



Environmental & Exercise Physiology Section Newsletter

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EEP To Use New Format For Business Meeting/Social Event at EB 04

In past years the EEP section traditionally held separate events for the business meeting and the annual banquet, with attendance quite variable for both events depending on the location of the meeting. In order to attract a wider audience, especially the young investigators that attend the meeting, we will use a different format that hopefully will create a much less formal setting for EEP member interaction. We propose to use the following format: 1) hold the annual business meeting on Monday, April 19 in the Hyatt McPherson Square Room at 6:00 PM, which will last ~45 minutes; 2) present the predoctoral/postdoctoral student/young investigator awards and the EEP Honor Award, which will be followed by a short presentation by the honor award recipient; 3) following these transactions, we will immediately transition into an informal social gathering with hors d'oeuvres and assorted beverages (cash bar) that hopefully will be enjoyed by all in attendance. The latter will be used in place of the annual banquet in order to generate more interaction among the EEP membership. A small fee will be charged for those academicians attending the social to help cover some of the expenses.

John Greenleaf to Receive The 2004 EEP Honor Award



The EEP Section will bestow its highest honor on Dr. John E. Greenleaf on Monday, April 19th at the EEP Awards Program to be held at the Grand Hyatt Hotel McPherson Square Room at 7:00 PM. Dr. Greenleaf is a 1963 graduate of the Department of Physiology at the University of Illinois who had the privilege of having Professor Robert E. Johnson as his mentor. After graduation, he established the Laboratory for Human Environmental Physiology in the Life Sciences Division at NASA Ames Research Center in Moffett Field, CA, which he directed until his recent retirement from governmental service. While directing the laboratory, he held adjunct professor positions at San Francisco State University, the University of California at Davis, the University of Northern Colorado, the University of Occupational and Environmental Health (Kitakyushu-Japan), as well as a Visiting Scientist Position at the Danish Aerospace Medical Centre of Research in Copenhagen.

Early in his career, Dr. Greenleaf studied the effects of dehydration and re-hydration on orthostatic and acceleration tolerance of men and women. In fact, he was the first investigator at NASA to include women in his experimental designs. His research indicated that oral rehydration was essential to maintain fluid homeostasis in micro-and-

hyper gravity conditions; and he was instrumental in NASA adopting fluid composition and consumption procedures before spacecraft re-entry during the return to a 1-G environment. He also formulated the patented fluid beverage (AstroAde) recommended for such circumstances.

Dr. Greenleaf will be remembered for his pioneering exercise training studies conducted under simulated microgravity conditions, because they provide the foundations for the exercise prescription required for the explorations of planets (Mars) or for the colonization of space. Equally noteworthy are his innovative thermal investigations in simulated microgravity conditions, with and without exercise, that indicate temperature regulation mechanisms will change and must be considered in planning future extravehicular and space exploration activities.

Dr. Greenleaf is acknowledged for being a scholar and a prodigious author in the environmental and exercise sciences. He was steadfast (and alone) in promoting physiological research and scientific exchange in Poland during the “Cold War Era” and this practice still continues. He has been recognized by The University of Illinois as a Distinguished Alumni; by NASA for the prestigious Ames Associate Fellowship, and by The American College of Sports Medicine with a Citation for scientific achievement. These collective accomplishments make him uniquely qualified to receive the Section’s highest honor. The title of his presentation will be WATER:TO DRINK OR NOT.

The Adolph Lecture at Experimental Biology, 2004

Will Be Presented By V. Reggie Edgerton



Dr. V. Reggie Edgerton, Professor of Physiological Sciences and Acting Director of Brain Research Institute at the University of California, Los Angeles, has been selected by the EEP Steering Committee to present the Adolph Lecture at the EB Meeting in Washington, D.C. Dr. Edgerton is an international leader in the integrated fields of Exercise Physiology, Space Physiology, Muscle Plasticity, and the Neural Control of Movement. Also, he is recognized as a pioneer in the evolving field concerning plasticity of the central nervous system and spinal cord. His recent research on the locomotor pattern generator in spinal cord injured patients has

revolutionized the thinking and strategies for treating these individuals. This is illustrated by the clinical trials that are now becoming a common practice, which were predicated on the findings of Edgerton and his colleagues. The topic of his lecture will be the “learning and memory of the spinal cord”. The lecture will be presented on Tuesday, April 20, 2004 at 8:00 AM in Room 146C in the Convention Center. We look forward to seeing you there!

Student Abstract Awards Announcements

The EEP Steering Committee has selected the following students for the prestigious and highly competitive Abstract Awards:

Pre-doctoral Category:

Gatorade Award: **R. Bridge Hunter; Boston University**

Military Physiology Award: **Wook Song; Texas A & M University**

APS Proctor & Gamble Award: **Jordan Millar; University of Wisconsin**

EEP Recognition Award: **Chadwick Wright; Ohio State University**

EEP Recognition Award: **Chad Hancock; University of Missouri**

Post-Doctoral Category:

Gatorade Award: **Kyle Henderson; University of Missouri**

Military Physiology Award: **Richard Ho; Joslin Research Center, Boston, Mass.**

EEP Recognition Award: **Benjamin Miller; Bispebjerg Bakke Hospital, Copenhagen,**

EEP Recognition Award: **William Schrage; Mayo Clinic, Rochester, MN**

The students will be recognized at the annual business meeting on Monday, April 19 and they are invited to the Adolph Lecture Student Luncheon to be held at Noon on Tuesday, April 20.

EEP New Investigator Award Recipient is Dr. Frank Dinunno, Colorado State University

Dr. Frank Dinunno, Assistant Professor of Health and Exercise Science, at Colorado State University was selected by the EEP Steering Committee as the 2004 recipient of the APS New Investigator Award for the EEP section. Dr. Dinunno was recognized for his outstanding training and his research accomplishments, which focus on the effects of exercise, hypoxia, and autonomic regulation of skeletal muscle blood flow in adult and aged subjects. Dr. Dinunno will receive his award following the EEP annual business meeting, which will be held on Monday, April 19 at 6:00 PM.

Graduate Students and Post Docs Invited to The Adolph Lecture Luncheon

Graduate Students and Post Docs attending the Experimental Biology Meeting in Washington, D.C. are invited to attend a luncheon in honor of Dr. V. Reggie Edgerton, who will deliver the EB 2004 Adolph Lecture (see above). The luncheon is scheduled for 12:15 PM on Tuesday, April 20, 2004 in the Grand Hyatt Washington (1000 H Street,

NW). Reservations are limited to 25 people, and interested individuals must contact the host, Kenneth M. Baldwin at UC Irvine (phone: (949)-824-7192; fax: (949) 824-8540; email: kmbaldwi@uci.edu). Make your reservations now.

EEP Program Highlights For Experimental Biology 2004 in Washington, DC

The 2004 Experimental Biology Meeting will be held in Washington, DC from Saturday, April 17 to Wednesday, April 21.

Program Symposia and Featured Topics Relevant To EEP Membership

Saturday: April 17; 5:45 PM Walter Cannon Award Lecture

Human Genetics: New Clues for Physiology and Pathology

Sunday, April 18;

Symposia on Insulin-Dependent Exercise Signaling **10:30-12:30 AM**

Featured Topic on Control of Muscle Blood Flow During Exercise **3:15-5:15 PM**

Monday, April 19

Symposia on Sympatho-Adrenergic Reflex With Aging **8:00-10:00 AM**

Symposia on Redox Control of Skeletal Muscle **10:30 -12:30 AM**

Featured Topic on Muscle Fatigue **3:15-5:15 PM**

Tuesday, April 20

Adolph Lecture: Learning and Memory of the Spinal Cord **8:00-9:00 AM**

Symposia on Physical Activity: A Drive for Central Neural Activity **3:15-5:15 PM**

Historical Lecture Commemorating Pavlov: The 1904 Nobel Prize **12:45-1:45 PM**

Wednesday, April 21

Adaptation to Exercise Stress: Mechanisms of Protection **8:00-9:00 AM**

Special Topic on CV and Respiratory Constraints on Exercise **10:30-12:30 AM**

Symposium: The Saga of Fever: **10:30-12:30 AM**

From the APS Liaison With Industry Committee (LWIC)

(EEP Section Representative: Jeff Zachwieja)

The LWIC is sponsoring a Workshop entitled "**High Content Biology: Multiplexing in Cell Physiology**" at EB2004 on Monday, April 19 from 3:15-5:15 pm in Convention Center 146A. This workshop will describe novel methods for simultaneous analysis of multiple endpoints in cells and biochemical settings. The program is as follows:

High content screening approaches in functional characterization of obesity related GPCR's. A.F. Hoffman, Roche Discovery Technologies.

Illuminating erythropoietin receptor signal transduction. P. Tagari, Amgen Inc.

High-throughput mutational profiling in human samples. E.R. Mardis, Washington Univ. Sch. of Med.

Patterns of phosphorylation as cellular response signature. R. Zivin, Johnson and Johnson

The Novel Disease Model Award will be granted to a graduate student and a postdoctoral fellow who submit the best abstracts at EB2004 that describe a novel disease model. The model can be in vitro or in vivo but should clearly emphasize the potential utility of the system for future research related to a disease. The award is \$500 for the graduate student and \$800 for the postdoctoral fellow and is sponsored by the LWIC. Winners will be honored at the EB 2004 APS Business meeting in Washington, D.C.

You're invited! Come meet and eat with your fellow physiologists who are working in the corporate sector. The 4th Annual APS Liaison With Industry Committee Mixer is scheduled for Monday at 5:30, Hyatt Constitution E.

Mark Your Calendar For October 6-9 in Austin, Texas

The 2004 Intersociety Meeting on the Integrative Biology of Exercise will be held in Austin, Texas on October 6-9 at the Hilton Hotel. This meeting is the fourth in a series, and **Ron Terjung**, Chair Elect of the EEP and the Meeting Organizer, promises the meeting to be another great one. Featured Topics will include Mechanical Signal Conduction in Musculoskeletal Remodeling; Cytokines, Muscle and Metabolism; AMP-Activated Protein Kinase in Metabolic and Transcription Processes; Genetic Engineering and Muscle Performance; Regulation of Blood Flow to Exercising Muscles; Design of Muscle For Different Functions; Interpreting Physiological Adaptations to Exercise and Disease States Through Bioinformatics, Genomics, and Proteomics; Mechanical Forces and Signaling in Vascular Remodeling; Mechanisms of Inactivity-induced Disorders; Comparative Biomechanics and Muscle Function in terrestrial Vertebrates; Exercise-Induced Injury and Repair of Skeletal Muscle; Striated Muscle Hypertrophy Factors in Controlling Enlargement and Phenotype transformations. Abstracts Due May 12, 2004. For more information go to www.the-aps.org; or meetings@the-aps.org.