



Comparative Physiology Section Newsletter October 2000

Greetings! Let me express our hopes that this newsletter finds all of you enthusiastic about the upcoming months, which promise superb meetings around the world for comparative physiologists. Some details of these meetings are included in this newsletter. It is also time to vote on the position of treasurer of the Comparative Physiology Section and short biographies and a ballot is included in the mailing.

Now is the time to get serious about Experimental Biology 2001 in Orlando, Florida March 31 – April 4. **The deadline for abstracts is November 6.** This is another big year for comparative physiology and hopefully we'll see you there. The entire schedule is available on-line at http://www.the-aps.org/meetings/eb/aps_program.htm. A new aspect this year is that anyone presenting a featured topic talk will also be required to present a poster. Some meeting highlights are:

August Krogh Distinguished Lectureship

Tuesday, April 3, 2:00 PM

Conservation and Adaptation in Evolution of Human Hypoxia Response Physiology
Peter Hochachka, University of British Columbia

SYMPOSIUM:

Monday, April 2, 10:15 AM

Life, Sex and Death: The Physiological Basis of Life-History Traits and Trade-Offs
Tony D. Williams and Barry Sinervo

FEATURED TOPIC:

Tuesday, April 3, 8:00 AM

Comparative Aspects of Circadian Organization in Vertebrates
Michael Menaker and Carla Green

FEATURED TOPIC:

Tuesday, April 3, 3:15 PM

Cell Stress and Protein Kinases: Integrated Signaling in vivo
Kenneth B. Storey

FEATURED TOPIC:

Sunday, April 1, 10:15 AM

The Evolution and Modification of the Hypercapnic Ventilatory Response
William K. Milsom and Steve F. Perry

Hopefully this list of topics will provoke some ideas for other subjects. We need suggestions for symposia and featured topics for the Experimental Biology meeting, Spring 2002. Please send ideas (as simple as a title) to jhicks@uci.edu by March 1, 2001. If we cannot fill the slots allotted to our section (one symposia and three featured topics), we will lose them, so this is the time to put your best ideas forward.

The Comparative Section Young Investigator Award (\$500) will provide 3 travel awards for recognition of meritorious research by young investigators who participate in the annual Experimental Biology meeting. Candidates must have completed their Ph.D. within the past 10 years, be a member of APS, and must present a talk or poster at the EB meeting. The subject matter can be any topic that deals with comparative physiology. Applicants should submit their abstract, a one-page CV, and a one-page summary of research accomplishments and goals via email to David H. Evans, Ph.D., Chair of the Comparative Section (devans@zoo.ufl.edu) by Jan. 15, 2001 for review by the section Steering Committee. The winners will be notified by email by Feb. 15, 2001, and the award will be presented at the Business Meeting of the Section during the EB meeting.

Fall of the same year (2002) is the APS sponsored conference on Comparative Physiology in San Diego, CA. The conference, tentatively entitled "The Power of Comparative Physiology: Evolution, Integration and Applied", should interest all of us.

Here is a list of the currently scheduled symposia:

Symposium Title	Organizer
Cellular And Molecular Responses To Cold And/Or Metabolic Depression.	Hannah Carey
DNA Microarrays: Applications To Comparative Physiology	Andy Gracey
Mitochondrial Responses To Environmental Challenge	Chris Moyes
Neuropeptides Integrating Physiological Processes In Invertebrates: An Evolutionary And Comparative Approach	Gerd Gaede <i>and</i> Klaus Hoffman
Evaluating The <i>In Vivo</i> Performance Of Muscular Systems: Mechanisms That Reduce The Cost Of Locomotion And/Or Enhance Performance	Andrew Biewener <i>and</i> Richard Marsh
Phylogenetic Approaches To Understanding Physiological Evolution	Ted Garland
The Influence Of Comparative Physiology On Engineering: Neuro-Muscular Biological Inspiration Toward The Design Of Artificial Muscles And Robots	Robert Full
The Physiological And Genetic Responses To Stressful Environments	Gretchen Hoffman <i>and</i> Martin Feder
Polar Molecular Biology: Proteins And Enzymes At Their Temperature Extremes	Dave Petzel
The Power Of Integration	George Lauder
Diving Physiology: Where Have We Been And Where Are We Going?	Dave Jones
The Comparative Physiology Of Carbonic Anhydrase	Katie Gilmour <i>and</i> Steven Perry
Acclimatization To Hypoxia: Supply Vs. Demand Strategies	Frank Powell
Regulation Of Vertebrate Renal Function: A Comparative Approach	William Dantzler <i>and</i> Eldon Braun
Developmental Physiology: Plasticity And Constraints	Donald Manahan <i>and</i> Steve C. Hand
Relaxed Heterothermia	Peter Frappell <i>and</i> Pat Butler

If you have questions for the steering committee, the current members are listed below and contact information can be found at <http://www.summa-research.org/compsec/steering.html>.

David Evans	Chair and SAC Representative	Michele G. Wheatly	Committee on Committees
Siribhinya Benyajati	Treasurer	Steve Wood	Industrial Liaison Committee
Jim Hicks	PAC Representative	Hiroko Nishimura	AJP Representative
Stan L. Lindstedt	Councilor	Steve Warburton	Secretary

Other upcoming meetings

Annual Meeting Society for Experimental Biology – Canterbury, England 2-6 April 2001. For more information see <http://www.sebiology.com>

The Roles of Experimental Biology in the Protection of Endangered Species and the Control of Species – University of California, Los Angeles 12-14 September 2001.

Subject areas to be covered will include (but will not be limited to):

i) Comparative physiology of endangered and exotic species in the wild; ii) Comparative physiology of captive breeding of endangered species; iii) Genetic engineering for species survival and exotic species control; iv) Microbiological and endocrinological approaches to control of exotic species; v) Integrating experimental scientific results into policy making for protection of endangered species and control of exotic species.

Additional information about the conference is given at their website:

<http://www.ioe.ucla.edu/biodiversity/index.html>. Inquiries may be addressed to conference co-Chair, Dr. Soraya M. Bartol, at smbartol@ucla.edu.

34th International Congress of Physiological Sciences, Christchurch, New Zealand, 26-31 August 2001. The comparative physiological components of the scientific program are relatively limited in number, but should be of interest to many members of the Section. There will be four symposia, with associated poster sessions, that will be primarily comparative. Their titles are: "Thermal adaptations," "Cardiovascular adaptations to the Environment," "Starvation as a normal feature of animal life histories," and "From philosopher to fish." A number of other sessions are likely to include comparative topics as well. Look at the Congress website for details: <http://www.iups2001.org.nz>.

Planning is in progress for the **6th International Congress of Comparative Physiology and Biochemistry**, sponsored by IUBS, which will take place in southern Australia in August 2003. Major decisions about the symposia for that Congress will be made by the International Organizing Committee (IOC) for the Congress at a meeting to take place at the Christchurch Congress next August. Russ Baudinette, IOC chair, will issue a formal call for symposium suggestions later this year. The Comparative Section is a participant in these Congresses and will be authorized to suggest up to five symposia for the program. Probable deadline for receipt of full proposals for symposia is likely to be March 2001. If you are interested in participating you might appreciate having an early start on planning. Malcolm Gordon is the Section representative on the IOC (msgordon@ucla.edu).