



JUNE 26-28 2008  
**WORLD CONGRESS  
 ON SPORTS INJURY  
 PREVENTION**  
 TROMSØ NORWAY

# PROGRAM

## Wednesday June 25<sup>th</sup>

16-20	Registration (Radisson SAS Hotel Tromsø)
19 -	Get together at Polaria - an Arctic Experience!

## Thursday June 26<sup>th</sup>

7.30 - 10	Registration (Radisson SAS Hotel Tromsø)			
10 – 10.30	OPENING CEREMONY (Tromsøsalen, Radisson SAS Hotel Tromsø)			
10.30-11.15	<b>KEYNOTE LECTURE (Tromsøsalen, Radisson SAS Hotel Tromsø)</b> <b>Roald Bahr (Norway) &amp; Karim Khan (Canada):</b> Injury prevention – do we need to shift focus from the ACL to overuse injuries?			
11.15 - 12	<b>KEYNOTE LECTURE (Tromsøsalen, Radisson SAS Hotel Tromsø)</b> <b>Jiri Dvorak (Switzerland):</b> Give Hippocrates a jersey – promoting health through sports			
12 - 13	LUNCH (Radisson SAS Hotel Tromsø & Rica Ishavshotel – please check your lunch ticket)			
	<b>SESSION A</b> (Tromsøsalen, Radisson SAS Hotel Tromsø)	<b>SESSION B (Rica Hall 1, Rica Ishavshotel)</b>	<b>SESSION C (Rica Hall 2, Rica Ishavshotel)</b>	<b>SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)</b>
13 – 15.30	<b>Tendons – from molecule to man</b> <b>Chair: Henning Langberg (Denmark)</b> 13.00-13.20 <b>Michael Kjaer (Denmark):</b> Tendon injuries – why is it a big problem	<b>Injury prevention in rugby union</b> <b>Supported by the International Rugby Board (IRB)</b> <b>Chair: Mick Molloy (Ireland)</b> 13.00-13.20 <b>Mick Molloy (Ireland):</b> Rugby scrum/injury	<b>Free communications</b> <b>Chairs: Jon Karlsson (Sweden) &amp; Robert Johnson (USA)</b> 13.00-13.10 <b>C Goulet, B Hagel, D Hamel, G Légaré (Canada):</b> Self-reported skill level and injury severity in skiers and	<b>Workshops</b> 13.00-13.50 <b>R Celebrini (Canada):</b> A lower extremity injury prevention warm-up incorporating a proximal to distal movement strategy (#A) 14.00-14.50 <b>C Ortega (chair, USA), G Zuest (USA):</b> Efficient

13.20-13.40 **Mette Hansen** (Denmark): Do female hormones affect tendon trainability?

13.40-14.00 **David Hart** (Canada): Molecular and cellular regulation in tendon responses to injury and overuse: where biology and biomechanics intersect

14.00-14.20 **Bjarki Haraldsson** (Denmark): The relationship between structural properties in the patellar tendon and physical activity - a link to overuse injuries?

14.20-14.40 **Jens Bojsen-Møller** (Denmark): Mechanical structure and function of the large human tendons – why are they so easily injured?

14.40-15.00 **Mads Kongsgaard** (Denmark): Resistance and eccentric training as prevention and treatment of patellar tendinopathy

15.00-15.10 **Henning Langberg** (Denmark): Future perspectives

15.00-15.10 **All**: Panel discussion

mechanism and prevention

13.20-13.35 **Simon Kemp** (UK): The influence of risk factors on the incidence of tackle injuries in professional rugby union

13.35-13.50 **Andrew McIntosh** (Australia): Injury causation and prevention in the tackle in community rugby

13.50-14.05 **Ken Quarrie** (New Zealand): Injury prevention in New Zealand

14.05-14.20 **Martin Raftery** (Australia): Understanding and preventing catastrophic cervical spinal cord injury

14.20-14.35 **Preston Wiley** (Canada): Special issues in injury prevention (including tournaments and women's rugby)

14.35-14.50 **Colin Fuller** (UK): Rugby World Cup injury analysis

14.50-15.10 **Paul McCrory** (Australia): Understanding and preventing concussion

15.10-15.30 **All**: Panel discussion

snowboarders (#1)

13.10-13.20 **TT Bere, TW Flørenes, L Nordsletten, R Bahr** (Norway): Injuries among World Cup alpine skiers (#2)

13.20-13.30 **TW Flørenes, L Nordsletten, S Heir, R Bahr** (Norway): Injuries to World Cup ski and snowboard athletes (#3)

13.30-13.40 **A Brooks, FP Rivara** (USA): Evaluation of skiing and snowboarding injuries in terrain parks (#4)

13.40-13.50 **K Aginsky, M Lambert, J Gray, W Derman** (South Africa): Effects of a core stability intervention programme on abdominal and lumbar muscle symmetry in elite high school cricketers (#5)

13.50-14.00 **J Orchard, P Farhart, T James, M Portus, A Kountouris** (Australia): Pace bowlers in cricket with history of lumbar stress fracture have increased risk of lower limb muscle strains, particularly calf strains (#6)

14.00-14.10 **J Orchard, T James, M Portus, A Kountouris, R Dennis** (Australia): Pace bowlers in cricket demonstrate 3-4 week delay between high workloads and increased risk of injury (#7)

**Chairs: Bruce Beynon (USA) & Toru Fukubayashi (Japan)**

14.20-14.30 **K Steffen, G Myklebust, TE Andersen, I Holme, R Bahr** (Norway): Self-reported injury history and lower limb function as risk factors for injuries in female youth football (#8)

14.30-14.40 **AH Engebretsen, AM Pensgaard, I Holme, L Engebretsen, R Bahr** (Norway): Self-reported psychological characteristics as risk factors for

taping strategies to prevent injuries of the upper extremities (#B)

15.00-15.50 **T Hewett** (co-chair, USA), **G Myklebust** (co-chair, Norway): Techniques for preventing ACL injuries (#C)

			<p>injuries among male football players (#9)</p> <p><b>14.40-14.50 K Steffen, AM Pensgaard, R Bahr (Norway):</b> Self-reported psychological characteristics as risk factors for injuries in female youth football (#10)</p> <p><b>14.50-15.00 AH Engebretsen, G Myklebust, I Holme, L Engebretsen, R Bahr (Norway):</b> Risk factors for ankle, knee, hamstring and groin injuries among male football players - a prospective cohort study (#11)</p> <p><b>15.00-15.10 T Soligard, R Bahr, TE Andersen (Norway):</b> Risk of football injuries on artificial turf in youth football: 3-year data from the Norway Cup tournament (#13)</p> <p><b>15.10-15.20 J Bjørneboe, TE Andersen, R Bahr (Norway):</b> Risk of injury on artificial turf in elite football (#14)</p> <p><b>15.20-15.30 W Derman (South Africa):</b> Does pre-treatment with NSAID prevent muscle pain and damage following unaccustomed eccentric exercise? (#51)</p>	
15.30-16	COFFEE BREAK/POSTER PRESENTATIONS			
	SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)	SESSION B (Rica Hall 1, Rica Ishavshotel)	SESSION C (Rica Hall 2, Rica Ishavshotel)	SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)
16 - 18	<p>The prevention of knee and lower leg injuries among elite alpine skiers and competitors</p> <p><b>Chair: Robert Johnson (USA)</b></p> <p><b>16.00-16.15 Robert Johnson (USA):</b> Comparison of injury trends among recreation versus elite and competitive alpine skiers</p> <p><b>16.15-16.30 Bruce Beynnon</b></p>	<p>The hierarchy of evidence in sports injury prevention: A methodological debate</p> <p><b>Chair: Roald Bahr (Norway)</b></p> <p><b>16.00-16.05 Roald Bahr (Norway):</b> Introduction and setting rules of debate</p> <p><b>16.05-16.20 Carolyn Emery (Canada):</b> The randomized</p>	<p>Free communications</p> <p><b>Chairs: Bert Mandelbaum (USA) &amp; Ingar Holme (Norway)</b></p> <p><b>16.00-16.10 J Bjørneboe, R Bahr, TE Andersen (Norway):</b> Injury surveillance in male Norwegian professional football - a methodological study (#15)</p> <p><b>16.10-16.20 M Bizzini, A Junge, R Bahr, J Dvorak (Switzerland/Norway):</b> The need</p>	<p>Workshops</p> <p><b>16.00-16.50 TM Best (co-chair, Canada), L Maffey (co-chair, Canada):</b> Research evidence and clinical support for hamstring and "groin" muscle strains: an active approach to injury prevention/re-occurrence and rehabilitation (#D)</p> <p><b>17.00-17.50 L Maffey (Canada):</b> Research evidence and clinically practical elements of the "core" of</p>

(USA): ACL injuries among ski racers in New England

16.30-16.45 **Jasper Shealy** (USA): A review of key studies in the prevention of alpine skiing injuries

16.45-17.00 **Bruce Beynnon** (USA): Risk factors for ACL injuries among elite alpine skiers and competitors

17.00-17.20 **Carl Ettlinger** (USA): Knee and lower leg injury mechanisms among elite alpine skiers and competitors

17.20-17.35 **Jasper Shealy** (USA): Strategies for reducing the risk of injury among elite alpine skiers and competitors

17.35-17.45 **Robert Johnson** (USA): A comprehensive plan for injury reduction among elite alpine skiers and competitors

17.45-18.00 **All**: Panel discussion

controlled trial: the highest level of evidence in injury prevention in sport

16.20-16.35 **Willem van Mechelen** (Netherlands): RCT, CT or none? That's the question!

16.35-16.50 **Domhnall MacAuley** (UK): RCTs are critical for good clinical practice

16.50-17.05 **John Orchard** (Australia): Observation of reality is what we need!

17.05-17.20 **Roald Bahr** (Norway): Questions/viewpoints from the floor

17.20-17.25 **All**: Summary statements on each side

17.25-17.30 **Roald Bahr** (Norway): Voting and consensus!

for injury prevention in elite football referees: data from the 2006 FIFA World Cup™ and the FIFA Women's World Cup 2007 (#16)

16.20-16.30 **O Bruegger** (Switzerland): Fatal accidents in sport: data collection, accident occurrence and prevention (#17)

16.30-16.40 **O Bruegger** (Switzerland): Cost of sports accidents to the Swiss national economy (#18)

16.40-16.50 **L Hasslan, J Iwasa, K Steffen, G Myklebust** (Norway): Shoulder pain is a common problem in elite female team handball players (#19)

**Chairs: Michael Kjaer** (Denmark) & **Paul McCrory** (Australia)

17.00-17.10 **S Gianotti, P Hume, W Hopkins, J Harawira, R Truman** (New Zealand): Effect of the scrum law change on injuries in rugby union (#20)

17.10-17.20 **T Soligard, G Myklebust, K Steffen, I Holme, H Silvers, M Bizzini, A Junge, J Dvorak, R Bahr, TE Andersen** (Norway/USA/Switzerland): F-MARC 11+: a complete warm-up program to prevent injuries in youth female football (#21)

17.20-17.30 **A Nilstad, T Soligard, A Junge, R Bahr, TE Andersen** (Norway/Switzerland): Compliance with F-MARC 11+: a complete warm-up program to prevent injuries in youth female football (#22)

17.30-17.40 **S Sherker, K Abbott, P Klarenaar, A Donaldson** (Australia): Can risk management training improve the safety activity of community sports clubs? An evaluation of the 'SafeClub' program (#23)

physiotherapy pre-season evaluation: Using real-time ultrasound biofeedback (#E)

			<p>17.40-17.50 <b>H Silvers, M Gerhardt (USA)</b>: Groin injury prevention program in professional soccer players (#24)</p> <p>17.50-18.00 <b>C Emery, W Meeuwisse (Canada)</b>: The effectiveness of a neuromuscular prevention strategy to reduce injuries in youth soccer: a cluster-randomized controlled trial (#25)</p>	
18 -	Midsummer celebration at Otervika			

## Friday June 27<sup>th</sup>

### 8 – 8.45 KEYNOTE LECTURE (Tromsøsalen, Radisson SAS Hotel Tromsø)

**Willem Meeuwisse** (Canada): Practical models of injury prevention

#### SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)

#### SESSION B (Rica Hall 1, Rica Ishavshotel)

#### SESSION C (Rica Hall 2, Rica Ishavshotel)

#### SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)

9 - 12

#### Prevention of football injuries

**Supported by FIFA/F-MARC**

**Chairs: Jiri Dvorak** (Switzerland) & **Colin Fuller** (UK)

9.00-9.10 **Astrid Junge** (Switzerland): Football injury epidemiology: what are we trying to prevent?

9.10-9.30 **Thor Einar Andersen** (Norway): Ankle injuries: how do they happen and what can be done for prevention?

9.30-9.50 **Árni Árnason** (Iceland): Hamstring strains: why so frequent and are prevention programs effective?

9.50-10.20 **Coffee break**

10.20-10.40 **Bert Mandelbaum** (USA): Knee injuries: the special case of ACL injury prevention in women

10.40-11.00 **William Garrett** (USA): Adductor-related soccer injuries: what are they and can they be prevented?

11.00-11.20 **Donald Kirkendall** (USA): Head injuries: are they preventable?

11.20-11.30 **Astrid Junge** (Switzerland): Country-wide implementation of a prevention program: the Swiss experience

#### A sport-specific approach to the prevention of shoulder problems among overhead athletes

**Chair: Jonathan C. Reeser** (USA)

9.00-9.10 **Jonathan C. Reeser** (USA): Introduction and overview: what is the scope of the problem?

9.10-9.20 **Ann M. Cools** (Belgium): A brief overview of shoulder kinematics

9.20-9.35 **Mark R. Hutchinson** (USA): Strategies for the prevention of shoulder problems in baseball

9.35-9.50 **Jim Miller** (USA): Pathomechanics of shoulder problems in swimmers: strategies for prevention

9.50-10.20 **Coffee break**

10.20-10.35 **Mark R. Hutchinson** (USA): Strategies for the prevention of shoulder problems in tennis

10.35-10.50 **Jonathan C. Reeser** (USA): Practical strategies for preventing shoulder problems in volleyball athletes

10.50-11.05 **Andrew Gregory** (USA): Practical strategies for preventing shoulder problems in

#### Free communications

**Chairs: Scott McLean** (USA) & **Tron Krosshaug** (Norway)

9.00-9.10 **S Shultz, MD Leonard-Garner, AD Nguyen, RJ Schmitz** (USA) Relationship between clinical measures of joint laxity and sagittal plane joint excursion and stiffness during a drop jump landing (#26)

9.10-9.20 **C Ekegren, WC Miller, RG Celebrini, DL MacIntyre, JJ Eng** (Canada): Agreement and validity of observational risk screening guidelines in evaluating ACL injury risk factors (#27)

9.20-9.30 **E Tsuda, Y Ishibashi, A Fukuda, H Tsukada, Y Hayashi, Y Kimura, S Toh** (Japan): Is dynamic lower limb alignment during landing a predictor of noncontact anterior cruciate ligament injury in high school basketball players? (#28)

9.30-9.40 **M Collins, A September, L van der Merwe, G Mokone, M Schweltnus** (South Africa): The COL5A1 genotype is associated with range of motion measurements (#29)

9.40-9.50 **J Hashemi, R Breighner, J Taekhyung, S Ekwaro-Osire, N Chandrashekar** (USA/Canada): An in-vitro investigation of the role of quadriceps load during one-

#### Workshops

9.00-9.50 **JM Alonso** (co-chair, Spain), **À Basas** (Spain), **A Frohm** (Sweden), **M Kongsgaard** (co-chair, Denmark): Practical issues of patellar tendinopathy prevention on top level athletes (#F)

10.00-10.50 **J Drezner** (USA): Establishing an emergency action plan for high school, colleges, and clubs to respond to a collapsed and unconscious athlete and a potential cardiac emergency (#G)

11.00-11.50 **J Drezner** (co-chair, USA), **R Dimeff** (co-chair, USA): The preparticipation physical evaluation in the office and club setting utilizing standardized forms and protocols (#H)

11.30-11.40 **Simon Gianotti** (New Zealand): Country-wide implementation of a prevention program: the New Zealand experience

11.40-12.00 **All**: Panel discussion

developing athletes

11.05-11.15 **Jim Miller** (USA): Decades of dedication to sport: the master's shoulder

11.15-11.35 **Ann M. Cools** (Belgium): Effective rehabilitation (and secondary prevention) of shoulder problems

11.35-12.00 **All**: Panel discussion

legged jump landing (#30)

**Chairs: Willem Meeuwisse (Canada) & Per Renström (Sweden)**

10.00-10.10 **S McLean, J Samorezov, R Palmieri-Smith** (USA): Non-contact ACL injury risk is linked directly to fatigue-induced central pathway degradation (#31)

10.10-10.20 **Y Kimura, Y Ishibashi, E Tsuda, A Fukuda, H Tsukada, Y Hayashi, S Toh** (Japan): Gender differences in dynamic lower limb alignment during a drop jump task in pubescent children (#32)

10.20-10.30 **R Schmitz, AD Nguyen, M Leonard, S Shultz** (USA): Relationship of clinical laxity measures to energy absorption during drop jump landings (#33)

10.30-10.40 **T Doyle, W Andrews, B Dawson, R Newton** (Australia): Functionally assessing bi-lateral differences and general effects of fatigue during a sport specific running protocol (#34)

10.40-10.50 **M Estriga, L Massada, J Bernardes, J Carvalho** (Portugal): The influence of sex hormones on ACL laxity of female handball players (#35)

**Chairs: Tim Hewett (USA) & Lars Engebretsen (Norway)**

11.00-11.10 11.50-12.00 **C Young, S Busey, J Rodriguez, D Mark** (USA): The effect of school-based instruction on the usage of protective equipment in in-line skaters (#36)

11.10-11.20 **D Goodman, C Ciavarro** (Canada): Changing behaviours of youth hockey players by innovative educational

			<p>interventions (#37)</p> <p><b>11.20-11.30 C Emery, I Shrier, W Meeuwisse, C Goulet, B Hagel, B Benson (Canada):</b> The risk of injury associated with body checking among pediatric ice hockey players (#38)</p> <p><b>11.30-11.40 TM Straume-Næsheim, TE Andersen, J Dvorak, R Bahr (Norway/Switzerland):</b> Do football (soccer) players have a higher prevalence of cognitive deficits compared to athletes in non-contact sports? (#39)</p> <p><b>11.40-11.50 S Hollis, M Stevenson, A McIntosh, A Shores, C Finch (Australia):</b> The incidence of mild traumatic brain injury (MTBI) in an Australian non-elite rugby cohort (#40)</p> <p><b>11.50-12.00 B Benson, W Meeuwisse, C Burke (Canada/USA):</b> The NHL-NHLPA Concussion Program: a prospective study of 7 regular seasons (1997 - 2004) (#41)</p>	
<b>12 - 13</b>	<b>LUNCH (Radisson SAS Hotel Tromsø &amp; Rica Ishavshotel – please check your lunch ticket)</b>			
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<b>13 – 15.30</b>	<p><b>What makes injury prevention in children and adolescents different?</b></p> <p><b>Chair: Carolyn Emery (Canada)</b></p> <p><b>13.00-13.15 Carolyn Emery (Canada):</b> Overview of epidemiology/risk factors/ long-term consequences of injury in children and adolescents</p> <p><b>13.15-13.30 Willem Meeuwisse (Canada):</b> Injury surveillance issues in child and adolescent</p>	<p><b>Preventing injuries in track and field</b></p> <p><b>Supported by the International Association of Athletics Federations (IAAF)</b></p> <p><b>Chair: Juan Manuel Alonso (Spain)</b></p> <p><b>13.00-13.20 Juan Manuel Alonso (Spain):</b> How large is the injury problem in athletics? – overall epidemiology</p> <p><b>13.20-13.40 Geoffrey Verrall (Australia):</b> Preventing injuries</p>	<p><b>Workshops</b></p> <p><b>13.00-13.50 MH Binet (France), R Greenwald (chair, Scotland), M Langran (Scotland), J-D Laporte (France):</b> Preventing winter sport injuries among recreational skiers and snowboarders (#I)</p> <p><b>14.00-14.50 M Fitton (USA), B Pluim (co-chair, USA), M Turner (co-chair, UK), T Vaziri (USA):</b> Athletic Logic Injury Registration System (#J)</p>	<p><b>Workshops</b></p> <p><b>13.00-13.50 T Fukubayashi (chair, Japan), S Niga (Japan):</b> Active conservative treatment for the prevention of groin pain (#K)</p> <p><b>14.00-14.50 C Goulet (Canada), T Timpka (chair, Sweden):</b> Safe Sports International – a global program for sports safety promotion (#L)</p>

	<p>sport</p> <p><b>13.30-13.45 Tim Hewett (USA):</b> Non-contact injury mechanisms in youth</p> <p><b>13.45-14.00 Grethe Myklebust (Norway):</b> Lower extremity injury prevention strategies in youth soccer and handball</p> <p><b>14.00-14.15 Brent Hagel (Canada):</b> Injury prevention in child and adolescent skiing and snowboarding</p> <p><b>14.15-14.30 Brian Benson (Canada):</b> Concussion prevention in child and adolescent ice hockey</p> <p><b>14.30-14.45 Barbara Morrongiello (Canada):</b> Psycho-social factors related to the uptake of injury prevention strategies in child and adolescent sport</p> <p><b>14.45-15.00 Lorrie Maffey (Canada):</b> Preseason evaluation in youth sport</p> <p><b>15.00-15.15 Carolyn Emery (Canada):</b> Future directions for injury prevention in child and adolescent sport</p> <p><b>15.15-15.30 All:</b> Panel Discussion - moving the research agenda forward in injury prevention in child and adolescent sport</p>	<p>among sprinters – the case of hamstring injuries</p> <p><b>13.40-14.00 Karim Khan (Canada):</b> Preventing injuries among middle distance and long distance runners – the case of stress fractures</p> <p><b>14.00-14.20 Henning Langberg (Denmark):</b> Preventing injuries among jumpers – the case of patellar and Achilles tendinopathy</p> <p><b>14.20-14.40 Mark Hutchinson (USA):</b> Preventing injuries among throwers</p> <p><b>14.40-15.00 Thomas Best (USA):</b> Surviving the decathlon – and the training for it!</p> <p><b>15.00-15.30 All:</b> Panel discussion - setting the research agenda for injury prevention in track and field</p>		
<p><b>15.30 - 16</b></p>	<p><b>COFFEE BREAK/POSTER PRESENTATIONS</b></p>			
	<p><b>SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)</b></p>	<p><b>SESSION B (Rica Hall 1, Rica Ishavshotel)</b></p>	<p><b>SESSION C (Rica Hall 2, Rica Ishavshotel)</b></p>	<p><b>SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)</b></p>

<p><b>16 - 18</b></p>	<p><b>Anatomical contributions to knee injury: Factors we can no longer ignore</b></p> <p><b>Chair: Scott McLean (USA)</b></p> <p>16.00-16.20 <b>Sandra J. Shultz (USA)</b>: Anatomical and postural contributions to knee injury risk – a relationship that remains poorly understood</p> <p>16.20-16.40 <b>Anh-Dung Nguyen (USA)</b>: Defining sex specific lower extremity postures: bridging the gap between static and dynamic lower extremity alignment</p> <p>16.40-17.00 <b>Scott McLean (USA)</b>: Anatomical predictors of high risk knee joint loading states</p> <p>17.00-17.30 <b>All</b>: Panel discussion - implications for injury prevention and future directions</p>	<p><b>Implementing an injury prevention programme</b></p> <p><b>Chairs: Holly Silvers (USA) &amp; Simon Gianotti (New Zealand)</b></p> <p>16.00-16.20 <b>Holly Silvers (USA)</b>: Implementing prevention programs: lessons from the field</p> <p>16.20-16.40 <b>Simon Gianotti (New Zealand)</b>: Documenting evidence of success or failure</p> <p>16.40-17.00 <b>Grethe Myklebust (Norway)</b>: Ensuring, monitoring, and promoting compliance</p> <p>17.00-17.15 <b>Mario Bizzini (Switzerland)</b>: Working with volunteer coaches and their teams</p> <p>17.15-17.45 <b>All</b>: Panel discussion</p>	<p><b>Behaviour and sports injuries</b></p> <p><b>Chair: Evert Verhagen (Netherlands)</b></p> <p>16.00-16.15 <b>Evert Verhagen (Netherlands)</b>: Behaviour: a peculiar injury risk factor</p> <p>16.15-16.30 <b>Barbara Morrongiello (Canada)</b>: Attitudes, emotions, and cognitions. Influences on risk taking</p> <p>16.30-16.45 <b>Carly McKay (Canada)</b>: Behaviours, attitudes, and injury risk</p> <p>16.45-17.00 <b>Brent Hagel (Canada)</b>: Does the use of protective equipment cause injuries in sport and recreation activities by increasing risk taking behaviour?</p> <p>17.00-17.15 <b>Barbara Morrongiello (Canada)</b>: Strategies to reduce risk-taking behaviour: a test of two interventions</p> <p>17.15-17.30 <b>Dorine Collard (Netherlands)</b>: Development of preventive strategies in sports, should we listen to the athletes?</p> <p>17.30-18.00 <b>All</b>: Panel discussion – Is it time to shift our focus to the behavioural aspects of sports injuries?</p>	<p><b>Workshops</b></p> <p>16.00-16.50 <b>L Gill (USA), H Langberg (Denmark), R Smith (USA), ML Voight (chair, USA)</b>: Titleist Performance Institute Golf Fitness screen: Preventing injury and improving performance (#M)</p> <p>17.00-17.50 <b>AM Cools (co-chair, Belgium), JC Reeser (co-chair, USA)</b>: Clinical examination of the shoulder at risk in the overhead athlete: focus on injury prevention (#N)</p>
<p><b>20 -</b></p>	<p><b>Banquet at the Radisson SAS Hotel (Radisson SAS Hotel Tromsø)</b></p>			

## Saturday June 28<sup>th</sup>

8 – 8.45

### KEYNOTE LECTURE (Tromsøsalen, Radisson SAS Hotel Tromsø)

**Tim Hewett (USA):** Coupled biomechanical – epidemiological strategies for preventing ACL injuries: connecting the body's core to injury at the knee

### SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)

### SESSION B (Rica Hall 1, Rica Ishavshotel)

### SESSION C (Rica Hall 2, Rica Ishavshotel)

### SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)

9 - 12

### Game, set, and match – prevention of tennis injuries

**Chair: Per Renström (Sweden)**

9.00-9.15 **Babette Pluim**

(Netherlands): What is the extent of the problem and what risk factors have been identified?

9.15-9.30 **Todd Ellenbecker**

(USA): USTA High Performance Profile

9.30-9.45 **Anna Frohm**

(Sweden): Prevention of patellar tendinopathy

9.45-10.00 **Angel Ruiz-Cotorro**

(Spain): Prevention of spondylolysis in young tennis players – the Spanish experience

10.00-10.15 **Michael Turner**

(UK): Prevention of spondylolysis in young tennis players – the English experience

10.15-10.45 **Coffee break**

10.45-11.00 **Todd Ellenbecker**

(USA): Preventative shoulder exercises

11.00-11.15 **Maarten Moen**

(Netherlands): Prevention of stress fractures/reactions in the lower extremity

11.15-11.30 **Christian Swier**

(Netherlands): Stability exercise

### Influencing government policy development for sports injury prevention

**Chairs: Willem van Mechelen (Netherlands)**

9.00-9.20 **John Orchard**

(Australia): Introduction - the importance of data and why is it so important that we influence government policy for sports safety?

9.20-9.40 **Simon Gianotti (New Zealand):**

Influencing government policies that impact on sport injury prevention - the implementation of the New Zealand Injury Prevention Strategy

9.40-10.00 **Toomas Timpka**

(Sweden): Policies for safety in youth sports, an international perspective

10.00-10.30 **Coffee break**

10.30-10.50 **Claude Goulet**

(Canada): Quebec governmental policies for sports safety: what they were, what they are, and what works

10.50-11.10 **Lars Engebretsen**

(Norway): Obtaining government support for preventive research in sport injuries and the implementation of this research in Norway

### Studying sports injury mechanisms - from the field to the laboratory

**Chair: Andrew McIntosh (Australia)**

9.00-9.05 **Andrew McIntosh**

(Australia): Introduction - the importance of understanding injury mechanisms

9.05-9.15 **Paul McCrory**

(Australia): Studying sports injury phenomena - clinical perspective

9.15-9.25 **Paul McCrory**

(Australia): What coaches, players and athletes report about injury mechanisms

9.25-9.40 **Ken Quarrie (New Zealand):**

Playing situation & behaviour - match analysis using video

9.40-9.55 **Thor Einar Andersen**

(Norway): Translation of player situation & behaviour analysis to football

9.55-10.25 **Coffee break**

10.25-10.40 **Trevor Savage**

(Australia): Gross biomechanical description of injury situations

10.40-10.55 **Tron Krosshaug**

(Norway): Local analysis of injury mechanisms - from incident analysis using video to lab studies

### Workshops

9.00-9.50 **R Bahr (Norway), R Dick (USA), C Fuller (Chair, England), W Meeuwisse**

(Canada): Recurrent injuries: How to define them and how to record them (#O)

10.00-10.50 **R Dick (USA), J Dvorak (chair, Switzerland), A Junge (Switzerland):**

How to conduct an injury surveillance program I (#P)

11.00-11.50 **JM Alonso (Spain), R Dick (chair, USA), M Mountjoy**

(Canada), P Renström (Sweden): How to conduct an injury surveillance program II (#Q)

	<p>for the prevention of groin injuries</p> <p><b>11.30-12.00 All:</b> Panel discussion - will chronic injuries remain a chronic problem in tennis?</p>	<p><b>11.10-11.30 Willem van Mechelen (Netherlands):</b> Discussant and sports injury prevention. Who is responsible - the 'Nanny State' or the individual?</p> <p><b>11.30-12.00 All:</b> Panel discussion</p>	<p><b>10.55-11.10 James Slauterbeck (USA):</b> Laboratory studies of injury mechanisms - in vivo and in vitro</p> <p><b>11.10-11.25 Bertrand Fréchède (Australia):</b> Computer simulations of injury mechanisms</p> <p><b>11.25-11.40 Andrew McIntosh (Australia):</b> Linking injury mechanism studies with interventions to prevent injury</p> <p><b>11.40-12.00 All:</b> Panel discussion</p>	
<b>12 - 13</b>	<b>LUNCH (Radisson SAS Hotel Tromsø &amp; Rica Ishavshotel – please check your lunch ticket)</b>			
	<b>SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)</b>	<b>SESSION B (Rica Hall 1, Rica Ishavshotel)</b>	<b>SESSION C (Rica Hall 2, Rica Ishavshotel)</b>	<b>SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)</b>
<b>13 - 15</b>	<p><b>Implementing training programs targeted to improve performance and prevent injury in team sports - successes, perils, pitfalls and politics</b></p> <p><b>Chair: Jiri Dvorak (Switzerland)</b></p> <p><b>13.00-13.30 Jiri Dvorak (Switzerland):</b> Introduction: overview of implementing training programs targeted to improve performance and prevent injury in team sports</p> <p><b>13.30-13.50 Geoffrey Verrall (Australia):</b> Australian football</p> <p><b>13.50-14.10 Thor Einar Andersen (Norway):</b> Soccer</p> <p><b>14.10-14.30 James Moriarty (USA):</b> American football</p> <p><b>14.30-15.00 All:</b> Panel discussion</p>	<p><b>ACL injury paradigm: ACL biology and its relationship to injury and prevention</b></p> <p><b>Chair: James Slauterbeck (USA)</b></p> <p><b>13.00-13.10 James Slauterbeck (USA):</b> Introduction of an "ACL Injury Paradigm" and its relationship to prevention</p> <p><b>13.10-13.30 Javad Hashemi (USA):</b> ACL geometry, property, and morphology – a sex-based assessment</p> <p><b>13.30-13.50 Bruce Beynnon (USA):</b> Load application to the knee and neuromuscular control</p> <p><b>13.50-14.10 Dan Hardy (USA):</b> Relationship of sex hormones, gene expression profiles, and ACL remodeling to ACL loading and failure</p> <p><b>14.10-14.30 Jimmy Slauterbeck (USA):</b> Where we need to go?</p> <p><b>14.30-15.00 All:</b> Panel discussion</p>	<p><b>Epidemiology of injuries in Olympic sports</b></p> <p><b>Chair: Dennis Caine (USA) &amp; Melissa Schiff (USA)</b></p> <p><b>13:00-13:15: Dennis Caine (USA):</b> Gymnastics</p> <p><b>13:15-13:30: Brian Benson (Canada):</b> Ice Hockey</p> <p><b>13:30-13:45: Tonje W Flørenes (Norway):</b> Alpine Skiing</p> <p><b>13:45-14:00: Willy Pieter (Malaysia):</b> Taekwondo</p> <p><b>14:00-14:15: Babette Pluim (Netherlands):</b> Tennis</p> <p><b>14:15-14:30: Evert Verhagen (Netherlands):</b> Volleyball</p> <p><b>14:30-14:45: Melissa Schiff (USA):</b> Injury Prevention</p> <p><b>14:45-15:00: All:</b> Panel Discussion</p>	<p><b>Workshops</b></p> <p><b>13.00-13.50 S Gianotti (New Zealand), K Quarrie (New Zealand):</b> RugbySmart (#R)</p> <p><b>14.00-14.50 M Bizzini (co-chair, Switzerland), A Junge (co-chair, Switzerland), G Myklebust (co-chair, Norway):</b> Basic and advanced version of an injury prevention program for amateur football players (#S)</p>
<b>15-</b>	<b>COFFEE BREAK</b>			

15.30				
	SESSION A (Tromsøsalen, Radisson SAS Hotel Tromsø)	SESSION B (Rica Hall 1, Rica Ishavshotel)	SESSION C (Rica Hall 2, Rica Ishavshotel)	SESSION D (Sydspissen, Radisson SAS Hotel Tromsø)
15.30 – 17.30	<p><b>Mechanisms of hamstring muscle strain and implications for prevention</b></p> <p><b>Chair: Geoffrey Verrall (Australia)</b></p> <p>15.30-15.35 <b>Geoffrey Verrall (Australia)</b>: Introduction: is the mechanism of injury relevant?</p> <p>15.35-15.45 <b>Thomas M. Best (USA)</b>: Kinematics of the hamstring muscles during sprinting</p> <p>15.45-15.50 <b>Geoffrey Verrall (Australia)</b>: Why is the biceps the most commonly injured hamstring muscle?</p> <p>15.50-16.05 <b>David Morgan (Australia)</b>: From the lab: the non-uniform sarcomere model of hamstring muscle strain injury</p> <p>16.05-16.20 <b>Geoffrey Verrall (Australia)</b>: From the field: the force/fatigue model of hamstring injury</p> <p>16.20-16.35 <b>Thomas M. Best (USA)</b>: The influence of inflammation on the healing pathway. Do the mechanisms matter?</p> <p>16.35-16.50 <b>Árni Árnason (Iceland)</b>: Does the mechanism of injury influence the prevention program</p> <p>16.50-17.00 <b>Geoffrey Verrall (Australia)</b>: Summary</p> <p>17.00-17.30 <b>All</b>: Panel discussion – areas of agreement and disagreement for the mechanics of hamstring injuries and implication</p>	<p><b>Adjustment for exposure to injury risks: considerations in the selection of controls, biomechanists vs. epidemiologists</b></p> <p><b>Chair: Karim Khan (Canada)</b></p> <p>15.30-15.35 <b>Karim Khan (Canada)</b>: Introduction and setting rules of debate</p> <p>15.35-15.50 <b>Andrew McIntosh (Australia)</b>: Torquing with epidemiologists - a biomechanical perspective on case control studies</p> <p>15.50-16.05 <b>Brent Hagel (Canada)</b>: An epidemiologic perspective on selection of controls for etiologic studies of protective equipment use in the sport and recreation context</p> <p>16.05-16.20 <b>David Lloyd (Australia)</b>: Why does it break? Biomechanics has the answer!</p> <p>16.20-16.35 <b>Colin Fuller (UK)</b>: Epidemiology and biomechanics</p> <p>16.35-16.50 <b>Karim Khan (Canada)</b>: Questions/viewpoints from the floor</p> <p>16.50-16.55 <b>All</b>: Summary statements on each side</p> <p>16.55-17.00 <b>Karim Khan (Canada)</b>: Voting and consensus!</p>	<p><b>Free communications</b></p> <p><b>Chairs: John Orchard (Australia) &amp; Tron Krosshaug (Norway)</b></p> <p>15.30-15.40 <b>G Myklebust, A Skjølberg, R Bahr (Norway)</b>: ACL injuries in female team handball players - national injury trends after the Norwegian injury prevention study (#42)</p> <p>15.40-15.50 <b>R Sasaki, Y Urabe, O Yamaguchi, Y Ueda, T Akimoto (Japan)</b>: Change of whole body reaction time by performing an ACL injury prevention program (#43)</p> <p>15.50-16.00 <b>MK Zebis, J Bencke, L Andersen, T Alkjær, P Magnusson, M Kjær, P Aagaard (Denmark)</b>: Neuromuscular training changes the timing of medial hamstring muscle activity during sidecutting in female elite soccer and handball players (#44)</p> <p>16.00-16.10 <b>Y Urabe, R Sasaki, A Miyazato, O Yamaguchi, Y Ueda, S Koshida (Japan)</b>: Effect of an ACL injury prevention program on decreasing ACL injury incidence: a three-year follow-up study (#45)</p> <p>16.10-16.20 <b>N Constantini, A Finestone, N Hod, I Hetsroni, O Mei-Dan, T Horn, I Shub, S Heinemann, G Mann (Israel)</b>: Stress fracture reduction by equipment modification in border police female fighter recruits – Part I (#46)</p> <p><b>Chairs: John Bergfeld (USA) &amp; Sandra Shultz (USA)</b></p>	<p><b>Workshops</b></p> <p>15.30-16.20 <b>M Bizzini (Switzerland), T Hewett (USA), R Smith (USA), ML Voight (chair, USA)</b>: ACL injury prevention programs: How to implement and are they effective (#T)</p> <p>16.30-17.20 <b>C Ortega (chair, USA), G Zuest (USA)</b>: Efficient taping strategies to prevent injuries of the lower extremities (#U)</p>

	for prevention programs		<p><b>16.30-16.40 K Bartholomeeusen, R Meeusen, E Cumps (Belgium):</b> Is the novice runner at risk? A prospective cohort study of running injuries during a 10-week supervised training program (#47)</p> <p><b>16.40-16.50 M Collins, A September, J Cook, C Handley, L van der Merwe (South Africa/Australia):</b> Variants within the COL5A1 gene are associated with chronic achilles tendinopathy in a second population (#48)</p> <p><b>16.50-17.00 M Schwellnus, K Schwabe, R de Villiers, M Collins (South Africa):</b> Achilles tendon morphology and blood flow changes following an Ironman triathlon: a prospective cohort study (#49)</p> <p><b>17.00-17.10 M Yagishita, K Kitaoka (Japan):</b> The effect of eccentric exercise on the injured patella tendon healing (#50)</p> <p><b>17.10-17.20 I Buist, S Bredeweg (Netherlands):</b> Incidence and risk factors of running-related injuries in female recreational runners (#52)</p>	
17.30 – 18.15	<b>KEYNOTE LECTURE (Tromsøsalen, Radisson SAS Hotel Tromsø)</b> <b>Colin Fuller (UK):</b> Risk management in sports: prevention is better than cure			
18.15 – 18.30	<b>CLOSING CEREMONY (Tromsøsalen, Radisson SAS Hotel Tromsø)</b>			
20 -	<b>Speaker’s dinner – special event (by invitation)</b>			

## FREE COMMUNICATIONS - POSTERS

- #53 • **I Aerts, E Cumps, R Meeusen** (Belgium): Reliability of an on-field jump-landing scoring system (JLS-System)
- #54 • **I Aerts, E Cumps, R Meeusen** (Belgium): Prevalence and risk factors of anterior knee pain in basketball
- #55 • **A Arvantis, D Giannaopoulos, M Chronopoulou, S Voulioti** (Greece): Risk factors for scuba diving injury: a survey
- #56 • **A Arvantis, D Giannaopoulos, M Chronopoulou, S Voulioti** (Greece): Joggers' injuries: the association of alcohol consumption with the type and severity of injuries and outcomes
- #57 • **A Arvantis, D Giannaopoulos, M Chronopoulou, S Voulioti** (Greece): Descriptive epidemiological survey of women's volleyball injuries
- #58 • **F Avila-España, P Carpintero, FJ Berral, R Carpintero, J Caeiro, P Navarro, FJ Berral** (Spain): Achilles tendon disorders in recreational runners
- #59 • **ST Aydog, M Moser, MB Horodyski, PA Indelicato** (Turkey/USA): Isokinetic evaluation for the ACL reconstructed patient: Did we forget strengthening exercises for the quadriceps?
- #60 • **Backe, L Ericson, T Timpka, S Janson** (Sweden): Rock climbing injury rates and associated risk factors in a general climbing population
- #61 • **G Baltaci, O Cinar, G Dogan, G Usgu, S Onal, B Teker** (Turkey): Increased external rotation affects horizontal adduction range in shoulder kinematics
- #62 • **G Baltaci, N Ozunlu, GO Basari** (Turkey): The effects of weight ankle stability in adolescent basketball players
- #63 • **G Baltaci, D Ozer, G Senbursa** (Turkey): Preventive brace, taping or barefoot: do they do any change on multi-joint coordination and kinesthetic position sense in closed kinetic mechanism
- #64 • **N Bittencourt, L Mendonça, L Macedo, A Silva, S Fonseca** (Brazil): Correlation between patellar anatomical alignment and patellar tendinosis
- #65 • **N Bittencourt, L Mendonça, C Vasconcelos, A Silva, S Fonseca** (Brazil): Isokinetic muscle strength ratio evaluation of shoulder external and internal rotators
- #66 • **N Bittencourt, L Mendonça, C Guimarães, A Silva, S Fonseca** (Brazil): Isokinetic analysis of hamstrings and quadriceps muscles in the Brazilian male and female taekwondo team
- #67 • **N Bittencourt, L Mendonça, MT dos Anjos, A Silva, S Fonseca** (Brazil): Isokinetic analysis of medial and lateral rotators ratio of glenohumeral joint in the Brazilian male volleyball team
- #68 • **N Bittencourt, L Mendonça, G Amaral, MT dos Anjos, A Silva, S Fonseca** (Brazil): Isokinetic hamstring: quadriceps muscle strength ratio in Brazilian volleyball athletes
- #69 • **J Solla, L Casáis, M Martínez, ML Estriga** (Spain/Portugal): Prospective strength and flexibility training for injury prevention in professional soccer
- #70 • **M Castro, MA Janeira, O Fernandes, L Cunha** (Portugal): Biomechanical analysis of an inciting event of ankle sprain on basketball players
- #71 • **M Castro, MA Janeira, L Cunha** (Portugal): Injuries in Portuguese basketball
- #72 • **R Celebrini, JJ Eng, C Ekegren, WC Miller, JD Johnston** (Canada): The effect of a proximal to distal movement strategy in decreasing ACL injury risk factors in female adolescent soccer players
- #73 • **G Cerulli, A Caraffa, F Ponteggia, V Conti, E Benvenuti, V Leto, D Orlando** (Italy): Survey of injury prevention programmes among basketball, volleyball and handball coaches in central Italy

- #74 • **C Ciucurel, MM Ciucurel, L Georgescu, H Traila, EI Iconaru, S Toma** (Romania): Study regarding specific alpine skiing injuries (initiation level) on students in physical education and sport
- #75 • **CY Chen, MY Lou** (Taiwan): Effects of the application of kinesio-tape and traditional tape on motor perception
- #76 • **CY Chen, PY Lee** (Taiwan): Can the cue of breathing in decrease landing forces in the maximal vertical jump?
- #77 • **E Cumps, E Verhagen, I Aerts, R Meeusen** (Belgium/Netherlands): Sports injury prevention: a multidisciplinary approach
- #78 • **G Del Rossi** (USA): An innovative approach to concussion prevention in helmeted sports: A pilot investigation
- #79 • **W Derman, K Aginsky, J Gray, M Lambert** (South Africa): Effects of a core-stability intervention programme on shoulder counter-rotation and transverse abdominal muscle function in elite high-school fast bowlers with lower back discomfort
- #80 • **T Doyle, A Dempsey, D Lloyd, B Elliott, R Khan** (Australia): Technique influences on co-contraction at the knee during sidestepping
- #81 • **T Doyle, J Sheppard, A Sachlikidis** (Australia): Smith machine jump squats versus free weight jump squats; which is safer?
- #82 • **J Drezner, K Harmon, J Heistand, M Cramer, A Rao** (USA): Effectiveness of emergency response planning for sudden cardiac arrest in United States high schools with automated external defibrillators
- #83 • **J Drezner, A Rao, M Cramer, K Harmon** (USA): Details and outcomes of resuscitation following sudden cardiac arrest in high school student athletes from the United States
- #84 • **P Edouard** (France): Influence of rugby on shoulder internal and external rotator strength
- #85 • **P Edouard** (France): Isokinetic ankle strength in athletics
- #86 • **S Elliott, N Cummings** (USA): Functional movement trends as indicators for injury prevention
- #87 • **F Esparza-Ros, F Barrera, JL Martinez Romero, TF Jaen, P Guillen** (Spain): Eccentric exercises for the prevention of patellar tendinopathy in soccer players
- #88 • **F Esparza-Ros, MC Calvo** (Spain): Bicycle adjustment: risk factors injuries in cycling
- #89 • **E Falvey, B Crowley, M Molloy** (Ireland): When is wearing a helmet bad for your health? Hurling injuries and risk compensation
- #90 • **E Falvey, S Shanthikumar, Z Lo, P McCrory, R Baker, A Franklin-Miller** (Australia): Pressure plate evaluation of walking gait overestimates biomechanical abnormalities of the foot
- #91 • **E Falvey, A Franklin-Miller, P McCrory** (Australia): A fascial origin for undiagnosed posterior thigh pain
- #92 • **E Falvey, J Eustace, M Molloy** (Australia): Sports and recreation injury, from the playing field to the home; out of the frying pan and into the fire
- #93 • **O Faude, T Meyer, B Federspiel, W Kindermann** (Germany): Injuries in the first German football league
- #94 • **J Feland, T Hopkins, I Hunter, W Johnson** (USA): Hamstring stretching using a whole body vibration platform
- #95 • **TW Flørenes, L Nordsletten, S Heir, R Bahr** (Norway): Registering injuries among World Cup skiers and snowboarders – a methodological study
- #96 • *Withdrawn*
- #97 • **A Franklyn-Miller, W Boyington** (England): Can the RSScan footscan® D3D™ orthotic reduce the incidence of lower limb injuries in initial military training?
- #98 • **M Fukano, T Fukubayashi, Y Nagano, KJ Saitama** (Japan): Changes in tibial rotation during locomotion: effects of shoe type

- #99 • **M Giannotti, H Tamim, A Macpherson** (Canada): Epidemiology of acute head injuries in youth soccer
- #100 • **A Giske, EA Rosenlund** (Norway): Stress fracture of the 5th metatarsal bone in athletes
- #101 • **M González, P Lillo, G Moneva, JA Heredia, E Gutiérrez** (Spain): Weightlifter's knee: a different pathology, a different prevention programme?
- #102 • **B Gottlieb, A Gayman, G Kerr** (Canada): Development and preliminary validation of the teammate support for injury scale
- #103 • **A Hansford** (United Kingdom): The effect of the F-MARC 11 intervention program on anterior cruciate ligament injury prevention in female rugby players
- #104 • **J Hashemi, N Chandrashekar, B Gill, J Slauterbeck, B Beynnon, R Schutt, E Dabezies** (Usa/Canada): The tibial plateau geometry: impact on biomechanics of the tibiofemoral joint and ACL injury
- #105 • **T Henke, P Platen** (Germany): Injuries in professional football: epidemiology and prevention measures
- #106 • **CA Hincapié, EJ Morton, JD Cassidy** (Canada): Musculoskeletal injuries and pain in dancers: a systematic review
- #107 • **T Hopkins, J Pak, A Robertshaw, B Feland, I Hunter** (USA): Whole body vibration does not alter dynamic restraint characteristics of the peroneus longus
- #108 • **M Hupperets, E Verhagen, W van Mechelen** (Netherlands): Compliance to a two-month home-based unsupervised proprioceptive training programme
- #109 • **M Hupperets, E Verhagen, W van Mechelen** (Netherlands): A critical review on the effects of proprioceptive training on structural and functional characteristics of the ankle
- #110 • **SO Husnes, TW Flørenes, R Bahr, L Nordsletten** (Norway): Injuries among World Cup snowboard athletes
- #111 • **R Jensen, A Kvale, A Baerheim** (Norway): Is the pain in patellofemoral pain syndrome neuropathic?
- #112 • **Y Kaplan, R Gofin** (Israel): The epidemiology of injuries in American Flag Football (AFF): Initial pilot study results
- #113 • **Y Kaplan** (Israel): Prevention of ankle sprains in sport: a systematic literature review
- #114 • **MKJ Ray, M Kohandel, PZ Namini** (Iran): A comparison between conservative treatment and plyometric exercise in the rehabilitation of patients with patellar tendinopathy (jumper's knee)
- #115 • **K Kitaoka, M Yagishita** (Japan): Study on configuration of the lateral tibial condyle in non-contact ACL injured knee
- #116 • **K Knobloch, L Schreible, K Robert, PM Vogt** (Germany): Gender matters - superior Achilles tendon microcirculation in tendinopathy among symptomatic female versus male recreational sportsmen
- #117 • **K Knobloch, R Grasmann, PM Vogt** (Germany): Cryotherapy and compression vs. sole cryotherapy for achilles tendon microcirculation - a randomized clinical trial
- #118 • **K Knobloch, U Yoon, R Kraemer, PM Vogt** (Germany): Runner's tendinopathy among master running athletes
- #119 • **K Knobloch, U Yoon, R Kraemer, PM Vogt** (Germany): 200-400 m breaststroke events are associated with a fourfold increased risk for knee overuse injuries: a prospective trial among 341 elite swimming athletes
- #120 • **K Komura, K Kitaoka** (Japan): Rehabilitation program for the prevention of re-injury after ACL reconstruction
- #121 • **J Konin, K Koike, J Meredith, B Goodstein** (USA): Comparison of BMI between university and professional soccer players
- #122 • **J Konin, J Meredith, B Goodstein** (USA): Body mass index for professional soccer players
- #123 • **J Konin, M McCoy, A Rosendale** (USA): Effects of oral contraceptives and athletic injury

- #124 • **R Kraemer, K Knobloch** (Germany): Patients suffering Achilles tendon rupture subsequent to Achilles tendinopathy are younger than without previous tendon pain
- #125 • **R Kraemer, R Rotter, J Stratos, PM Vogt, K Knobloch** (Germany): Acute increase of capillary blood flow with unchanged postcapillary filling pressure and tissue oxygen saturation following closed soft tissue injury at the lower limb: an animal study
- #126 • **Z Krajnc, M Vogrin, A Molicnik** (Slovenia): Osteoarthritis of lower limb joints in retired, first Slovenian football league players
- #127 • **E Kristianslund, G Myklebust, R Bahr, T Krosshaug** (Norway): Differences in jumping technique between ACL-injured and non-injured team handball players
- #128 • **E Kristianslund, K Steffen, J Iwasa, Y Shima, G Myklebust, R Bahr, T Krosshaug** (Norway): Strength and anatomical measures in ACL-injured and non-injured elite team handball players
- #129 • **H Kusche, C Schaller, M Clarius, V Buehren** (Germany): Snowboard injuries in children and teenagers: measures for better prevention
- #130 • **M Langran, TK Manimekalai** (Scotland): Factors predisposing to snow sports injury in Scotland
- #131 • **M Langran, TK Manimekalai** (Scotland): Risk factors for snow sports injuries amongst children in Scotland
- #132 • **L Lifshitz** (Israel): Chronic groin pain: hip strength and flexibility in professional soccer players
- #133 • **YP Lin, CY Chen** (Taiwan): Effect of different recreational activities on balance control in old people
- #134 • **A Lopes, H Barreto, R Aguiar, F Gondo, J Neto** (Brazil): Brazilian physiotherapy services in the 2007 Pan-American Games
- #135 • **G Mann, AJ Foldes, M Nyska, Shai Shabat, I Hetsroni, O Mei-Dan, M Suderer, N Constantini** (Israel): Stress fractures in female border police recruits during basic training
- #136 • **G Mann, I Shub, S Heinemann, I Hetsroni, A Finestone, E Dolev, A Foldes, O Mei-Dan, A Dorozko, A Even, Z Lencovsky, D Ben David, G Kahn, N Hod, T Horn, M Nyska, N Constantini** (Israel): Stress fractures reduction by equipment modification in border police female fighters recruits
- #137 • **M Maroy, S Fieuws, K Peers** (Belgium): Preseason evaluation of core stability in elite football players: isometric double straight leg lowering test versus isokinetic trunk muscle testing
- #138 • **C McKay, C Emery, T Campbell, W Meeuwisse** (Canada): The effect of premature return to play on re-injury risk in elite adolescent ice hockey, and associated psychosocial predictors
- #139 • **C McKay, C Emery, T Campbell, A Petersn** (Canada): Examining attitudes toward body-checking, levels of emotional empathy and levels of aggression in body-checking and non-body-checking youth hockey leagues
- #140 • **R McKenna, RJ Drummond, A McLean, D Allan** (United Kingdom): Spinal injuries following cycling accidents: 14-year experience within a national spinal unit
- #141 • **S McLean, J Samorezov, R Palmieri-Smith** (USA): Muscle pre-motor phase measures during a simple choice reaction task predict high risk knee landing postures
- #142 • **P Mustafins, I Scibrja** (Latvia): The most common injury and musculoskeletal complaints in sitting volleyball: a long term survey
- #143 • **Y Mutsuo, Y Ueno, N Kitamura, K Watanabe, K Amemiya, K Akasaka, T Suyam** (Japan): Importance of the eyes for tackle injury prevention in Rugby Union
- #144 • **Y Nagano, M Suzukawa, T Tamaki, T Mochida, T Yoshihisa, S Yano, T Fukubayashi, H Nakajima** (Japan): A report on the incidence of injuries for junior high school basketball teams in Yokohama: an introduction of an injury prevention program

- #145 • **Y Nagano, H Miki, K Tsuda, Y Shimizu, Y Nou, T Fukubayash** (Japan): The incidence of injury for the Japanese top level female basketball league
- #146 • **J Nakase, K Kitaoka** (Japan): Risk factors for graft rupture and contralateral rupture after ACL reconstruction
- #147 • **AD Nguyen, MD Leonard-Garner, RJ Schmitz, S Shultz** (USA): Influence of static lower extremity posture on hip and knee motions during drop jump landings
- #148 • **N Nogueira, R Ângelo, P Mourão, A Carvalho** (Portugal): Ankle neuromuscular protective reflex action: fatigue effect in muscle response to instability
- #149 • **T Ono, J Kubota, T Okuwaki, T Fukubayashi** (Japan): Functional differences in knee flexor muscles during eccentric knee flexion
- #150 • **D Palmer, G Trewartha, C Fuller, K Stokes** (United Kingdom): An epidemiological study of injuries within English academy and schools youth rugby union
- #151 • **R Palmieri-Smith, JT Hopkins** (USA): Neuromuscular dysfunction in persons with functional ankle instability
- #152 • **K Pasanen** (Finland): Artificial playing surface increases the injury risk in pivoting indoor sports
- #153 • **F Pillard, C Mansat, V Lauwers-Cances, D Rivière; G Garet** (France): A prospective study of match injuries among rugby teams during the 2005-2006 National French Amateur Rugby Championship: injury patterns
- #154 • **F Pillard, C Mansat, C Cristini, D Rivière, G Garet** (France): A prospective study of match injuries among rugby teams during the 2005-2006 National French Amateur Rugby Championship: descriptive report
- #155 • **I Prothoy** (France): Risk factors prevention of painfull elbow in golf
- #156 • **K Quarrie, S Gianotti, W Hopkins, P Hume** (New Zealand): Injury prevention in New Zealand rugby
- #157 • **K Quarrie, W Hopkins** (New Zealand): Playing situation & behaviour: injury analysis using video
- #158 • **M Raftery** (Australia): An addition to the traditional injury prevention model
- #159 • **C Ratzlaff, P Doerfling, M Koehoorn, G Steininger, M Liang, J Cibere, D MacIntyre, D Wilson, J Edsaile, J Kopec** (Canada/USA): Lifetime trajectory of sport and overall physical activity by time, energy, joint force and knee osteoarthritis status in a Canadian sample
- #160 • **I Reininga, K Lemmink, R Diercks, J van Raaij, M Stevens** (Netherlands): Motor recovery of athletes after ACL reconstruction: visual control of balance
- #161 • **M Vasilescu, L Rusu, M Dragomir** (Romania): Using tensiomyography in the management of hamstring injuries prevention
- #162 • **R Kasanami, Y Tanaka, K Sugimoto, N Kurumatani, Y Takakura** (Japan): Evaluation of preparticipation self-assessment for triathlon and aquathlon races
- #163 • **S Röhrli, Y Oku, Y Ozawa, R Ganschow** (Norway/Germany/Japan): Sport injuries in judo: comparison of the risk profile in Japan and Europe
- #164 • **AH Saeterbakken, R van den Tillaar, S Seiler, G Kirkesola** (Norway): Core stability training programs improve throwing velocity
- #165 • **I Sannicandro** (Italy): Effects of proprioceptive training in the landing in professional football players
- #166 • **K Sato, T Hosokawa, R Mochizuki, F Torii, H Umahara, S Mistueda, A Tsuchiya, I Kanisawa, I Yamaura, M Kato, M Matsuda** (Japan): Effect of single leg standing training on lower extremity kinematics during single leg drop landing
- #167 • **M Schiff, J O'Kane, M Levy, C Mack, N Polissar, A Tencer** (USA): A comparison of soccer injury surveillance systems using certified athletic trainers versus email
- #168 • **M Schiff, J O'Kane, N Polissar, C Mack, A Tencer, M Levy** (USA): Reliability of measures to assess hip and knee muscle strength and jump biomechanics among female youth soccer players

- #169 • **S Shanthikumar, Z Low, E Falvey, P McCrory, R Baker, A Franklyn-Miller** (Australia): The effect of gait velocity on calcaneal balance at heel strike: implications for orthotic prescription in injury prevention
- #170 • **Y Shima, K Kitaoka, T Munehiro, J Nakase, K Tomita** (Japan): Heat shock preconditioning attenuates oxidative stress and muscle injury after downhill running in rats
- #171 • **I Shrier, M Hallé, RJ Steele, E Lamme, J Mellette, J Pundick, GO Matheson, F Prince** (Canada): Psychological risk factors for injury
- #172 • **I Shrier, RJ Steele** (Canada): Making appropriate inferences from sport injury prevention data
- #173 • **J Stege, JH Stubbe, ATH van Hespren, WTM Ooijendijk** (Netherlands): Injuries in professional Dutch football: a prospective cohort study
- #174 • **S Stensrud, E Kristianslund, R Bahr, T Krosshaug, G Myklebust** (Norway): Correlation between three simple, clinical tests for assessing knee control in elite female handball players
- #175 • **K Takahashi, Y Nagano, M Kitsunai, M Fukano, S Suzuki, M Setojima, T Fukubayashi** (Japan): Efficacy of the F-MARC 11 training program on collegiate football teams
- #176 • **AB Toure** (Luxembourg): Re-injury prevention in elite sport in Luxembourg
- #177 • **U Tranaeus, U Johnson** (Sweden): Reduction of sport injuries in male elite ice hockey in Sweden: a psychological intervention study
- #178 • **S Vatsaas, TW Flørenes, L Nordsletten, S Heir, R Bahr** (Norway): Injuries among World Cup freestyle skiers 2006/2007
- #179 • **A Vinther, T Alkjær, I-L Kanstrup, B Zehran, C Ekdahl, K Jensen, A Holsgaard-Larsen, P Aagaard** (Denmark): Ergometer rowing in slides: implications for injury risk
- #180 • **H Visnes, A Tegnander, R Bahr** (Norway): Prevalence of jumper's knee and patellar tendon ultrasound changes among Norwegian elite junior volleyball players: baseline data from the OSTRC patellar tendinopathy cohort study
- #181 • **J Wang, D Vigil** (USA): Risk factors for injury in a karate competition
- #182 • **J Wang, D Vigil, CF Brown** (USA): The effect of static stretching versus dynamic warm-ups upon the athletic performance of recreational karate athletes
- #183 • **N Webborn, S Willick** (USA): Comparison of injuries from two Paralympic Winter Games: Salt Lake 2002 & Torino 2006
- #184 • **A Mioduszewski, M Szyszka, P Adamczyk, M Wrobel** (Poland): Laterality in the ankle sprains
- #185 • **J Yamazaki, T Muneta, I Sekiya, YJ Ju, K Hara, K Shinomiya** (Japan): 3D motion analysis for single legged squat in anterior cruciate ligament deficient patients
- #186 • **Y Hayashi, Y Ishibashi, E Tsuda, A Fukuda, H Tsukada, Y Kimura, S Toh** (Japan): Analysis of knee valgus moment during three different sports tasks in female basketball players
- #187 • **A Årøen, V Hjermundrud, T Kvist, L Engebretsen, MA Risberg** (Norway): Preoperatively no significant difference in functional scoring (KOOS) in ACL-injured knees with and without a full thickness cartilage lesion

## WORKSHOP PROGRAM

#A - **R Celebrini** (Canada): A lower extremity injury prevention warm-up incorporating a proximal to distal movement strategy

This workshop will be a practical, interactive session demonstrating the application of a proximal to distal movement strategy that emphasizes proximal control into a soccer team warm-up. The key learning objectives are 1) to review the content and sequence of a soccer warm-up that effectively combines physiological preparation with injury prevention considerations in a time efficient program and 2) to introduce specific instructions and exercises that emphasize proximal control and optimal biomechanics.

#B - **C Ortega** (chair, USA), **G Zuest** (USA): Efficient taping strategies to prevent injuries of the upper extremities

Prophylactic taping has been an accepted technique in the prevention of athletic injuries. Although tape application can be used to support motion or protect against injury, it is important to enhance performance by understanding the linkage of the kinetic chain in upper extremity movement. This workshop will provide opportunities for attendees to apply taping techniques to support movement enhance performance and prevent injuries of the upper extremities.

#C - **T Hewett** (co-chair, USA), **G Myklebust** (co-chair, 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 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.

#D - **TM Best** (co-chair, Canada), **L Maffey** (co-chair, Canada): Research evidence and clinical support for hamstring and "groin" muscle strains: an active approach to injury prevention/re-occurrence and rehabilitation

This workshop will be based on research on the role of inflammation in muscle repair following acute strain injury and exercise, as well as the potential of athlete screening to identify deficits that may be addressed with exercise programs to prevent injuries. Using a multimedia presentation, discussion, question and answer form, participants will better understand the principles of an active approach for hamstring and groin muscle injury prevention and rehabilitation including return to sport.

#E - **L Maffey** (Canada): Research evidence and clinically practical elements of the "core" of physiotherapy pre-season evaluation: Using real-time ultrasound biofeedback

This workshop will examine research evidence on how "core" muscle's strength, timing and efficiency may be essential in injury prevention and management, as well as how the "core" may play a role in enhanced sport performance. The format will be a multi-media presentation of athlete's initial and post exercise real-time ultrasound core evaluation as well as a "live demonstration" of real-time ultrasound usage for "core evaluation".

#F - **JM Alonso** (co-chair, Spain), **À Basas** (Spain), **A Frohm** (Sweden), **M Kongsgaard** (co-chair, Denmark): Practical issues of patellar tendinopathy prevention on top level athletes

This workshop will analyze if the current eccentric training protocols are sufficient for top level athletes with high demands on the tendon. The faculty will review proposals for new protocols, as well as the implementation of such protocols in the training plan of high level athletes. At the end of this workshop, participants will be able to implement specific eccentric training for relevant high level athletes participating at the professional level.

#G - **J Drezner** (USA): Establishing an emergency action plan for high school, colleges, and clubs to respond to a collapsed and unconscious athlete and a potential cardiac emergency

Sudden cardiac arrest is the leading cause of death in young athletes. Workshop participants will evaluate their current medical response planning for a cardiac emergency. The management of sudden cardiac arrest in athletes and the role of automated external defibrillators will be reviewed. Participants will learn how to prepare for, recognize, and respond to a collapsed and unresponsive athlete, and they will be familiar with appropriate emergency planning for sudden cardiac arrest in athletics.

#H - **J Drezner** (co-chair, USA), **R Dimeff** (co-chair, USA): The preparticipation physical evaluation in the office and club setting utilizing standardized forms and protocols

Use of a standardized history questionnaire can assist the sports medicine or primary care provider in detecting athletes at risk for musculoskeletal injury, sudden death, and potential catastrophic events. The objectives of this workshop are to assist sports medicine providers in conducting a screening preparticipation evaluation

using a comprehensive history questionnaire, highlighting specific history elements and physical exam recommendations to improve detection of athletes with underlying cardiovascular disease and musculoskeletal conditions at risk of injury.

#I • **MH Binet** (co-chair, France), **R Greenwald** (chair, Scotland), **M Langran** (co-chair, Scotland), **J-D Laporte** (France): Preventing winter sport injuries among recreational skiers and snowboarders

Experts from the International Society for Trauma and Sport Medicine for Winter Sports, the International Society for Skiing Safety and the French Association of Ski Resorts Physicians will address methods to prevent injuries among skiers and snowboarders: helmet wear, appropriate binding settings and how these can be promoted, the characteristics of effective wrist protectors, and how to involve ski patrols in skiing safety. Participants will be able to implement effective programs to promote skiing safety.

#J • **M Fitton** (USA), **B Pluim** (co-chair, USA), **M Turner** (co-chair, UK), **T Vaziri** (USA): Athletic Logic Injury Registration System

This workshop will provide a demonstration of the injury registration and performance management system Athletic Logic that is used by the ITF, the ATP, the Sony Ericsson WTA Tour and the Royal Netherlands Lawn Tennis Association. At the end of the workshop participants will be able to enter data; quickly copy and adapt individual programs to groups and vice versa; prepare a weekly, monthly and yearly program; and produce statistical reports on training and injury data.

#K • **T Fukubayashi** (chair, Japan), **S Niga** (Japan): Active conservative treatment for the prevention of groin pain

This workshop will be based on an active rehabilitation program for athletes with groin pain, which has been developed over the last ten years in Japan, and recently been developed for prevention. Dynamic hip flexion-extension and adduction-abduction exercises with torso rotation are key elements of the program. The aim is the relaxation of hip adductor and flexor muscles combined with the reinforcement of hip abductor and extensor muscles. This program is useful not only for beginners, but also for top athletes.

#L • **C Finch** (Australia), **C Goulet** (Canada), **T Timpka** (chair, Sweden): Safe Sports International – a global program for sports safety promotion

The purpose of the Safe Sports International program is to develop a global organization for safety promotion in sports that brings together socially and geographically defined sports communities. We will display and discuss injury definition issues (examples from track and field) and how Internet technology can be used to promote sports safety. The participant will be able to learn new methodological approaches to sports safety promotion that are adjusted for the global sports community.

#M • **L Gill** (USA), **H Langberg** (Denmark), **R Smith** (USA), **ML Voight** (chair, USA): Titleist Performance Institute Golf Fitness screen: Preventing injury and improving performance

The goal of this workshop is to provide the participant with an overview of the major physical performance factors that limit most participants from reaching their potential and potentially lead to injury. Based upon the successful golf fitness screen developed by the Titleist Performance Institute, participants will learn how to effectively screen and identify physical factors that limit a player's performance. The main emphasis will be on the demonstration of the 12 step screening process.

#N • **AM Cools** (co-chair, Belgium), **JC Reeser** (co-chair, USA): Clinical examination of the shoulder at risk in the overhead athlete: focus on injury prevention

Overhead athletes often show sport-specific adaptations at shoulder level, predisposing them for injuries. It is important in injury prevention to identify these alterations in the early stages of shoulder pain. The purpose of this workshop is to provide an algorithm for clinical reasoning and to demonstrate specific shoulder tests to identify possible causes of impingement symptoms, one of the most frequently described functional shoulder problem in overhead athletes. The workshop will focus on hands-on assessment.

#O • **R Bahr** (Norway), **R Dick** (USA), **C Fuller** (Chair, England), **W Meeuwisse** (Canada): Recurrent injuries: How to define them and how to record them

Interpreting the role of previous injury as a risk factor for sports injuries is confounded by the inconsistent definitions adopted for a recurrent injury in epidemiological studies. The workshop will present and discuss a framework that enables recurrent injuries to be differentiated as 're-injuries' (of a fully-recovered previous injury) and 'exacerbations' (of a non-recovered previous injury). Participants will be able to unify the range of recurrent injury definitions employed in epidemiological studies of sports injuries.

#P • **R Dick** (USA), **J Dvorak** (chair, Switzerland), **A Junge** (Switzerland): How to conduct an injury surveillance program I

Injury surveillance is the first step in injury prevention because it provides important information about the frequency, characteristics and causes of injury. An example of a single team sport (FIFA injury reporting system), single individual sport (IAAF), and multi-sport (NCAA Injury Surveillance System) surveillance system will be demonstrated. In each example, the faculty will briefly outline 1) project goals 2) methods 3) successes 4) problems/challenges and 5) subsequent application, such as during the Beijing Olympic Games in all participating sports.

#Q • **JM Alonso** (Spain), **R Dick** (chair, USA), **M Mountjoy** (Canada), **P Renström** (Sweden): How to conduct an injury surveillance program II

Injury surveillance is the first step in injury prevention because it provides important information about the frequency, characteristics and causes of injury. In this workshop, examples of a single sport (Athletics World Championships) and multi-sport (Olympic team sport tournaments) surveillance system will be demonstrated. In

each example, the faculty will briefly outline 1) project goals 2) methods 3) successes 4) problems/challenges and 5) subsequent application. Audience discussion will follow.

#R • **S Gianotti** (*New Zealand*), **K Quarrie** (*New Zealand*): RugbySmart

This workshop will present a RugbySmart workshop of the type delivered to rugby coaches and referees in New Zealand. The RugbySmart DVD highlighting physical conditioning, technique in the contact phases of rugby and injury management in rugby will be complemented with practical activities. Attendees will gain insight into the approach taken to the delivery of injury prevention messages in New Zealand rugby union since 2001.

#S • **M Bizzini** (*co-chair, Switzerland*), **A Junge** (*co-chair, Switzerland*), **G Myklebust** (*co-chair, Norway*): Basic and advanced version of an injury prevention program for amateur football players

The preventive program "The 11" is designed for amateur players to reduce typical football injuries. The basic version includes ten evidence-based or best-practice exercises and the promotion of Fair Play. The exercises focus on core stability, neuromuscular control and plyometrics. The advanced version is a complete warm-up program that combines the key exercises from "The 11" and the "PEP" program with running exercises, and provides different levels of the exercises.

#T • **M Bizzini** (*Switzerland*), **T Hewett** (*USA*), **R Smith** (*USA*), **ML Voight** (*chair, USA*): ACL injury prevention programs: How to implement and are they effective

This workshop will provide the most up-to date research on how non-contact ACL injuries occur and examine the similarities and differences among the various ACL injury prevention training programs. The learning objective will focus upon the biomechanical effects of neuromuscular training exercises. The evidence of the various intervention programs will be presented in order to discuss their potential to reduce ACL injury risk and assess their potential for more effective and efficient intervention protocols.

#U • **C Ortega** (*chair, USA*), **G Zuest** (*USA*): Efficient taping strategies to prevent injuries of the lower extremities

Prophylactic taping has been an accepted technique in the prevention of athletic injuries. Tape application is used to protect, restrict or support a body part and when combined with biomechanical principles can also enhance performance. This workshop will provide opportunities for attendees to apply taping techniques to prevent injuries and support efficient movement of the lower extremities.