

# INTERNATIONAL ASSOCIATION OF APPLIED PSYCHOLOGY (IAAP)

## DIVISION SPORT PSYCHOLOGY

# 12

BULLETIN - 2009

### EDITORIAL

Welcome to the second extended issue of Division 12 Bulletin!! This bulletin includes reports of activities that occurred during 2009 as well as information about forthcoming professional meetings and other announcements.

Many thanks to all contributors !!

Please, keep on sending me your news, or other information you would like to share with the Sport Psychology community.

**Bulletin Editor** Montse Ruiz,  
Department of Sport Sciences  
University of Jyväskylä  
400014 Finland  
E-mail: [montse.ruiz@jyu.fi](mailto:montse.ruiz@jyu.fi)

#### In this issue

Message from the President	1
Congress Reports and other activities	2
Obituary	5
Names in the News	6
New Publications	7
Forthcoming Meetings / Conferences	8
Executive Board	9

## MESSAGE FROM THE PRESIDENT



Dear Friends and Colleagues,

Welcome to our Division 12 (Sport Psychology) website and this newsletter reflecting the activity of our division. A big thank you goes to Montse who has been doing an excellent job keeping the website and newsletter editing in good shape. As you realize, from now on our priority is preparation for the ICAP-2010 Congress and soliciting the participation of sport

psychologists from all over the world. Please, use your formal and informal contacts to invite the colleagues as potential participants and /or supporters of our Congress. It is going to be quite a challenge considering the economical situation in different countries and substantial cuts in travel money in most Universities...

So far the preparation for the Congress went quite well: we established good contacts with local organizers (Tim Hannan is our liaison person), we managed to increase a number of slots for our Division program (see below), we already have three reviewers-volunteers of sport psychology submissions (Joan Duda, Marit Sorensen, and Howard Hall) - Thanks very much!

(continues ...)

The program committee of the Congress has reviewed the allocation to all divisions, and has increased the number of symposia sessions available to Division 12 from 4 to 8, to enable the inclusion of up to two additional invited speakers. Accordingly, the allocation to Division 12 is as follows:

1. **State of the Art** (Peter Terry, "The evolution of applied sport psychology: Beware the Sun, Icarus")
2. **Half-Day workshop** (Peter Terry, "The What, Why and How of Mood Profiling")
3. **Presidential keynote address** (Juri Hanin, "Emotion- focused and Action-focused Coping in Sport")
4. **Invited keynote address** (Catherine Sabiston, "Youth physical activity motivation: Lessons learned and future considerations")

There are also 8 symposium sessions, with 2 of these available for the two additional invited addresses we nominated, Robert Vallerand and Gloria Balagué; the remaining 6 symposia sessions will be required for division-initiated symposia. This will accommodate the three symposia we previously advised (Joan Duda, Motivation-centered Interventions in Sport: Theory, Research, & Practice; Glyn Roberts, Children in sport; and Howard Hall, Perfectionism in sport) and other submitted symposia.

Now it is up to us to go on with good work and promote our program which looks quite promising (see congress program below).

#### **Juri Hanin**

President of Division 12 of IAAP

## CONGRESS REPORTS

### **ISSP 12th World Congress of Sport Psychology** by Montse Ruiz

The 12<sup>th</sup> World Congress of Sport Psychology of the International Association of Sport Psychology (ISSP) was held this year in Marrakesh, Morocco. Since this was the first time a congress of this kind was organized in an African country, it was quite visible that the authorities as well as the organizers were really proud of hosting such an event.

The general themes of the congress covered sport and exercise psychology (i.e. performance enhancement, overtraining, rehabilitation), social psychology of sport (i.e. group dynamics, communication), motor control and learning (i.e. skill acquisition, motor development), psychopathology in sport, and developmental issues of interest for sport psychologists, researchers, coaches and athletes.

Below are some highlights from keynote speakers:

Professor Terry Orlick's presentation dealt with focusing on excellence and how that can be extended from sports to life. His philosophical talk touched upon some aspects he learned from his work with athletes, such as learning to appreciate small things, or keeping the direction in the pursuit and focusing on the things that make a difference. Professor Orlick emphasized the importance of action, introducing the term "docide" as he explained that while decide is saying that you are going to do something, "docide" is when you actually do it.

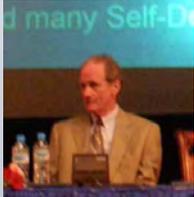


(continues ...)



Professor Craig A. Wisberg's (USA) keynote focused on the potential benefits of giving athletes some control over the way they practice and prepare for competition. Prof. Wisberg presented evidence of the effects of self-regulation on enhancing skill retention and transfer. He also discussed about the positive effects of self-regulation on retention in practice settings in terms of increased self-efficacy, motivation or more productive goal setting. His address also highlighted some possible limitations of self-regulated learning in terms of pressure placed on coaches who can lose their jobs if they do not bring results, and age and time constrains since this kind of learning is not so effective for young athletes or when time is limited.

Professor Gershon Tenenbaum (USA) gave a keynote on the perceptions of traits and states, effort, and the perceptual-cognitive-emotion-motor linkage. He discussed the use of introspective tools to study personality traits, states and attitudes. Prof Tenenbaum suggested that despite the susceptibility to social desirability of these tools and the limited "conventional" reliability, their validity can be greater than that of multi-item measures even if these are highly reliable !! He also discussed about attention (i.e. association and dissociation) strategies and how attention inflexibility or the difficulty in switching back and forth between attention strategies might lead to decreased effort.



Professor Edward L. Deci (USA), co-author of the Self-Determination Theory (SDT) gave a keynote on the promotion of autonomous motivation. Prof Deci reviewed the history of research on SDT emphasizing the importance of promoting autonomy and providing positive feedback. He distinguished between autonomous (intrinsic) versus controlled (external) motivation arguing that autonomously motivated behaviours are considered

self-determined, and can be promoted by supporting the basic psychological needs: competence, relatedness and autonomy.

Professor Packianathan Chelladurai's (USA) address highlighted how both sport psychology and sport management draw much of their research from disciplines such as psychology, social psychology, and sociology. Prof Chelladurai presented research on his multidimensional model of leadership in which he views athlete performance and satisfaction as the product of actual behaviour, preferred behaviour and prescribed behaviour of the leader.



In addition to the keynotes there were many other interesting symposia, individual papers and posters. Of special interest was the "Thinking Outside the Box" symposium where professors Dan Gould (USA), Terry Orlick (CAN) and Lars-Eric Unesth  l (Sweden) were discussing about how some of the sport psychology techniques can be applied to other non-sport settings. Dan Gould was also discussing on the similarities and differences and shared some of the challenges he faced while working as consultant in the business settings. Also quite instructive and inspiring was the "Sport Psychology Pioneers" symposium, chaired by John Salmela. The Sport Psychology pioneers were Robert N. Singer, (USA), Lars-Eric Unesth  l, (Sweden), Leonard Zaichkowsky, (USA) and Keith Henschen (USA) and they discussed about how research and practice in the areas of motor learning, mental training, biofeedback, motivation and talent development have evolved over the last 30 to 40 years.

Finally, during the Congress the new Managing Council 2009-2013 was elected consisting of: Sidonio Serpa (President), Natalia Stambulova, Traci Statler, Abderrahim Baria (Vice President), Gangyan Si (Secretary General), and Ernest Tsung-Min Hung (Treasurer). Next ISSP Congress will be held in Beijing, China. ISSP website: [www.issponline.org](http://www.issponline.org).

### ISBNPA Annual conference

The Annual conference of the International society for Behavioral Nutrition and Physical Activity (ISBNPA) was held in Portugal (June 17-20). After the conference, a Satellite Meeting entitled "Understanding and changing health behaviour with Self-Determination Theory and Motivational Interviewing" was organized in Sintra (June 22-23). The meeting dealt with the usefulness and common ground between Self-Determination Theory and Motivational Interviewing for promoting health behavior change, especially nutrition and physical activity. Division 12 Fellow, Joan Duda (UK) and Michelle Fortier (Canada) presented on Self-Determination Theory Applications in Exercise and weight control. Other speakers included: Tom Baranowski (USA), Gaston Godin (CAN), Ken Resnicow (USA), Maarten Vansteenkiste (Belgium) and Geoffrey Williams, UK.

## STAR Annual Conference

The 30th Stress and Anxiety Research Society (STAR) Conference was held in Budapest last July. Division 12 President, Juri Hanin (Finland) gave an invited keynote address: "From anxiety to performance-related emotions in top-level sport". Juri Hanin & Muza Hanina also gave the following invited lectures for sport psychology students at the Semmelweis University: "Optimization of athletic performance: emotion-focused and action-focused coping", "Emotions in sport: an individualized approach", and "Change and change management in top-level sport". Division 12 member, Professor Andrew M. Lane (UK), chaired a paper session on Negative/positive emotions in stress and coping and presented a paper on "Can anger and tension be helpful? Relationships between mood states and emotional intelligence during optimal performance". All presentations were well attended and triggered interesting discussions.



from left to right:  
Charles Spielberger, Kornél Sipos & Juri Hanin



from left to right:  
Erica Fryberg (AUS), Kornél Sipos (HUN), Petra Buchwald (GER), Stephen Hobfoll (USA), Kate More (AUS), Charles Spielberger (USA), Michael Eysenck (UK) Juri Hanin (FIN) and Laszlo Coth (HUN)

## AASP Annual Conference report submitted by Amanda J. Visek

September 15th-18th, 2009, the Association for Applied Sport Psychology (AASP) held its 24th annual conference in Salt Lake City, Utah. Newly elected Executive Board members included: Bonnie Berger (President-Elect), Amanda J. Visek (Division Head, Public Relations & Outreach), Heather Peters (Secretary/Treasurer), and student representatives Moe Machida and Kristina Moore. Keynote and invited speakers included Jerry May, J. J. Clark, Dan Kirschenbaum, Robert Sallis, and Ruth L. Hall. Award recipients included Melissa Murray (Dissertation Award), Angela Fifer (Distinguished Student Practice Award), and Jonathan Duff (Diversity Award). Immediately following this year's largest attended conference, AASP hosted a Sport Psychology Expo for coaches, parents, and athletes of all ages as a member driven community outreach initiative.

## MBRU International Symposium

The Third International Scientific Symposium on learning and teaching of motor skills was organized last October by the Motor Behavioural Research Unit (MBRU) of Department of Sport Sciences, University of Jyväskylä, Finland. Invited speakers were Professor Robert M. Malina, (USA) "Motor development and movement proficiency: Implications for physical activity and youth sport", Beatrix Vereijken, (NOR) "The meaning and role of variability in motor learning", Mark A. Williams (UK) "Defining the path to performance excellence in sport".

The symposium was opened by Beatrix Vereijken's presentation that emphasized the role of variability in motor learning, arguing in favour of approaches that view variability in performance as informative, meaningful and functional. Mark A. Williams's paper focused on deliberate practice as a determinant factor on the path to performance excellence, and presented differences in anticipation and decision-making processes between expert and novice performers. Robert M. Malina's paper focused on the development of motor competence and the practical implications of developing motor proficiency

Other invited speakers were Duarte Araújo "Coaching decision-making in sport", Rolf Carlson "Talent development in competitive sport" and Montse Ruiz "Augmented feedback training in precision shooting". The lectures were well attended, and complemented with poster sessions and demonstrations.

## Report of activities organized in Copenhagen submitted by Anne-Marie Elbe

From August 31-September 3, 2009 25 PhD students from 8 European countries participated in the PhD course "Psychological Aspects of Talent Development". Invited speakers were K. Anders Ericsson, Jean Côté, Natalia Stambulova, Jürgen Beckmann, Mette Krogh Christensen and Anne-Marie Elbe. The course was organized by the Department of Exercise and Sport Sciences at the University of Copenhagen and funded by the Research Education Program in Sport Science as well the Danish elite sports organization Team Danmark. More information about the course can be found on the website:

<http://isis.ku.dk/kurser/index.aspx?xslt=default&kursusid=28128>

The Department of Exercise and Sport Sciences at the University of Copenhagen and Team Danmark conducted a consensus conference on "Performance in Sports Involving Intense Exercise" from September 16 - 18, 2009. Thirty internationally acknowledged researchers together with representatives from the world of sport took part in this consensus conference which was not open to the public. Half of the presentations focused on psychological aspects of sports involving intense exercise. The consensus statements as well as further information can be found at:

[www.ifl.ku.dk/english/communication/previous\\_arrangements/consensus/](http://www.ifl.ku.dk/english/communication/previous_arrangements/consensus/)

## OBITUARY

### Dr Martin . Lee (1940-2009)

It is with sadness that I must inform you that Dr. Martin Lee passed away in Exeter, UK, on 5th July 2009. He was ill with myelofibrosis, a rare bone marrow disease, for about 9 years and had beaten the odds to fight on as long as he did. He gained degrees from the Universities of Leeds (UK), Washington State (USA) and Oregon (USA), and went on to lecture at Leeds Trinity & All Saints, Bedford College, and the University of Brighton in the UK.

The study of values was central in Martin's research – which embraced such topics as leadership, self-concept, and parental influence. He led UK and international projects (eg. on fair-play, under the Council of Europe Committee for the Development of Sport) in this area. At least two measurement instruments which are internationally used arose from his research: *Attitudes to Moral Decisions in Youth Sport Questionnaire*; *Youth Sport Values Questionnaire-2*. His two most recent articles were completed under extreme duress as medical attempts to maintain Martin's health had all but ended. They could not have been completed with the support of some of his many collaborators around the world.

Lee MJ, Whitehead J, & Ntoumanis N. (2007). Development of the Attitudes to Moral Decision-making in Youth Sport Questionnaire (AMDYSQ). *Psychology of Sport & Exercise*, 8, 369-392.

Lee MJ, Whitehead J, Ntoumanis N, & Hatzigeorgiadis A. (2008). Relationships among values, achievement orientations, and attitudes in youth sport. *Journal of Sport Exercise Psychology*, 30, 588-610.

These articles ended a career spanning over 30 years, beginning when Martin was one of the first British researchers to publish in JSEP. I think Martin has left a legacy for those following in this important area work, and through his contribution to coach education and Physical Education may have improve the quality of experience for children in sport and physical education.

**Submitted by Professor Adrian Taylor**

Chair in Exercise and Health Psychology,

# NAMES IN THE NEWS

## European Masters Programme in Sport Psychology selected in the competitive Erasmus Mundus Programme

The European Masters in Sport and Exercise Psychology (EMSEP), offered jointly by four European universities, has been selected in the Erasmus Mundus Programme funded by the European Commission. Erasmus Mundus is a worldwide cooperation and mobility programme, which aims at enhancing quality in higher education and promoting intercultural understanding.

The programme is coordinated by the University of Jyväskylä with Professor of Sport and Exercise Psychology Taru Lintunen in charge. Partners are the universities of Lund (Sweden), Leipzig (Germany) and Thessaly (Greece).

- Erasmus Mundus is a very competitive and sought after programme, and being selected in it brings a kind of quality stamp for the programme, says Tuija Koponen, Head of International Office at the University of Jyväskylä.

The European Commission selects to fund high level joint European master's programmes for five years. The programmes are granted support for administrative expenses and scholarships to be given to European and non-European top students and visiting scholars.

- This master's programme aims at providing students with high quality master's level education in English within a European network, which hosts the best expertise in the field, says Professor Lintunen. - Students graduating from this programme will be professionals of development, education and research in the field of sport psychology and they will have the opportunity to create a wide international professional network within their own discipline already during their studies, Lintunen continues.

Graduates will receive Master's degrees from two universities, from their home university as well as from their exchange university. - The double degree structure widens the specialization opportunities of students and offers them the possibility to familiarize themselves with the academic culture, teachers and fellow students of two countries, Professor Lintunen says.

- The curriculum of the double degree programme is the result of a long term domestic and international cooperation, says Lintunen. She considers a double degree programme to be a challenging form of cooperation, which requires good mutual knowledge, trust and close communication between partner universities. - The programme was developed for example by comparing and sharing each university's educational strengths and good practices. In addition, the network has developed new joint study modules and study material. The long cooperation has made the teachers a well-functioning team and offered them a peer support network, Lintunen adds.

Each year 24 students holding a B.Sc. in Sport Science, Psychology or Social Psychology are accepted in the European Masters in Sport and Exercise Psychology. The first round of applications begins November 16, 2009 and ends January 5, 2010; the studies begin in Autumn 2010. The tight scheduled, 120 ECTS credit programme lasts for two years and includes studies in at least two of the network's universities.

EMSEP programme also invites experienced non-European scholars to contribute to the joint programme. Scholarships of maximum three months will be awarded to selected scholars. - The scholars will be teaching during the second term at the University of Leipzig where all EMSEP students come together to study. In addition, the scholars will visit other network universities during their scholarship period, says Professor Lintunen.

### Further information:

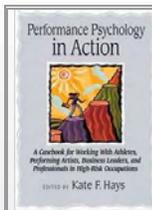
Academic Planner Anna-Maria Stregell  
tel. +358 14 260 2062, emsep-mundus@sport.jyu.fi

Professor Taru Lintunen  
tel. +358 14 260 2113, taru.lintunen@sport.jyu.fi

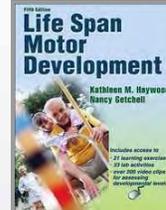
[www.jyu.fi/sport/emsep](http://www.jyu.fi/sport/emsep)

# NEW PUBLICATIONS

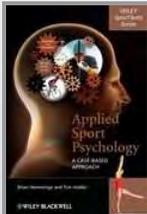
## BOOKS



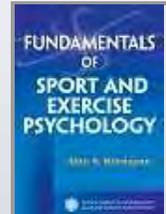
Hays K. F. (2009). Performance Psychology in Action: A Casebook for Working with Athletes, Performing Artists, Business Leaders, and Professionals in High-Risk Occupations . [www.apa.org](http://www.apa.org)



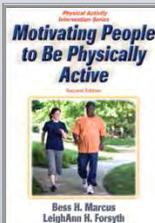
Haywood, K.M. & Getchell, N. (2009). Life Span Motor Development, Fifth Edition. Visit: [www.humankinetics.com](http://www.humankinetics.com)



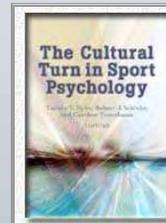
Hemmings, B. & Holder, T. (2009). Applied Sport Psychology: A Case-Based Approach. Wiley-Blackwell. Visit: [www.wiley-vch.de](http://www.wiley-vch.de)



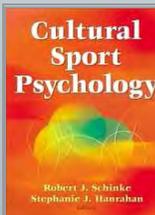
Kornspan, A.S. (2009). Fundamentals of Sport and Exercise Psychology Visit: [www.humankinetics.com](http://www.humankinetics.com)



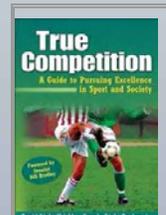
Marcus, B.H. & Forsyth, L.A. (2009). Motivating People to Be Physically Active-2nd Edition. Visit: [www.humankinetics.com](http://www.humankinetics.com)



Ryba, T., Schinke, R. & Tenenbaum, G. (2009). The Cultural Turn in Sport and Exercise Psychology. FIT: Morgantown. Visit: [www.fitinfotech.com](http://www.fitinfotech.com)



Schinke, R.J. & Hanrahan, S.J. (2009). Cultural Sport Psychology Visit: [www.humankinetics.com](http://www.humankinetics.com)



Shields, D., & Bredemeier, B. (2009). True competition: A guide to pursuing excellence in sport and society. Champaign, IL: Human Kinetics. Visit: [www.humankinetics.com](http://www.humankinetics.com)

## VIDEOS

### Mental Skills For Equestrian Athletes

Dr. Rico Schuijers shares some of the key psychological strategies equestrian athletes can use to get the most from their skills and enhance their riding performance. Topics include attention, focus, awareness, goal setting, tension control, thought control, and self-evaluation.

Visit: [www.vbvideo.com](http://www.vbvideo.com)

### Keys to Effective Sports Psychology Consulting

Dr. Kenneth Ravizza shares the philosophy, tips, and techniques that have helped to make him one of the most sought after applied sport psychology consultants.

Visit: [www.vbvideo.com](http://www.vbvideo.com)

# FORTHCOMING MEETINGS/CONFERENCES

## **December 21-24, 2009**

India International Congress in Sport Psychology entitled "Excellence in sport and life: New Challenges in Sport Performance, Exercise and Well-being" and organized by the Lakshmbai National University of Physical Education, Gwalior under the auspices of the Sport Psychology Association of India (SPAI), Asia South Pacific Association of Sport Psychology (ASPASP) and International Society of Sport Psychology (ISSP).

Visit: <http://www.lnupeiicsp.in>

## **March 31- April 1, 2010, Aberystwyth UK**

Annual Student Conference of the British Association of Sport and Exercise Sciences (BASES) to be held at Aberystwyth University, UK

Visit: <http://www.bases.org.uk/studentconf.asp>

## **June 7-10, 2010, Copenhagen, Denmark.**

PhD course "Telling Tales about and through the Body: Narrative and experience-based research methods between phenomenology and social constructionism" hosted by the University of Copenhagen.

Contact: Reinhard Steller ([rsteller@ifi.ku.dk](mailto:rsteller@ifi.ku.dk))

## **June 9-12, 2010, Minnesota, USA.**

Annual Meeting of the International Society for Behavioral Nutrition and Physical Activity (ISBNPA) to be held in Minneapolis, Minnesota, USA.

Visit: <http://www.togpartners.com/isbnpa/>

## **June 10-12, 2010, Arizona, USA**

Annual Conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSA) to be held in Tucson, Arizona.

Visit: <http://www.naspsa.org/conf/>

## **June 23-26, 2010, Antalya, Turkey**

15<sup>th</sup> Annual Congress of the European College of Sport Science to be hosted by the Middle East Technical University in Antalya, Turkey.

Visit: <http://www.ecss-congress.eu/2010>

## **July 11-16, 2010, Melbourne, Australia**

27 International Congress of Applied Psychology (ICAP).

Visit: <http://www.icap2010.com> and <http://www.icap2010.com/satellite.php> (for Satellite Meetings)  
(See draft of the program for Division 12 below).

## **September 6 - 8 2010, Glasgow, UK**

Annual Conference of the British Association of Sport and Exercise Sciences (BASES) to be held at the University of Glasgow, UK.

Visit: <http://www.bases.org.uk/BASES-Annual-Conference>

## **October 27-31, 2010, Providence, USA**

Annual Conference of the Association for Applied Sport Psychology

Visit: <http://appliedsportpsychology.org/conference>

# International Congress of Applied Psychology

(11-16 July 2010, Melbourne, Australia)

A draft program of the **Division 12 (Sport Psychology)**

## Divisional keynote:

Dr. Gloria Balaguer (University of Illinois, USA): *The many faces of Sport Psychology: Strength or Challenge for the field?*

## Exercise psychology:

Dr. Catherine Sabiston (McGill University, Canada): *"Youth physical activity motivation: Lessons learned and future considerations"*

## State-of-the-art lecture:

Professor Peter Terry (University of Southern Queensland, Australia): *"The evolution of applied sport psychology: Beware the Sun, Icarus"*

## Social psychology in sport:

Professor Robert J. Vallerand (Université du Québec à Montréal, Canada): *On the Role of Passion for Sport & Physical Activity in a Fulfilling Life*

## Divisional Presidential address:

Professor Yuri L. Hanin (KIHU-Research Institute for Olympic Sports, Finland): *Emotion- focused and Action-focused Coping in Sport*

## Invited symposia:

- Professor Joan Duda (UK): *Motivation-centered Interventions in Sport: Theory, Research, & Practice*
- Professor Glyn Roberts (Norway): *Children in sport*
- Professor Howard Hall (UK): *Perfectionism in Sport*

## Workshops (half a day)

Professor Peter Terry (UK / Australia): *The What, Why and How of Mood Profiling* (Half-a day)

## Further information:

<http://www.icap2010.com>

<http://www.icap2010.com/program.php>

Call for papers **extended** to: **January 11, 2010 !!**

## DIVISION 12 EXECUTIVE BOARD

### President

Yuri L. Hanin  
KIHU-Research Institute for  
Olympic Sports  
Rautpohjankatu 6,  
40700 - Jyväskylä, Finland  
Ph: +358 20 781 1500 (office)  
Ph: +358 50 49 33 236 (mobile)  
Fax: +358 20 781 1501  
E-mail: [juri.hanin@kihu.fi](mailto:juri.hanin@kihu.fi)

### Secretary/Treasurer

Jolly Roy  
Sport Psychology Centre  
National Sports Institute  
Bukit Jalil, Sri Petaling  
Kuala Lumpur-57000, Malaysia  
Ph:+6 03 8992 9691  
Fax:+6 03 8996 8748  
E-mail: [jolroy@hotmail.com](mailto:jolroy@hotmail.com)

### Past- President

Marit Sørensen  
Norwegian School of Sport  
Sciences  
0806 Oslo, Norway  
Ph: +47 23 26 24 31  
Fax: +47 22 23 42 20  
E-mail: [marit.sorensen@nih.no](mailto:marit.sorensen@nih.no)

### Bulletin Editor/ Website manager

Montse Ruiz  
Department of Sport Sciences  
University of Jyväskylä  
400014 Finland  
Ph: +358 14 260 2120  
Fax: +358 14 260 2101  
E-mail: [montse.ruiz@jyu.fi](mailto:montse.ruiz@jyu.fi)

### President-Elect

Howard Hall  
Faculty of Health & Life  
Sciences  
York St John University  
Lord Mayor's Walk, York  
YO31 7EX  
Ph: +44 01904-876302  
E-mail:  
[h.hall@yorks.ac.uk](mailto:h.hall@yorks.ac.uk)