FEPS

Federation of European Physiological Societies

FEPS NEWSLETTER

March 2006, #7

Deadline Abstract submission for the meeting of the Physiological Society in London, July 5-7, 2006
http://physoc-ucl2006.abstractcentral.com

March 13, 2006

http://www.feps.org

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Letter of the President of FEPS

Dear Colleagues,

The joint German Physiological Society – FEPS meeting in Munich is now coming very close! The excellent program with the many participants from all over Europe - and other parts of the world - promises a successful meeting. Add the thriving initiative with a special symposium arranged by the *European Young Physiologists* and the recurring Symposium on Teaching Physiology. Both activities are scheduled on Sunday, March 26 and indicate that we are on the right track to find a "European format" for annual "joint meetings" arranged by a national member Society and FEPS.

It is indeed time to plan the detailed activity calendar for the Meeting. Look for the full program at this address: http://physinst.web.med.uni-muenchen.de/dpg06/.
To find the names of participants and the abstracts use the following address: http://www.dpg-online.org/kongress/user.php. Presently there are 1129 participants – many of them from outside Germany, and 944 abstracts. The overall view of the program – with possibilities to click into the details – is found at the following address: http://www.dpg-online.org/kongress/user.php?target=calendar_s&fromsite=target%3Dabout

During the Munich meeting FEPS will have business meetings both of its Executive Committee and the Council – important issues at both business meetings are a better knowledge on the present teaching of physiology in European countries – at a time when Departments and Courses are changing from traditional divisions to more integrated units. How do we secure that the core curriculum remains intact – and that the students also are exposed to the developing future of our field? In the Newsletter #5 we had reports from the Physiology Teaching Workshop in Bristol. They are now uploaded on the FEPS Homepage. It is my hope that we will end up by having a "knowledge base" on physiology teaching in Europe on our Homepage.
Further initiatives to make ***Acta Physiologica*** the effective FEPS journal will be discussed. A broader Editorial Board covering both all fields of physiology and the European nations, and the publication of abstracts from national meetings are important issues. Obviously the next joint meeting in Bratislava is high on the agenda. It takes place September 11-14, 2007, and is a joint venture between the Slovak Physiological Society, the Physiological Society and FEPS. The deadline for Symposia proposals already passed on February 15 this year, and a subcommittee will work out a preliminary program during the Munich meeting.

Let us meet in Munich – the place to be March 26-29 !

Hans Hultborn
President of the Federation of European Physiological Societies

Joint Meeting of The German Physiological Society and
The Federation of European Physiological Societies (FEPS)

Munich, March 26 - 29, 2006

Program

Program Committee

Prof. Dr. Busse, Frankfurt
Prof. Dr. Deußen, Dresden
Prof. Dr. Jelkmann, Lübeck
Prof. Dr. Jonas, Freiburg
Prof. Dr. Pfitzer, Köln
Prof. Dr. Pott, Bochum
Prof. Dr. Richter, Göttingen
Prof. Dr. Misgeld, Heidelberg

Prof. H. Hultborn, Copenhagen, Denmark
Prof. G. van der Vusse, Maastricht, Netherlands
Prof. B. Lumb, Bristol, United Kingdom
Prof. E. Sykova, Prag, Czech Republic
Prof. H. Murer, Zürich, Zwitzerland

Program Scheme

Time	Saturday, March 25th	Sunday, March 26th	Monday, March 27th	Tuesday, March 28th	Wednesday, March 29th
8:15-10:30	10:00 Satellite Symposium New and Emerging Techniques in Electrophysiologa	Young FEPS See special schedule	Symposia (SM1-SM6)	Symposia (ST1-ST6)	Symposia (SW1-SW6)
Pause					
10:45-11:45		Young FEPS See special schedule	Plenary Lecture (1)	Plenary Lecture (2)	Plenary Lecture (5)
11:45-12:30			Poster	Poster	Poster
Pause					
13:30-15:00	Satellite Symposium	5 Symposia (SS1-SS5) 4 Workshops for young physiologists (W1-W4) See special schedule	Orals (7x)	Orals (7x)	Orals (7x)
15:00-15:45			Poster	Poster	Poster
Pause					
16:00-17:30		Young investigators	Orals (7x)	Orals (7x)	Orals (7x)
Pause					
17:45-18:45		Young investigators	Plenary Lecture (2)	Plenary Lecture (4)	Plenary Lecture (6)
18:45		Opening/Welcome	Member's Assemblies	**Congress Dinner**	
20:30		Party for young FEPS			

Plenary lectures: speakers and topics

Monday	*Tuesday*	*Wednesday*
Plenary lecture (1) *Prof. Hannah Monyer, Heidelberg, Germany* Gabaergic interneurons and the role of inhibition in the brain	Plenary lecture (3) FEPS Lecture *Prof. Francois Verrey, Zurich, Switzerland* New epithelial amino acid transporters	Plenary lecture (5) *Prof. Ferdinand LeNoble, Maastricht/ Paris, the Netherlands,/France* Neural genes in branching morphogenesis and vascular development
Plenary lecture (2) *Prof. Avril Somlyo, Charlottesville, USA* Signaling by G-proteins, Rho-kinase and protein phosphatase to smooth and non-muscle myosin II	Plenary lecture (4) *Prof. López-Barneo, Seville, Spain* Oxygen sensing and ion channel function	Plenary lecture (6) Winner of the Dubois-Reymond Award (tba)

List of Symposia and Symposia speakers Munich 26-29, 2006

Sunday, March 26, 2006

	Symposia Titles	*Chairmen/ Proposers*	*Speakers*	*Title Topic*
SS1	Innovative methods in Teaching Physiology - Experiences with Problem Based Learing (FEPS)	Snoeckx	Luc Snoeckx	Teaching Physiology via Problem Based Learning. An introduction
			Carlo di Benedetta	The pros and contras in our experience for implementing the PBL and COE methodology in traditional Medical Schools
			Gillian Maudsley	Tutoring medical students in a problem-based curriculum : roles and realities
			Anne Custers	How do students experience PBL as a vehicle for learning Physiology
			To be confirmed	The relation between computer technology and PBL
			Mascha Verheggen	How can we reliably evaluate knowledge acquired via PBL
SS2	Purinergic mechanisms in muscle nociception	Ellrich	Alan North	Purinergics and peripheral pain mechanisms
			Ulrich Hoheisel	Excitatory effects of ATP on muscle afferents
			Eike D. Schomburg	Spinal sensorimotor control and purinergics
			Jens Ellrich	P2X receptors and neck muscle pain
SS3	New insights in cerebellar physiology	Kolb	Christopher H. Yeo	Cerebellar function in motor memory formation
			Steve A. Edgley	Information processing in cerebellar cortex
			Dagmar Timmann	Cerebellum and Cognition
			Matthias Maschke	Influence of cerebellar dysfunction on motor learning.
			Hans-Peter Thier	The cerebellar basis of motor learning
SS4	Gas channels in membranes	Gros	WF Boron	Role of aquaporin 1 for CO_2 permeation across the luminal membrane of the rat kidney proximal tubule
			R Kaldenhoff	The tobacco aquaporin NtAQP1 is a membrane CO_2 pore with physiological functions
			H Ehmke/ME Blank	Evidence for transport of molecular CO_2 across the red cell membrane by aquaporin 1 and AE1
			JP Cartron	Rhesus proteins constitute a pathway for gaseous NH_3
			G Gros/ V Endeward	Contribution of aquaporin 1 and Rh proteins to the CO_2 permeability of the human red cell membrane
SS5	Cardiovascular Genomics	Raizada	Andrew Baker	Viral vectors for cardiovascular gene therapy
			Robin Davisson	Physiological genomics of the cardiovascular system
			Julian Paton	Central cardiovascular control and neural gene transfer
			David Paterson	NO and cardiac functions
			Mohan Raizada	Gene therapy for hypertension
W1	Quantitative PCR			To be announced
W2	RNA Interference			To be announced
W3	Stem Cells			To be announced
W4	Career Planning			To be announced

Monday, March 27, 2006

	Symposia Titles	*Chairmen/ Proposers*	*Speakers*	*Title Topic*
SM1	Purinergic transmission in the nervous system	Verkhratsky	A. North, A. Verkhratsky H. Zimmermann Peter Illes O. Krishtal A. Nistri	Unitary purinergic EPSCs in cortical neurones Nucleotide signalling in adult neurogenesis Purinoreceptors in neuropathology P2X receptors as targets for opiates and cannabinoids Molecular physiology of P2X receptors
SM2	The mouse model for investigation of motor control in health and disease	Schomburg	Jens Ellrich Bror Alstermark Ole Kiehn Eike D. Schomburg	Long term depression of nociceptive reflexes in mice In vivo recordings of bulbospinal excitation in adult mouse forelimb motoneurones Physiological, anatomical, and genetic identification of CPG neurones in the developing spinal cord of the mouse Fatigability of spinal motor reflexes in the SOD1-G93A mouse – a model for ALS
SM3	The hypoxia response : from mussel to man	Gassmann	Doris Abele Thomas A. Gorr Roland Wenger Max Gassmann Joachim Fandrey Patrick Maxwell	The hypoxia response in mud clam and fish Drosophila and Daphnia in hypoxia The molecular response to hypoxia in mammals Hypoxia, HIF, Epo and excessive erythrocytosis Imaging hypoxia in mammalian cells The impact of HIF and CAIX in tumorigenesis
SM4	Cardio-mechano electric feedback: from pipette to patient	Kohl	Gerrit Isenberg Jean-Luc Balligand André Klebér Uli Schotten Peter Kohl	Effects of different modalities of mechanical stimulation (stretch, compression) on ion handling in cardiac myocytes and non-myocytes Endogenous Nitric Oxide mediates regulation of cardiac contractilityand Ca2+ responses to stretch Mechanical effects on cardiac action potential propagation Role of mechanical factors in initiation and sustenance of atrial fibrillation Mechanical interventions for initiation and termination of ventricular tachyarhythmia
SM5	Alveolar fluid transport: new insights into lung edema and injury	Kübler / Mairbäurl	Heimo Mairbäurl Stuart Wilson Thomas Jonassen Ardeschir Ghofrani	Alveolar fluid transport and the resolution of pulmonary edema Ion channels regulating alveolar fluid transport Adaptation of alveolar fluid transport in congestive heart failure Impaired alveolar fluid clearance in acute lung injury
SM6	Development of the cardiovasc. system: plasticity through genetic and environmental factors	Dragon	Rob Poelmann Carlos E. Blanco Bernd Pelster Bernd Fleischmann	Development-related changes in the expression of shear stress responsive genes in the developing cardiovascular system of chicken embryos. Effect of prenatal hypoxia on cardiovascular function of the adult Developmental plasticity of the cardiovascular system; blood distribution of the zebrafish incubated under hypoxic conditions in vivo. Embryonic stem cell-derived pacemaker and cardiomyocytes.

Tuesday, March 28, 2006

	Symposia Titles	*Chairmen/ Proposers*	*Speakers*	*Title Topic*
ST1	Blood vessels and nerves: common signals and pathways in development	NN	DG. Wilkinson	Diverse roles of eph receptors and ephrins in the regulation of cell migration and tissue assembly
			HG. Augustin	EphB receptors and ephrinB ligands: regulators of vascular assembly and homeostasis
			NN	to be announced
			EB Pasquale	Eph receptors in the adult brain
ST2	Calcium handling in normal and diseased heart	Sipido	Andrew Trafford	Adapting the systolic calcium transient to the influences of age and day length.
			Peter Vangheluwe	The critical role of SERCA2 affinity in the regulation of calcium handling and cardiac function
			Natal van Riel	Computational analysis of disturbed calcium handling in the intact heart
			Andras Varro	Calcium handling and cardiac arrhythmias
			Laszlo Ligeti	Calcium handling in the diabetic heart
ST3	GABA and epilepsy	Köhling	Kai Kaila	KCC2 and CA7 and their role in epilepsy
			Matthew Walker	Tonic activation of GABA receptors and epilepsy
			George Kostopoulos	Functional differentiation along the axis of the hippocampus and its relevance for epileptogenesis
			Marco de Curtis	Parahippocampal circuits and epileptogenesis
ST4	Mechanisms of glia axon communication and nervous system repair	Hülsmann	Arthur Butt	Calcium signalling in NG2-expressing glia
			Michael Sereda	Genetic defects of myelination: molecular pathogenesis of hereditary neuropathies (CMT1A)
			Eva Sykova	Glia, stem cells and biomaterials - working together to repair spinal cord injury
			Jacqueline Trotter	NG2-expressing cells in glial-axonrecognition and myelination.
			Norbert Weidner	Cell-contact mediated axonal regeneration in the injured spinal cord.
ST5	Molecular mechanisms operating in the normal and diseased proximal tubule: new insights and perspectives	Devuyst	Heini Murer / Carsten Wagner	Transport of amino acids, phosphate, and organic cations/anions in the proximal tubule
			Olivier Devuyst / Pierre Courtoy	Endocytosis in the proximal tubule: Insights from mouse models of renal Fanconi syndrome
			Erik I. Christensen	Lysosomal storage and Fabry disease
			Thomas Willnow / Anders Nykjaer	Multiligand receptors-derived strategies to prevent aminoglycoside-induced nephrotoxicity
ST6	Physiology and biophysics of KCNQ potassium channels	Friedrich	Holger Lerche	The retigabine interaction site of KCNQ channels
			Guiscard Seebohm	KCNQ1 kinetics and influence of the beta subunit KCNE1
			Thomas Jentsch	Insights into systems biology of KCNQ channels
			Jacques Barhanin	Gain-of-Function Mutations of KCNQ1 and KCNE2 in familial atrial fibrillation ?
			Álvaro Villarreal	Mechanisms underlying KCNQ2/3 heteromeric potassium M-channel potentiation?
			Michael Schwake	Interaction of antiepileptic drugs with KCNQ channels?

Wednesday, March 29, 2006

	Symposia Titles	*Chairmen/ Proposers*	*Speakers*	*Title Topic*
SW1	Versatility of intracellular signalling pathways: From receptor to network plasticity	Ponimaskin	Stefan Offermanns	Mouse models for study G-protein-mediated signalling
			Nevin Lambert	GABAB-receptor and IRK interactions
			Guillermina Lopez-Bendito	GRCRs in developing brain
			Evgeni Ponimaskin	New signaling pathways mediated by 5-HT receptors
			Weiqi Zhang	GABAB-receptor signalling in postnatal development
SW2	Cardiac physiology and pathophysiology in transgenic mice	Suleiman	K. Zacharowski	Knock-out mice and the role of cardiac Toll-like receptors
			D. Escande	Mouse models of cardiac arrhythmias and conduction defects
			K. Willecke	Expression and function of connexins in mouse heart
			Chris Jackson	Cardiac characteristics of ischaemically diseased mouse heart
			Costanza Emanueli	Cardiovascular pathology of kallikrein-kinin system in mouse
SW3	Aldosterone and vascular function	Skott	Martin Wehling	Rapid effects of aldosterone on vascular function
			Michael Gekle	Aldosterone signaling mechanisms: the role of EGFR.
			Hans Oberleithner	Aldosterone and endothelial cell function; lessons from the atomic force microscope.
			Ole Skøtt	Rapid effects of aldosterone on renal afferent arterioles.
			Allan D. Struthers	Effects of aldosterone blockade on endothelial function in patients; type 2 diabetes and heart failure
SW4	Chloride channels: structure function disease	Schwarz	Thomas Jentsch	Introduction and overview about ClC channels
			Michael Pusch	Biophysics and molecular pharmacology of Cl--transporting ClC proteins.
			Anselm A. Zdebik	Chloride-Proton exchangemediated by ClC Proteins
			Alessandro Sardini	Cell volume–regulated chloride channels
			Sheppard David N.Sheppard	CFTR: from physiology to clinic
SW5	Amino acid transporters: expression regulation and physiological role	King	Hari Hundall	Sensing and signalling mechanisms underlying the regulation of the System A amino acid transporter in response to changes in amino acid availability
			Ellen Closs	Regulation of cationic amino acid transporters (CATs)
			David Thwaites	PAT1 (SLC36A1) and the SLC36 family of proton coupled amino acid transporters
			Hannelore Daniel	Peptide transporters in E. coli and C. elegans: what can we learn from them?
			Matthias Brandsch	Transporters for proline and proline-containing peptides
SW6	Calcium Signalling	Garaschuk/ Parekh	Arthur Konnerth	Synapses/ Calcium and Neurotransmitter release
			Ole Petersen	Calcium Oscillations, Calcium Waves and the Pancreas
			Jose Lopez-Barneo	Calcium Signalling and Hypoxia
			Anant Parekh	Store-operated Channels and Cell Signalling
			Franz Hoffmann	Calcium Channels

Program for young FEPS

8:30-8:35	**Opening EYPS**		
8:35-9:15	**Keynote Lecture: Atherosclerotic Plaque Rupture, Esther Lutgens**		
9:15-10:15	**Oral 3x**		
Pause	**Poster set up**		
10:45-11:25	**Keynote Lecture: VEGF in Neurological Disease, Diether Lambrechts**		
11:25-12:05	**Oral 2x**		
Pause	**Lunch Moderated Poster Session I.**		
13:30-14:30	**I. Quantitative PCR (Biorad)**	**II. RNA interference (Invitrogen)**	**III. Stem Cells**
Pause	**Moderated Poster Session II.**		
16:00-17:30	**Young Investigator Award 4x**		
Pause			
17:45-18:45	**Young Investigator Award 4x**		
18:45-….	**Welcome Reception EYPS Award Ceremony**		
20:30-…	**EYPS Party**		

Joint Meeting
of
The Slovak Physiological Society
and
The Physiological Society
and
The Federation of European Physiological Societies

BRATISLAVA, September 11-14, 2007

Dear colleagues,

We are delighted to invite you to this Joint Meeting in the capital of Slovakia.
With your help, suggestions and participation the most rapidly developing areas and hot topics in Physiological Sciences will be adequately represented in plenary lectures, symposia, and open oral & poster presentations. Prompted by the overwhelming success of the European Young Physiologists Symposium in Munich, a special symposium will be organized by and for young European scientists. You will be informed on registration, abstract submission and hotel reservations soon.
We hope you will enjoy the science presented at the Joint Meeting and the friendly atmosphere in Bratislava, as well as its history, cultural life and beauty.

On behalf of the local organizers, Vladimir Strbák

Meeting of the Physiological Society hosted by University College London

London, July 5-7, 2006

Dear Colleagues,

We are pleased to announce that abstract submission for the next meeting of The Physiological Society being hosted by University College London from 5 to 7 July 2006 is now open.

Please visit our website for further deatails http://meetings.physoc.org/ucl/
We would be grateful if announcements could be made to your individual membership lists and would gratefully accept reciprocal web links.

All Special Interest Groups are active for this meeting. 16 symposia, three workshops and 7 Plenary/Prize Lectures have been scheduled with space for over 130 oral communications, posters and demonstrations.

A preliminary programme overview may be downloaded from http://meetings.physoc.org/ucl/PreliminaryProgrammev1.pdf and all symposia have now been finalised.

We look forward to welcoming you to London in July 2006.

With best wishes

Nick Boross-Toby
Head of Events

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http://physoc.org

The International Union of Physiological Sciences: IUPS Editorial

Akimichi Kaneko and Ole H. Petersen

Physiology 21:2-, 2006. Doi:10.1152/physiol.00061.2005

EDITORIAL

Akimichi Kaneko, IUPS President; Ole H. Petersen, IUPS Sec. General PHYSIOLOGY 21:2, 2006; 10.1152/physiol.00061.2005

The International Union of Physiological Sciences

IUPS Editorial

This is the first of a newly established series of IUPS Editorials in *Physiology*. We thank the Editor-in-chief, Walter Boron, for this opportunity to inform the readers of *Physiology* about the activities of the International Union of Physiological Sciences (IUPS).

The most important recent IUPS event was the 35th International Congress of Physiological Sciences held in San Diego, California, form 31 March to 5 April, 2005. This Congress had many new features, including a very successful series of tracks covering some of the most important current physiological themes. As part of Experimental Biology, there were ample opportunities to benefit from and participate in events organized by friendly neighboring subjects and for memebers of these other societies to see what physiologists had to offer. With more than 10,000 registered participants, this gave unprecendented exposure to physiological research at a time when this subject is undergoing a major revival.

The 35the IUPS Congress in San Diego provided a much needed replenishment of IUPS resources. We therefore have good reasons to be very grateful to the American Physiological Society (APS), not only for organizing a superb scientific event, but also for helping the IUPS rebuild our finances so that we may again plan major initiatives. As described in the 2004 and 2005 IUPS Newsletters (http://www.iups.org) the scientific program for the San Diego Congress was generated by the IUPS International Scientific Program Committee (ISPC) in cooperation with the APS under the chairmanship of Walter Boron. Walter did a fantastic job for which IUPS is extremely grateful.

The San Diego Congress also represented the crowning achievement of IUPS President Allen Cowley, Jr. Allen was an outstanding President, responsible for a major restructuring and streamlining of the Union's Commission Structure, which did much to facilitate the scientific programming process for the San Diego Congress.

During the San Diego Congress, the IUPS council (for composition see the IUPS web site mentioned above), chaired by Akimichi Kaneko, who at the General Assembly in San Diego was elected to succeed Allen Cowley as IUPS President, met several times and a number of important decisions were made. The following three are perhaps of particular significance:

1) A Long-Range Planning Committee (LRPC) was established under the chairmanship of Denis Noble, who served as IUPS Secretary General from 1993 until 2001, when Ole Petersen took over. Denis has since completed the composition of this key committee. We are grateful to Denis, Allen Cowley, Cecilia Hidalgo, and Yasunobu Okada for taking on this task. The committee will present its report, making recommendations on future IUPS activities, as well as their rescource implications, to the IUPS Council when it meets again in 2007. The LRPC is now seeking opinions from member societies and/or individuals on the future of the physiological sciences, the organization of IUPS, IUPS meetings, finance, relations with the International Council for Science (ICSU), the United Nations Educational, Scientific and Cultural Organization (UNESCO), International Brain Research

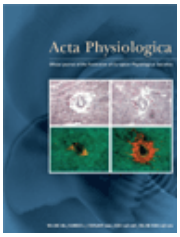
Organization (IBRO), and other international organizations, as well as on public relations. We are very interested in receiving opinions from a wide range of the scientific community. Anyone wanting to comment on these issues should write to Denis Noble via the IUPS Secretariat in Paris (e-mail: suorsoni@infobiogen.fr) before 15 May 2006.

2) council also elected a committee to come forward with specific plans for an Africa Initiative. Tony McKnight is chair with Ann Sefton and David Oyebola as members. The Committee is expected to develop a strategy to be presented to a funding agency to culminate in a major workshop in Africa in four years. Council has allocated seed money to get this potentially important initiative under way.

3) After four years of working with the Commission Structure established by the 2001 Council elected in Christchurch, New Zealand, it was decided to make some adjustments. Based on the experience of planning for the San Diego Congress, is was felt desirable to have a new Commission on Molecular and Cellular Biology. The two Commissions that had previously dealt with various aspects of the neurosciences were merged into one consolidated Neurobiology Commission. The new Commission Chairs are listed on our web site.

Although is may seem early, planning for the 2009 IUPS International Congress of Physiological Sciences is already under way. The 36th International congress of Physiological Sciences will be held in Kyoto, Japan, from 27 July to 1 August 2009. The IUPS ISPC has already been established. The (internationa) members elected by IUPS are: Yung Earm, South Korea; Malcolm Gordon, USA; John Hall, USA; Cecilia Hidalgo, Chile; Hans Hoppeler, Switzerland; Peter Hunter, New Zealand; Caroline McMillen, Australia; Ole Petersen, UK; Quentin Pittman, Canada; Irene Schulz, Germany; Ann Sefton, Australia; and Curt Sigmund, USA. Akimichi Kaneko, Japan, as IUPS President, Yoshihisa Kurachi, Japan, as Chair of the Local Scientific Program Committee, and Pierre Magistretti, Switzerland, as 2nd IUPS Vice-President, are Ex Officio members. The first meeting of the new ISPC will take place in Osaka, Japan, on 20 and 21 January 2006. At this meeting we shall establish the fundamental policy for the generation of the scientific program and specifically make a start to the selection of Plenary Lecturers. Some datails about the congress are already available at the IUPS web site.

In association with the 2006 January ISPC meeting, the IUPS Executive Committee will also get together, and in our next IUPS Editorial we hope to give information about the decisions made at these two meetings.



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