medicine, the Norwegian School of Sport Sciences, is an expert in the study of sports injury mechanisms, with several publications on the mechanisms of ankle and knee ligament injuries.

Caroline Finch, PhD Professor
Caroline Finch, Research Professor and NHMRC Principal Research Fellow; Director, Australian Centre for Research into Injury in Sport and its Prevention (ACRISP), Monash Injury Research Institute, Monash University, Melbourne, Australia. Leading sports injury epidemiologist with over 350 publications. Director of one of the International Research Centres for Prevention of Injury and Protection of Athlete Health supported by the International Olympic Committee (IOC).

Jiri Dvorak, MD Professor
Jiri Dvorak, MD, Professor at the University of Zurich, senior consultant at Schulthess Clinic and FIFA Chief Medical Officer, dedicated the last 20 years of his professional work to the development of Sports (Football) Medicine. 195 peer review publications from the F-MARC (FIFA Medical Assessment and Research Center) team impacted the standing of Medicine within the Football community experiencing the fact that Football can be promoted as Health enhancing leisure activity.

Colin Fuller, MD PhD Professor
Experience gained while working in high-risk industries initiated an on-going interest in developing risk management models for sport. Recently, with F-MARC, the popularity of football has been utilised to deliver health knowledge about communicable and non-communicable diseases among children in Africa.

Astrid Junge, PhD
Astrid Junge, PhD (Germany) is the Head of research at the Medical Assessment and Research Centre of the Fédération Internationale de Football Association (F-MARC) and an Associated Professor at the University of Zurich. She has published extensively on the epidemiology and prevention of football injuries.
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Proceedings
Abstracts of papers presented at the IOC World Conference on Prevention of Injury & Illness in Sport are published in a special issue of the British Journal of Sports Medicine to coincide with the Conference and focusing on sports injury prevention. All attendees will receive a copy on site.

Presentation Submission Instructions
Except for the workshops, all presentations will be run from a central computer using PowerPoint only. Presenters will not be able to use their own laptop. PowerPoint presentations can be viewed and tested by the Speakers in the slide preview room, located in room Apollinaire at level –1 of the Grimaldi Forum. Final presentations must be uploaded on the network the day preceding their presentation (for a morning session) or, at the latest, in the morning preceding an afternoon Session. It is essential for the smooth running of the sessions that all Speakers hand in their PowerPoint presentations in due time.

The Apollinaire room will be open from Wednesday, April 6 at 16.00 with the technical team available.

Presentation technical requirements
Supported media for transferring the presentations:
- USB storage device, DVDROM, CDROM, Memory card.

Configuration:
Windows XP / Vista / 7, Microsoft Office 2007 SP1 or previous version, Windows Media Player 11 or previous version.

Supported file formats:
- PowerPoint (PPT, PPTX).

For performance reason, the total size of your presentation and external files associated, must not exceed 1.5 Gbytes.

Posters
The posters will remain on display in the Diaghilev exhibition area throughout the duration of the Conference.
- Poster set-up is recommended on April 6, 16.00 – 18.00
- Poster set-up must be completed on April 7, 11.00 at the latest
- Poster removal must be completed on April 9, at 19h00
- A poster discussion session will be organised on Thursday, April 7 from 18.15 to 19.30 during the Wine & Cheese Reception. Authors are requested to be present to discuss their findings particularly during this session.

Workshops
The Conference features 38 different workshop sessions. These have been planned as practical, small-group sessions with plenty of opportunity for interaction between faculty and fellow participants. Please note that workshop attendance is limited and that you should sign up in advance at the secretariat desk.

European Accreditation
Following the approval from the UEMS (European Union of Medical Specialists), the EACCME (European Accreditation Council for Continuing Medical Education) has granted 18 hours of European external CME credits to the “IOC World Conference on Prevention of Injury & Illness in Sport”.

EACCME credits are recognized by the American Medical Association towards the Physician’s Recognition Award (PRA). To convert EACCME credit to AMA PRA category 1 credit, contact the AMA.

Certificate of attendance
A certificate of attendance is provided on request at the registration desk on the last day of the Conference.
General Information

Admission
The participant’s name badge is provided at the registration desk. All participants are requested to wear the badge throughout the Conference. Only badge holders are admitted to the appropriate sessions, exhibition and social events.

Cloakroom
A cloakroom is at the disposal of participants at the entrance of the Grimaldi Forum (hall Diaghilev). Delegates are kindly requested not to leave their personal belongings after closing times.

Currency
The currency in Monaco is the Euro. There are a number of currency exchanges which are open all day, including Sunday and bank holidays. Your hotel will provide you with details of your nearest currency exchange.

Electricity
The standard voltage in Monaco is 220 V.

Insurance
The Conference organisers can not accept liability for personal injuries sustained, of for loss or damage to property belonging to Conference participants, either during or as a result of the Conference. Registration does not include insurance.

Language
The official language of the Conference in English. No simultaneous translation will be provided.

Meals
Breakfast is included in the room rate at all hotels, if booked through the Organising Partner Publi-Créations. Lunch and coffee breaks will be served to the participants in the Diaghilev exhibition area of the Grimaldi Forum according to the schedule of the programme.

Secretariat desk
The secretariat / registration desk, located at the entrance of the Grimaldi Forum (hall Diaghilev), will open on Wednesday, April 6 at 16.00 and stay open throughout the Conference with the following hours:

- **Wednesday, April 6:** from 16.00 to 20.00
- **Thursday, April 7:** from 08.00 to 20.00
- **Friday, April 8:** from 07.30 to 19.00
- **Saturday, April 9:** from 07.30 to 19.00

Website
www.ioc-preventionconference.org
Social Events

**Wednesday, April 6**
18.30 - 19.30
Grimaldi Forum Monaco
Welcome Cocktail hosted by the Minister of State of the Principality of Monaco
(*included in the conference registration fee*)

**Thursday, April 7**
18.15 - 19.30
Grimaldi Forum Monaco
Wine & Cheese Reception and Poster Discussion
(*included in the conference registration fee*)

**Friday, April 8**
20.00 - La Salle des Etoiles, Sporting Monte-Carlo
http://en.sportingmontecarlo.com
Gala dinner
(*Additional registration required - Places are limited and will be allocated on a first-come, first-served basis*)

**Saturday, April 9**
19.30
Faculty Event (*by invitation*)
ISAKOS Approved Course

Exhibitors

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