

## Honorary Session

### **PS-HS01** Sport Science; a new research area?

29.06.2013, Start: 16:15, Lecture room: "Pabellón Sintético"

#### *Chair(s):*

- [Natàlia Balagué](#), INEFC Barcelona / Spain

#### *Speaker(s):*

- [Bengt Saltin](#), University of Copenhagen, Rigshospital / Denmark  
Title: *'Sport Science; a new research area?'*

## Plenary Sessions

### **PS-PL01** Does Pain Produce Gain? \*

26.06.2013, Start: 17:00, Lecture room: "Pabellón Sintético"

#### *Chair(s):*

- [José González-Alonso](#), Brunel University / United Kingdom  
- [Alan St Clair Gibson](#), Northumbria University / United Kingdom

#### *Speaker(s):*

- [Gershon Tenenbaum](#), Florida State University / USA  
Title: *'Unification of Concepts and Measures for Capturing the Mind Control over the Motion System.'*
- [Claude Bouchard](#), Pennington Biomedical Research Center / United States  
Title: *'Uncertainties Regarding Some of the Expected Benefits of Regular Exercise.'*

### **PS-PL02** Emerging Trends in Team Sports Science

27.06.2013, Start: 12:00, Lecture room: "Pabellón Sintético"

#### *Chair(s):*

- [Teresa M. Anguera](#), University of Barcelona / Spain  
- [Duarte Araujo](#), Technical University of Lisbon / Portugal

#### *Speaker(s):*

- [Keith Davids](#), Queensland University of Technology / Australia  
Title: *'Ecological Dynamics in analysis of performance in team sport'*
- [Joan Duda](#), University of Birmingham / United Kingdom  
Title: *'Using team sports to enhance health and well-being in young people'*

### **PS-PL03** The choreography of movement and the brain

28.06.2013, Start: 12:00, Lecture room: "Pabellón Sintético"

#### *Chair(s):*

- [Peter Jan Beek](#), Vrije Universiteit Amsterdam / Netherlands  
- [Mercé Mateu](#), INEFC, University of Barcelona / Spain

#### *Speaker(s):*

- [Scott Kelso](#), Florida Atlantic University & The University of Ulster / USA  
Title: *'The Challenge of Neural Choreography: Multiscale Coordination Dynamics'*

- [Scott deLahunta](#) , Coventry University / United Kingdom  
Title: *'Choreographic Thinking Tools'*

**PS-PL04** Rehabilitation through exercise \*

29.06.2013, Start: 12:00, Lecture room: "Pabellón Sintético"

*Chair(s):*

- [Anton Wagenmakers](#), Liverpool John Moores University / United Kingdom
- [Gisela Sjøgaard](#), University of Southern Denmark / Denmark

*Speaker(s):*

- [Ewa Roos](#), University of Southern Denmark / Denmark  
Title: *'Exercise as prevention and treatment of knee osteoarthritis'*
- [Abigail Mackey](#), University of Copenhagen and Bispebjerg Hospital / Denmark  
Title: *'The role of muscle stem cells in counter-fighting sarcopenia by exercise'*

**Invited sessions - Physiology & Sports medicine [PM]**

**IS-PM01** JSPFSM Exchange Symposium: Confronting super aging society - Japanese and European \*

26.06.2013, Start: 15:00, Lecture room: "Aula 3"

*Chair(s):*

- [Ryoichi Nagatomi](#), Tohoku University / Japan

*Speaker(s):*

- [Masahiro Horiuchi](#), Yamanashi Institute of Environmental Sciences / Japan  
Title: *'Evaluating the impact of blood flow restriction training on vascular function'*
- [Masashi Miyashita](#), Tokyo Gakugei University / Japan  
Title: *'ACUTE EFFECT OF INCREASED PARTICIPATION IN ACTIVITIES OF DAILY LIVING ON POSTPRANDIAL LIPAEMIA IN POSTMENOPAUSAL WOMEN'*
- [Willem van Mechelen](#) , VU University Medical Center / Netherlands  
Title: *'The role of exercise and physical activity in the light of an ageing European society/ageing workforce.'*

**IS-PM02** ACSM Exchange symposium: Exercise - Thermoregulation \*

28.06.2013, Start: 10:20, Lecture room: "Pabellón Sintético"

*Chair(s):*

- [Romain Meeusen](#), Free University Brussels / Belgium
- [Michael Kalinski](#), Kent State University / United States

*Speaker(s):*

- [W. Larry Kenney](#), Penn State University / USA  
Title: *'Internal heat transfer in hyperthermic humans '*
- [George Havenith](#), Loughborough University / United Kingdom  
Title: *'Heat transfer from skin to environment in hyperthermic humans'*

**IS-PM03** Oxygenation and fatigue in humans: unravelling the mechanisms \*

27.06.2013, Start: 16:20, Lecture room: "Sala de actos"

*Chair(s):*

- [Jose Antonio Lopez Calbet](#), University of Las Palmas de Gran Canaria / Spain

- [Ylva Hellsten](#), University of Copenhagen / Denmark

*Speaker(s):*

- [Jose Antonio Lopez Calbet](#), University of Las Palmas de Gran Canaria / Spain  
Title: *'Brain oxygenation and fatigue: role of PaO<sub>2</sub> and CaO<sub>2</sub>'*
- [Ylva Hellsten](#), University of Copenhagen / Denmark  
Title: *'Nucleotides, the key to health and performance?'*
- [Carsten Lundby](#), University of Zürich / Switzerland  
Title: *'Hypoxic stimulus and exercise limitations'*

**IS-PM04** Mitochondrial structural organization, dynamics and function  
28.06.2013, Start: 10:20, Lecture room: "Aula Magna 2"

*Chair(s):*

- [Clara Prats](#), The Panum Institute, University of Copenhagen / Denmark
- [Pablo M. García-Rovés](#), IDIBAPS / Spain

*Speaker(s):*

- [Clara Prats](#), The Panum Institute, University of Copenhagen / Denmark  
Title: *'Skeletal Muscle Mitochondrial Networks – structural organization and adaptations to physical activity / inactivity'*
- [Antonio Zorzano](#), University of Barcelona / Spain  
Title: *'Role of mitochondrial fusion proteins on muscle metabolism'*
- [Flemming Dela](#), University of Copenhagen / Denmark  
Title: *'Mitochondrial functional adaptation to exercise training'*

**IS-PM05** Obesity, diabetes and exercise: new developments \*  
29.06.2013, Start: 10:20, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Jeffrey Horowitz](#), University of Michigan / United States
- [Ignacio Ara](#), University of Castilla La Mancha / Spain

*Speaker(s):*

- [Jeffrey Horowitz](#), University of Michigan / United States  
Title: *'Effects of exercise and diet on muscle fat metabolism and insulin action'*
- [Luc van Loon](#), Maastricht University Medical Centre / Netherlands  
Title: *'Exercise treatment of type 2 diabetes'*
- [Amelia Guadalupe Grau](#), University of Copenhagen / Denmark  
Title: *'Exercise adaptations in muscle leptin signalling'*

**IS-PM06** Sports nutrition: from science to recommendations sponsored by GSSI \*  
27.06.2013, Start: 10:20, Lecture room: "Pabellón Sintético"

*Chair(s):*

- [Asker Jeukendrup](#), University of Birmingham / United Kingdom

*Speaker(s):*

- [Scott Montain](#), U.S. Army Research Institute of Environmental Medicine / United States  
Title: *'Hydration'*
- [Asker Jeukendrup](#), University of Birmingham / United Kingdom  
Title: *'Carbohydrate'*

- [Stuart Phillips](#), McMaster University / Canada  
Title: *'Protein'*

**IS-PM07** Antioxidants in physical exercise: points and counterpoints \*  
26.06.2013, Start: 15:00, Lecture room: "Pabellón Sintético"

*Chair(s):*

- [José Viña](#), University of Valencia / Spain
- [Zsolt Radak](#), Semmelweis University / Hungary

*Speaker(s):*

- [Arlette Gratas-Delamarche](#), University of Rennes2 / France  
Title: *'Overview of the role of free radicals and antioxidants in physical exercise'*
- [Mari Carmen Gomez-Cabrera](#), University of Valencia / Spain  
Title: *'Antioxidants in exercise: Worse than useless?'*
- [Zsolt Radak](#), Semmelweis University / Hungary  
Title: *'Favorable effects of antioxidants in exercise'*

**IS-PM08** Limits to performance during short-term and prolonged exercise in the heat  
27.06.2013, Start: 16:20, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Ricardo Mora-Rodriguez](#), University Castilla-La Mancha / Spain

*Speaker(s):*

- [José González-Alonso](#), Brunel University / United Kingdom  
Title: *'Cardiovascular limits during exercise in a hot environment'*
- [Ricardo Mora-Rodriguez](#), University Castilla-La Mancha / Spain  
Title: *'Metabolic limitations during prolonged exercise in a hot environment'*
- [Scott Montain](#), U.S. Army Research Institute of Environmental Medicine / United States  
Title: *'Marathon performance in a hot environment'*

**IS-PM09** The brain at work \*  
28.06.2013, Start: 16:20, Lecture room: "Pabellón Sintético"

*Chair(s):*

- [Niels Secher](#), University of Copenhagen / Denmark
- [Romain Meeusen](#), Free University Brussels / Belgium

*Speaker(s):*

- [Lars Nybo](#), University of Copenhagen / Denmark  
Title: *'Exercise in the heat'*
- [J Van Lieshout](#), Cardiovascular Research Institute Amsterdam / Netherlands  
Title: *'Effect of orthostasis on cerebral blood flow and oxygenation'*
- [Niels Secher](#), University of Copenhagen / Denmark  
Title: *'Cerebral blood flow and metabolism during exercise'*

**IS-PM10** Dietary nitrate as an ergogenic aid \*  
29.06.2013, Start: 10:20, Lecture room: "Aula Magna 2"

*Chair(s):*

- [Andrew Jones](#), Exeter University / United Kingdom
- [Glenn McConell](#), Victoria University / Australia

*Speaker(s):*

- [Stephen Bailey](#), Exeter University / United Kingdom  
Title: *'Mechanistic bases for dietary nitrate as an ergogenic aid'*
- [Naomi Cermak](#), Maastricht University / Netherlands  
Title: *'Application of dietary nitrate as an ergogenic aid in athletes'*
- [Jason Allen](#), Duke University / United States  
Title: *'Application of dietary nitrate as an ergogenic aid in clinical populations'*

**IS-PM11** Muscle mass regulation in humans: relative importance of protein synthesis and protein breakdown \*

27.06.2013, Start: 16:20, Lecture room: "Aula Magna 2"

*Chair(s):*

- [Paul Greenhaff](#), University of Nottingham / United Kingdom
- [Antonio Zorzano](#), University of Barcelona / Spain

*Speaker(s):*

- [Stuart Phillips](#), McMaster University / Canada  
Title: *'Anabolism: Exercise and Nutrition'*
- [Andrew Murton](#), University of Nottingham / United Kingdom  
Title: *'Catabolism: Immobilisation and inflammation'*
- [Phillip Atherton](#), University of Nottingham / United Kingdom  
Title: *'Ageing Sarcopaenia: Exercise and nutritional intervention'*

**IS-PM12** Regulation skeletal muscle carbohydrate and fat utilisation in exercise and disease in humans \*

29.06.2013, Start: 08:30, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Francis Stephens](#), University of Nottingham / United Kingdom
- [Roser Cussó](#), University of Barcelona / Spain

*Speaker(s):*

- [Jørn Wulff Helge](#), University of Copenhagen / Denmark  
Title: *'Fuel utilisation, exercise training and skeletal muscle insulin resistance'*
- [Francis Stephens](#), University of Nottingham / United Kingdom  
Title: *'Skeletal muscle carnitine availability and the regulation of fuel selection during exercise'*
- [Luc van Loon](#), Maastricht University Medical Centre / Netherlands  
Title: *'Skeletal muscle fuel utilisation during exercise in obesity and type 2 diabetes'*

**IS-PM13** Exercise and Training in COPD Patients \*

26.06.2013, Start: 15:00, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Stephan Sorichter](#), University of Freiburg / Germany
- [Franchek Drobnic](#), CAR Sant Cugat / Spain

*Speaker(s):*

- [H.J. Kabitz](#), University of Freiburg / Germany  
Title: *'Effects of COPD on respiratory muscles'*

- [Joan Albert Barbera](#), University of Barcelona / Spain  
Title: *'Gas exchange during exercise in patients with COPD'*
- [Josep Roca](#), University of Barcelona / Spain  
Title: *'Effects of exercise and training on skeletal muscles of COPD patients'*

**IS-PM14** Hypoxia for health and fitness \*

28.06.2013, Start: 08:30, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Christoph Dehnert](#), University of Heidelberg / Germany
- [José Luis Ventura](#), Hospital Bellvitge Barcelona / Spain

*Speaker(s):*

- [Ferran A. Rodríguez](#), Institut Nacional d'Educació Física de Catalunya, University of Barcelona / Spain  
Title: *'Training in hypoxia: does it improve sea-level performance?'*
- [J. Alfredo Martínez](#), University of Navarra / Spain  
Title: *'Hypoxia for weight loss in obesity?'*
- [Christoph Dehnert](#), University of Heidelberg / Germany  
Title: *'Hypoxia for high altitude acclimatization'*

**IS-PM15** Can exercise damage the heart \*

28.06.2013, Start: 10:20, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Martin Halle](#), Technical University Munich / Germany
- [Alfonas Vainoras](#), Lithuanian University of Health Sciences / Lithuania

*Speaker(s):*

- [Martin Halle](#), Technical University Munich / Germany  
Title: *'Does marathon increase incidence of Sudden Death?'*
- [Keith George](#), Liverpool John Moores University / United Kingdom  
Title: *'Evidence for cardiac strain during marathon?'*
- [Johannes Scherr](#), Technical University Munich / Germany  
Title: *'Cardiac screening before marathon?'*
- [David Nieman](#), Appalachian State University, North Carolina / USA  
Title: *'Inflammatory response during marathon: a potential pathogenetic mechanism?'*

**Invited sessions - Social Sciencies & Humanities [SH]**

**IS-SH01** Understanding sport participation in Europe \*

26.06.2013, Start: 15:00, Lecture room: "Aula 1"

*Chair(s):*

- [Siegfried Nagel](#), University of Bern / Switzerland
- [Koen Beedveld](#), WJH Mulier Institute / Netherlands

*Speaker(s):*

- [Koen Beedveld](#), Mulier Institute / Netherlands  
Title: *'Understanding (and bridging) differences in sport participation and physical activity in Europe'*

- [Ramon Llopis-Goig](#), University of Valencia / Spain  
Title: *'Sport participation and cultural change. A comparative analysis for some European countries'*
- [Hanna Vehmas](#), University of Jyväskylä / Finland  
Title: *'Sociological interpretations about the differences in sport participation'*

**IS-SH02** Body projects and the embodiment of gender and ethnicity

28.06.2013, Start: 10:20, Lecture room: "Aula 2"

*Chair(s):*

- [Gertrud Pfister](#), University of Copenhagen / Denmark
- [Susanna Soler](#), University of Barcelona / Spain

*Speaker(s):*

- [Patricia Vertinsky](#), University of British Columbia / Canada  
Title: *'The Transnational Flow of Body Cultures: The Globalization (and Feminization) of Modern Yoga in the 20th Century'*
- [Gertrud Pfister](#), University of Copenhagen / Denmark  
Title: *'Contested bodies – conflicts and controversies about dress codes at international sport competitions'*
- [Annelies Knoppers](#), University of Utrecht / Netherlands  
Title: *'Challenging the norm? Physical impairment, active aging and sporting bodies'*

**IS-SH03** Transitions and strategies in top level sport

27.06.2013, Start: 10:20, Lecture room: "Aula 1"

*Chair(s):*

- [Miquel Torregrosa](#), Univeristat Autònoma de Barcelona / Andorra
- [Anna Vilanova](#), INEFC, University of Barcelona / Spain

*Speaker(s):*

- [Anke Reints](#), Vrije Universiteit Brussel / Belgium  
Title: *'Applying the Developmental Model in investigating the career development of (retired) elite athletes'*
- [Cecilia Engstrom](#), Swedish Sport Confederation and Halmstad University / Sweden  
Title: *'Dual Career Experiences of the First Year Elite Sport Gymnasia Athletes in Sweden.'*
- [Fernando Azocar](#), University Autònoma de Barcelona / Spain  
Title: *'Changing category and country at the same time: untangling transitions.'*

**IS-SH04** Sports Policy factors Leading to International Sporting Success

27.06.2013, Start: 16:20, Lecture room: "Aula 1"

*Chair(s):*

- [Veerle De Bosscher](#), Free University Brussels / Belgium
- [Susana Monserrat](#), Active Research SM / United Kingdom

*Speaker(s):*

- [Simon Shibli](#), Sheffield Hallam University / United Kingdom  
Title: *'Who's the real winner? Measuring the performance of nations in elite sport'*
- [Veerle De Bosscher](#), Free University Brussels / Belgium  
Title: *'More money in equals more medals out? Results of the SPLISS-II study.'*

- [Maarten van Bottenburg](#), Utrecht University / Netherlands  
Title: *'Outcomes in elite sport: to what extent do nations want to be part of a global medal war?'*

**IS-SH05** A Critical Pedagogy for Physical Education Futures: Prospects for Change  
26.06.2013, Start: 15:00, Lecture room: "Aula 2"

*Chair(s):*

- [David Kirk](#), University of Bedfordshire / United Kingdom
- [Eloisa Lorente](#), INEFC University of Lleida / Spain

*Speaker(s):*

- [Ann MacPhail](#), University of Limerick / Ireland  
Title: *'A critical pedagogy for school physical education: Prospects for change'*
- [Lucio Martínez Alvarez](#), University of Valladolid / Spain  
Title: *'A critical pedagogy for PETE: Prospects for change'*
- [David Kirk](#), University of Bedfordshire / United Kingdom  
Title: *'A critical pedagogy for the school: Prospects for change'*

**IS-SH06** Ethico-legal perspectives on justice in sport  
28.06.2013, Start: 16:20, Lecture room: "Aula 1"

*Chair(s):*

- [Michael John McNamee](#), Swansea University / United Kingdom
- [Jose Luis Lopez Triviño](#), Pompeu Fabra University / Spain

*Speaker(s):*

- [Jose Luis Lopez Triviño](#), Pompeu Fabra University / Spain  
Title: *'Luck egalitarianism, justice and sport'*
- [Nicolás Pilar Jiménez](#), University of País Vasco / Spain  
Title: *'Privacy vs. antidoping policies'*
- [Claudio Tamburrini](#), University of Estocolm / Sweden  
Title: *'Value pluralism in Sport: Justice and Cheating'*

**IS-SH07** Sport sciences to improve dance performance and participation, an interdisciplinary proposal  
29.06.2013, Start: 10:20, Lecture room: "Aula 1"

*Chair(s):*

- [Carlota Torrents](#), University of Lleida / Spain
- [Marta Castañer](#), University of Lleida / Spain

*Speaker(s):*

- [Eleanor Quested](#), University of Birmingham / United Kingdom  
Title: *'Quality of participation and dancers' health'*
- [Beatriz Calvo-Merino](#), University Complutense Madrid / Spain  
Title: *'Inside the audience's brain: from neuroscience to dance aesthetics'*
- [Gaspar Morey-Klapsing](#), [www.creative-projects.net](http://www.creative-projects.net) / Spain  
Title: *'The beauty of kinematic dance parameters'*

**IS-SH08** Strategies for preventing sexual harassment in sport – in between voluntariness and obligation  
28.06.2013, Start: 16:20, Lecture room: "Aula 2"



Chair(s):

- [Ilse Hartmann-Tews](#), German Sport University Cologne / Germany
- [Bettina Rulofs](#), German Sport University Cologne / Germany

Speaker(s):

- [Celia Brackenridge](#), Brunel University London / United Kingdom  
Title: *'Sexual harassment prevention in European sport: science, activism and policy'*
- [Kari Fasting](#), Norwegian School of Sport Sciences / Norway  
Title: *'Preventing sexual harassment and abuse in sport – the Norwegian Perspective'*
- [Stiliani Chroni](#), University of Thessaly / Greece  
Title: *'Interventions against sexual exploitation in sport from a Greek perspective'*

**IS-SH09** Towards a theory of sports coaching  
27.06.2013, Start: 16:20, Lecture room: "Aula 2"

Chair(s):

- [Lars Tore Ronglan](#), Norwegian School of Sport Sciences / Norway
- [Alfredo Joven](#), INEFC University of Lleida / Spain

Speaker(s):

- [Robin Jones](#), Cardiff Metropolitan University / United Kingdom  
Title: *'The learning facet'*
- [Isabel Mesquita](#), Faculty of Sport -University of Porto / Portugal  
Title: *'The temporal facet'*
- [Lars Tore Ronglan](#), Norwegian School of Sport Sciences / Norway  
Title: *'The insecurity facet'*

**IS-SH10** Implementation and impact of the Empowering Coaching programme in promoting children's active and healthy engagement in sport: Findings from the PAPA main trial  
27.06.2013, Start: 10:20, Lecture room: "Aula 2"

Chair(s):

- [Joan Duda](#), University of Birmingham / United Kingdom
- [Isabel Balaguer](#), University of Valencia / Spain

Speaker(s):

- [Isabel Balaguer](#), University of Valencia / Spain  
Title: *'Empowering and disempowering coach behaviours, players' need satisfaction and well-being in the context of grassroots football'*
- [Athanasios Papaioannou](#), University of Thessaly / Greece  
Title: *'Implications of the coach-created motivational environment and player motivation for young people's self esteem and health'*
- [Philippe Sarrazin](#), Jean Fourier University Grenoble / France  
Title: *'Correlates of the objectively assessed empowering and disempowering features of the motivational climate in grassroots football'*

**IS-SH11** In Pursuit of Active Aging - Achieving Sustained Physical Activity and Function in Older Adults \*  
27.06.2013, Start: 10:20, Lecture room: "Aula Magna 1"

Chair(s):

- [Janice Thompson](#), The University of Birmingham / United Kingdom
- [Afroditi Stathi](#), University of Bath / United Kingdom

*Speaker(s):*

- [Kenneth Fox](#), Bristol University / United Kingdom  
Title: *'OPAL-PLUS: A 3-year follow-up assessing changes in physical function, physical activity and mental well-being in adults 70+ years.'*
- [Afroditi Stathi](#), University of Bath / United Kingdom  
Title: *'Development and piloting of a model of neighbourhood support for promotion of active ageing – Project ACE (Active, Connected and Engaged)'*
- [Marijke Hopman-Rock](#), BodyatWork Research Center TNO VU university medical center / Netherlands  
Title: *'New evidence for the positive relationship between sports, health and aging'*

### **Invited sessions - Biomechanics & Neuromuscular [BN] (inc. Sports Medicine)**

**IS-BN01** What the dynamics of team sports tell us about collective behaviours  
27.06.2013, Start: 16:20, Lecture room: "Aula Magna 4"

*Chair(s):*

- [Chris Button](#), University of Otago / New Zealand
- [Daniel Memmert](#), German Sport University Cologne / Germany

*Speaker(s):*

- [Wouter Frencken](#), Hanze University of Applied Sciences / Netherlands  
Title: *'Inter-team dynamics in soccer: evidence from small-sided games and full-sized matches.'*
- [Pedro Passos](#), Technical University of Lisbon / Portugal  
Title: *'behaviors in rugby union: the complementarity between stability and variability.'*
- [Jerome Bourbousson](#), Nantes University / France  
Title: *'Team coordination in basketball: what can various levels of analysis reveal about interpersonal dynamics?'*

**IS-BN02** Feedback and feedforward interaction - the role of augmented feedback in performance (sponsored by Adidas)  
27.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Albert Gollhofer](#), University of Freiburg / Germany
- [Caroline Nicol](#), Aix-Marseille University / France

*Speaker(s):*

- [Jens Bo Nielsen](#), University of Copenhagen / Denmark  
Title: *'Learning to move fast depends on memory of sensory feedback related to previous movements'*
- [Christian Leukel](#), University of Freiburg / Germany  
Title: *'Plasticity of the brain in feedback-mediated learning'*
- [Wolfgang Taube](#), University of Freiburg / Germany  
Title: *'Practical implications in learning with feedback'*

**IS-BN03** Biomechanical human-environment interaction  
28.06.2013, Start: 10:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- [Gert-Peter Brüggemann](#), German Sport University Cologne / Germany

- Rosa Angulo-Barroso, INEFC, University of Barcelona / Spain

*Speaker(s):*

- Josef Kröll, University of Salzburg / Austria  
Title: *'The effect of different (alpine) ski-snow interaction modes on the human body'*
- Patria Hume, University Auckland / New Zealand  
Title: *'Environmental factors for performance of track athletes'*
- Gert-Peter Brüggemann, German Sport University Cologne / Germany  
Title: *'Ground-shoe-foot interaction to biomechanics of the muscular-skeletal system in locomotion'*

**IS-BN04** Cyclic sports: energetics, evaluation and constraints \*

27.06.2013, Start: 16:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- Raúl Arellano, University of Granada / Spain
- Ludovic Seifert, University of Rouen / France

*Speaker(s):*

- Ludovic Seifert, University of Rouen / France  
Title: *'Inter-limb coordination in swimming: Effect of expertise'*
- Amelia Ferro, Polytechnic University of Madrid / Spain  
Title: *'LASER tools to real time speed measurement in athletics'*
- Paola Zamparo, University of Verona / Italy  
Title: *'Economy and efficiency in cyclic sports'*

**IS-BN05** Specificity in strength training in elite sport \*

26.06.2013, Start: 15:00, Lecture room: "Aula Magna 4"

*Chair(s):*

- Erich Müller, University of Salzburg / Austria
- Gerard Moras, INEFC, University of Barcelona / Spain

*Speaker(s):*

- Erich Müller, University of Salzburg / Austria  
Title: *'Specificity in strength training needs to follow the principle of Coordinative Affinity'*
- Mikel Izquierdo, Public University of Navarra / Spain  
Title: *'Dangerous liaisons of strength and endurance training'*
- Esteban Gorostiaga, Studies, Research and Sport Medicine Center, Government of Navarra / Spain  
Title: *'Is it good to train to failure in elite sports?'*

**IS-BN06** Evolution and adaptation in human locomotion \*

28.06.2013, Start: 10:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- Michael Grey, University of Birmingham / United Kingdom
- Neil Cronin, University of Jyväskylä / Finland

*Speaker(s):*

- [Neil Cronin](#), University of Jyväskylä / Finland  
Title: *'Messing with evolution: examples from human walking'*
- [Masaki Ishikawa](#), Osaka University of Health and Sport Sciences / Japan  
Title: *'Neuromuscular interaction during running for elite African distance runners'*
- [Michael Grey](#), University of Birmingham / United Kingdom  
Title: *'Cortical adaptations for human walking'*

**IS-BN07** New trends in motor learning

28.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Peter Jan Beek](#), Vrije Universiteit Amsterdam / Netherlands
- [Luis Miguel Ruiz-Pérez](#), University Castilla La Mancha / Spain

*Speaker(s):*

- [Thorsten Stein](#), Karlsruhe Institute of Technology / Germany  
Title: *'Robotics as a tool to understand human motor learning'*
- [Rich Masters](#), University of Hong Kong / Hong Kong  
Title: *'Implicit motor learning'*
- [Ysbrand van der Werf](#), Netherlands Institute for Neuroscience / Netherlands  
Title: *'Influence of sleep on consolidation in motor learning'*

**IS-BN08** Biomechanics of sport equipment: Triad of performance, comfort and injury prevention \*

28.06.2013, Start: 16:20, Lecture room: "Aula Magna 4"

*Chair(s):*

- [Hermann Schwameder](#), University of Salzburg / Austria
- [Xavier Balias](#), CAR Sant Cugat / Spain

*Speaker(s):*

- [Hermann Schwameder](#), University of Salzburg / Austria  
Title: *'Biomechanics of Sport Equipment: Triad of Performance, Comfort and Injury Prevention'*
- [Veit Senner](#), Technical University Munich / Germany  
Title: *'Methodological challenges and best practice examples in sports technology research and development'*
- [Stuart Miller](#), ITF / United Kingdom  
Title: *'Performance, comfort and injury prevention in tennis equipment'*
- [Jörg Spörri](#), University of Salzburg / Austria  
Title: *'Alpine Skiing Equipment - the challenge of balancing comfort, performance and safety aspects'*

**IS-BN09** Biomechanics in disability sport: Challenges and solutions \*

28.06.2013, Start: 16:20, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Wolfgang Potthast](#), German Sport University Cologne / Germany
- [Myriam Guerra](#), FPCEE-Blanquerna (University Ramon Llull) / Spain

*Speaker(s):*

- [Katja Mombaur](#), University of Heidelberg / Germany  
Title: *'Modeling and optimal control of double amputee running'*

- [Gert-Peter Brüggemann](#), German Sport University Cologne / Germany  
Title: *'Prostheses for recreational and elite sports: biomechanical requirements and technical fulfilments'*
- [Wolfgang Potthast](#), German Sport University Cologne / Germany  
Title: *'Biomechanics of sprinting on natural limbs and sprinting on one or two prostheses.'*

**IS-BN10** Evidence Based Sports Physiotherapy: Core stability in sports – myth or reality  
29.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Jan Cabri](#), The Norwegian School of Sport Sciences / Norway
- [Mónica Solana](#), Ramon Llull University / Spain

*Speaker(s):*

- [Jan Cabri](#), The Norwegian School of Sport Sciences / Norway  
Title: *N.N.*
- [Evert Verhagen](#), EMGO-Institute/VU University medical center / Netherlands  
Title: *N.N.*
- [Mónica Solana](#), Ramon Llull University / Spain  
Title: *'Core proprioception, evidence-based training methodology'*

**IS-BN01** What the dynamics of team sports tell us about collective behaviours  
27.06.2013, Start: 16:20, Lecture room: "Aula Magna 4"

*Chair(s):*

- [Chris Button](#), University of Otago / New Zealand
- [Daniel Memmert](#), German Sport University Cologne / Germany

*Speaker(s):*

- [Wouter Frencken](#), Hanze University of Applied Sciences / Netherlands  
Title: *'Inter-team dynamics in soccer: evidence from small-sided games and full-sized matches.'*
- [Pedro Passos](#), Technical University of Lisbon / Portugal  
Title: *'behaviors in rugby union: the complementarity between stability and variability.'*
- [Jerome Bourbousson](#), Nantes University / France  
Title: *'Team coordination in basketball: what can various levels of analysis reveal about interpersonal dynamics?'*

**IS-BN02** Feedback and feedforward interaction - the role of augmented feedback in performance (sponsored by Adidas)  
27.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Albert Gollhofer](#), University of Freiburg / Germany
- [Caroline Nicol](#), Aix-Marseille University / France

*Speaker(s):*

- [Jens Bo Nielsen](#), University of Copenhagen / Denmark  
Title: *'Learning to move fast depends on memory of sensory feedback related to previous movements'*
- [Christian Leukel](#), University of Freiburg / Germany  
Title: *'Plasticity of the brain in feedback-mediated learning'*

- [Wolfgang Taube](#), University of Freiburg / Germany  
Title: *'Practical implications in learning with feedback'*

**IS-BN03** Biomechanical human-environment interaction  
28.06.2013, Start: 10:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- [Gert-Peter Brüggemann](#), German Sport University Cologne / Germany
- [Rosa Angulo-Barroso](#), INEFC, University of Barcelona / Spain

*Speaker(s):*

- [Josef Kröll](#), University of Salzburg / Austria  
Title: *'The effect of different (alpine) ski-snow interaction modes on the human body'*
- [Patria Hume](#), University Auckland / New Zealand  
Title: *'Environmental factors for performance of track athletes'*
- [Gert-Peter Brüggemann](#), German Sport University Cologne / Germany  
Title: *'Ground-shoe-foot interaction to biomechanics of the muscular-skeletal system in locomotion'*

**IS-BN04** Cyclic sports: energetics, evaluation and constraints \*  
27.06.2013, Start: 16:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- [Raúl Arellano](#), University of Granada / Spain
- [Ludovic Seifert](#), University of Rouen / France

*Speaker(s):*

- [Ludovic Seifert](#), University of Rouen / France  
Title: *'Inter-limb coordination in swimming: Effect of expertise'*
- [Amelia Ferro](#), Polytechnic University of Madrid / Spain  
Title: *'LASER tools to real time speed measurement in athletics'*
- [Paola Zamparo](#), University of Verona / Italy  
Title: *'Economy and efficiency in cyclic sports'*

**IS-BN05** Specificity in strength training in elite sport \*  
26.06.2013, Start: 15:00, Lecture room: "Aula Magna 4"

*Chair(s):*

- [Erich Müller](#), University of Salzburg / Austria
- [Gerard Moras](#), INEFC, University of Barcelona / Spain

*Speaker(s):*

- [Erich Müller](#), University of Salzburg / Austria  
Title: *'Specificity in strength training needs to follow the principle of Coordinative Affinity'*
- [Mikel Izquierdo](#), Public University of Navarra / Spain  
Title: *'Dangerous liaisons of strength and endurance training'*
- [Esteban Gorostiaga](#), Studies, Research and Sport Medicine Center, Government of Navarra / Spain  
Title: *'Is it good to train to failure in elite sports?'*

**IS-BN06** Evolution and adaptation in human locomotion \*  
28.06.2013, Start: 10:20, Lecture room: "Aula Magna 5"

*Chair(s):*

- [Michael Grey](#), University of Birmingham / United Kingdom
- [Neil Cronin](#), University of Jyväskylä / Finland

*Speaker(s):*

- [Neil Cronin](#), University of Jyväskylä / Finland  
Title: *'Messing with evolution: examples from human walking'*
- [Masaki Ishikawa](#), Osaka University of Health and Sport Sciences / Japan  
Title: *'Neuromuscular interaction during running for elite African distance runners'*
- [Michael Grey](#), University of Birmingham / United Kingdom  
Title: *'Cortical adaptations for human walking'*

**IS-BN07** New trends in motor learning

28.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Peter Jan Beek](#), Vrije Universiteit Amsterdam / Netherlands
- [Luis Miguel Ruiz-Pérez](#), University Castilla La Mancha / Spain

*Speaker(s):*

- [Thorsten Stein](#), Karlsruhe Institute of Technology / Germany  
Title: *'Robotics as a tool to understand human motor learning'*
- [Rich Masters](#), University of Hong Kong / Hong Kong  
Title: *'Implicit motor learning'*
- [Ysbrand van der Werf](#), Netherlands Institute for Neuroscience / Netherlands  
Title: *'Influence of sleep on consolidation in motor learning'*

**IS-BN08** Biomechanics of sport equipment: Triad of performance, comfort and injury prevention \*

28.06.2013, Start: 16:20, Lecture room: "Aula Magna 4"

*Chair(s):*

- [Hermann Schwameder](#), University of Salzburg / Austria
- [Xavier Balias](#), CAR Sant Cugat / Spain

*Speaker(s):*

- [Hermann Schwameder](#), University of Salzburg / Austria  
Title: *'Biomechanics of Sport Equipment: Triad of Performance, Comfort and Injury Prevention'*
- [Veit Senner](#), Technical University Munich / Germany  
Title: *'Methodological challenges and best practice examples in sports technology research and development'*
- [Stuart Miller](#), ITF / United Kingdom  
Title: *'Performance, comfort and injury prevention in tennis equipment'*
- [Jörg Spörri](#), University of Salzburg / Austria  
Title: *'Alpine Skiing Equipment - the challenge of balancing comfort, performance and safety aspects'*

**IS-BN09** Biomechanics in disability sport: Challenges and solutions \*

28.06.2013, Start: 16:20, Lecture room: "Aula Magna 1"

*Chair(s):*

- [Wolfgang Potthast](#), German Sport University Cologne / Germany

- [Myriam Guerra](#), FPCEE-Blanquerna (University Ramon Llull) / Spain

*Speaker(s):*

- [Katja Mombaur](#), University of Heidelberg / Germany  
Title: *'Modeling and optimal control of double amputee running'*
- [Gert-Peter Brüggemann](#), German Sport University Cologne / Germany  
Title: *'Prostheses for recreational and elite sports: biomechanical requirements and technical fulfilments'*
- [Wolfgang Potthast](#), German Sport University Cologne / Germany  
Title: *'Biomechanics of sprinting on natural limbs and sprinting on one or two prostheses.'*

**IS-BN10** Evidence Based Sports Physiotherapy: Core stability in sports – myth or reality  
29.06.2013, Start: 10:20, Lecture room: "Aula Magna 3"

*Chair(s):*

- [Jan Cabri](#), The Norwegian School of Sport Sciences / Norway
- [Mónica Solana](#), Ramon Llull University / Spain

*Speaker(s):*

- [Jan Cabri](#), The Norwegian School of Sport Sciences / Norway  
Title: *N.N.*
- [Evert Verhagen](#), EMGO-Institute/VU University medical center / Netherlands  
Title: *N.N.*
- [Mónica Solana](#), Ramon Llull University / Spain  
Title: *'Core proprioception, evidence-based training methodology'*

\* Clinical track