



# APS: Environmental & Exercise Physiology Section Newsletter

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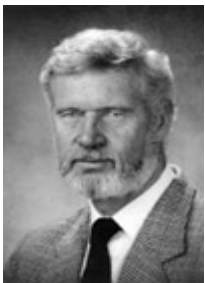
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## 1. EEP 2007: San Diego, April 5-April 9

*Please Note:* Pre-doc and Post-doc Trainees: Eight Research Awards (Item #5 below).  
EEP Student Luncheon with Adolph Lecturer – Noon, Monday April 7<sup>th</sup>, Marriott Hotel (Item #4 below).  
EEP Section Awards/Social will be: 6:00 PM Monday April 7<sup>th</sup>, Marriott Hotel (Item #13 below).  
Selected Program sessions of interest to EEP members: (Item #6 below).

## 2. Brian J. Whipp, Ph.D., D.Sc. to Receive the 2008 EEP Honor Award



The EEP Section is pleased to announce that Dr. Brian J. Whipp, Principal Research Fellow and Visiting Professor Institute of Membrane and Systems Biology University of Leeds, Leeds, UK, will receive the EEP Honor Award for 2008. Brian Whipp has made a significant contribution to human exercise physiology and the American Physiological Society over the past three decades. He has produced seminal work in three discrete areas: skeletal muscle bioenergetics, pulmonary gas exchange and ventilatory control. His emphasis on systems analysis and mathematical control techniques has had a significant impact on modern experimental techniques and design (e.g. breath-by-breath gas exchange monitoring; dynamic forcing of end-tidal gas tensions; <sup>31</sup>P-nuclear magnetic resonance spectroscopy), and provided a valuable contemporary perspective on aspects as diverse as ATP status in skeletal muscle and blood acid-base regulation, and how these are challenged at the limits of physical performance in health and disease. Dr. Whipp and his colleagues at Harbor-UCLA Medical Center were pivotal in the development of cardiopulmonary

exercise testing and interpretation of clinical populations into an international “gold standard” of clinical practice.

### 3. The Adolph Lecture -- presented by Ronald L. Terjung, Ph.D.



The EEP Section is pleased to announce that Dr. Ronald L. Terjung will be the 2008 Edward F. Adolph Distinguished Lecturer. His lecture title will be “*Vascular Adaptations Induced by Exercise*”. Dr. Terjung holds positions at the University of Missouri as Professor and Associate Chair, Department of Biomedical Sciences, College of Veterinary Medicine, Professor Department of Medical Pharmacology and Physiology, College of Medicine, Senior Investigator, Dalton Cardiovascular Research Center, and Associate Dean for Research and Graduate Studies. Dr. Terjung has over 130 peer-reviewed publications and reviews of research dealing with skeletal muscle, energy metabolism, cardiovascular function and remodeling and the acute and adaptive changes caused by physical activity. He has participated in more than 30 national and international scientific conferences. Dr. Terjung's research activities have been continuously funded by NIH through the Musculoskeletal Disease Program of the National Institute of Arthritis Musculoskeletal and Skin Diseases (30 years); the Cardiovascular Disease Program of the National Heart Lung and Blood Institute (17 years); the Local and National American Heart Associations; the Muscular Dystrophy Association; the Poland-U.S. Maria Sklodowska-Curie Joint Fund II; and various private corporation grants.

### 4. Graduate Students and Post-Docs Invited to The Adolph Lecture Luncheon

Graduate Students and Post-doctoral Trainees attending EB2008 are invited to attend a luncheon to meet with Dr. Ronald Terjung, who will deliver the 2008 Adolph Lecture.

Time: Monday, April 7<sup>th</sup>

Where: APS headquarters hotel (San Diego Marriott; specific room to be determined)

Cost: free

Contact: Mike Sawka ([Michael.sawka@us.army.mil](mailto:Michael.sawka@us.army.mil)) (limited to first 20!)

### 5. EB 2008 – Eight Awards and Abstract Submission for Competition

The EEP Section offers the largest number of awards for trainees. There are four pre-doc- and four post-doc awards available and eligible candidates are encouraged to apply for all awards. Take advantage of these opportunities! Refer to the [EEP Awards web site \(http://www.the-eps.org/meetings/eb08/awards/environmental.htm\)](http://www.the-eps.org/meetings/eb08/awards/environmental.htm) for a full description of these awards. The awards are judged for their scientific merit by the EEP Advisory Committee from those abstracts submitted for consideration.

- **EEP Recognition Award for Pre-doctoral Students** (\$500 plus reimbursement of the annual meeting advance registration fee) is presented to one or more pre-doctoral graduate students whose investigations are in environmental, exercise, or thermal physiology.
- **EEP Recognition Award for Beginning Investigators** (\$500 plus reimbursement of the annual meeting advance registration fee) is presented to one or more post-doctoral trainees whose investigations are in environmental, exercise, or thermal physiology.
- **EEP Gatorade Award for Young Investigators** (\$600 plus reimbursement of the annual meeting advance registration fee) is presented to a pre-doctoral graduate student whose investigation is in environmental, exercise, or thermal physiology.

- **EEP Gatorade Award for Beginning Investigators** (\$750 plus reimbursement of the annual meeting advance registration fee) is presented to a post-doctoral trainee whose investigation is in environmental, exercise, or thermal physiology.
- **EEP Military Physiology Award for Graduate Students** (\$600 plus reimbursement of the annual meeting advance registration fee) recognizes outstanding research of a graduate student working in the area of environmental, exercise, or thermal physiology with relevance to the mission of the U.S. Armed Forces.
- **EEP Military Physiology Award for Beginning Investigators** (\$750 plus reimbursement of the annual meeting advance registration fee) recognizes outstanding research by a post-doctoral fellow or equivalent working in the area of environmental, exercise, or thermal physiology with relevance to the mission of the U.S. Armed Forces.
- **EEP Gravitational Physiology Award for Pre-doctoral Students** (\$600 plus reimbursement of the annual meeting advance registration fee) recognizes outstanding research of a graduate student working in the area of gravitational physiology with relevance to the mission of the National Space Biomedical Research Institute.
- **EEP Gravitational Physiology Award for Beginning Investigators** (\$750 plus reimbursement of the annual meeting advance registration fee) recognizes outstanding research of a post-doctoral trainee working in the area of gravitational physiology with relevance to the mission of the National Space Biomedical Research Institute.

Please note, that ***only those abstracts submitted to EEP-specific abstract categories are eligible for consideration for an EEP Award.*** Therefore, if you wish to have your abstract considered for an EEP pre- or post-doc awards, it is essential to submit your abstract under one of the following EEP categories:

EEP Featured Topics:

1120-APS: Role of ROS & NO in contraction stimulated glucose uptake in skeletal muscle. (Featured Topic)

1121-APS: Satellite cell regulation with aging and exercise. (Featured Topic)

EEP Poster Sessions:

1122-APS: Altitude and hypoxia

1123-APS: Cardiovascular responses to exercise

1124-APS: Circadian and biological timekeeping

1125-APS: Diving and hyperbaria

1126-APS: Exercise metabolism and locomotion

1127-APS: Exercise responses and training

1128-APS: Fever and hypothermia

1129-APS: Gravitational and space

1130-APS: Metabolism in muscle

1131-APS: Muscle plasticity & gene regulation/expression

1132-APS: Responses to physical inactivity

1133-APS: Signaling in muscle

1134-APS: Temperature regulation & fluid balance

These categories should be considered in their broadest context.

## 6. EB 2008 --- Selected EB Program Sessions of Interest

Symposium - Exercise Prescriptions For Prolonged Space Flight, Per Tesch

Symposium - Skeletal Muscle Mitochondrial Function and Dysfunction with Age, David Hood

Symposium - Role of ROS and NO in Contraction-Stimulated Glucose Uptake in Skeletal Muscle, Michael Reid

Symposium - Exercise, Oxidative Stress, and Endothelial Function, Shane Phillips

Symposium - Cytokines, Inflammation and Autonomic Regulation, Michael Kenney and Robert Felder

Symposium - Temperature Sensing by TRP Channels, Jie Zheng

Symposium - Mechanisms of Metabolic Depression, Frank van Breukelen and Jason Podrabsky

Symposium - Energy Balance and Circulatory Control: central Pathways and Mechanisms, Greg Fink and J.R. Haywood.

Symposium - Impact of Obesity on Cardiovascular Function: Role of Inflammation, David Stepp and Jonathan Tune

Symposium - Role of Carotid in Oxygen Homeostasis, Sukhamay Lahiri

Feature Topic - The Antiquity of Exercise, Exercise Physiology, and the Exercise Prescription for Health, Charles M. Tipton and Suzanne M. Schneider

Feature Topic - Diving Physiology of Mammals and Birds, Andreas Fahlman

Feature Topic - Signaling and Control of Skeletal Muscle Remodeling, Ruud Schilder

EEP Featured Topic - "Role of ROS and NO in contraction-stimulated glucose uptake in skeletal muscle". (This is an EEB sponsored Featured Topic, **Please submit your abstracts**)

EEP Featured Topic - "Satellite Cell Regulation with Aging and Exercise". (This is an EEP sponsored Featured Topic, **Please submit your abstracts**)

Feature Topic - Muscle Fatigue, Jean-Marc Renaud

Feature Topic - Energy Balance, Cancer and Diabetes, Thomas M. Nosek

Workshop - Exercising the Metabolome, David G. Parkes and Alastair V. Ferguson

Workshop - Mining the Metabolome, Willis K. Samson and Michael Hanley

## 7. APS EEP New Investigator Award

Applications are welcome from all investigators who have made meritorious contributions to the areas represented by the EEP Section, are not above the rank of Assistant Professor or a comparable position in a research track at an academic institution or in industry (e.g. Scientist, Sr. Scientist, Research Investigator, etc.), and are a member of APS in good standing. **Nominations are made by at least two regular members of the APS.** Candidates will be judged on their publications, how the publications relate to the EEP Section and evidence for independence and promise (grant funding, peer review activities, etc.). This is not an abstract-based award; however, awardees are expected to attend EB, the EEP Reception for receipt of the Award, and make an oral or poster presentation. Attention: **Applications are due by November 8, 2008.** Please see the APS web site for description and instructions.

## 8. Call for Nominations

EEP Councilors, Adolph Lecturer, EEP Honor Award.

In order for the EEP Section to represent the interests and concerns of its membership and to promote environmental, thermal, and exercise physiology within the society, it is essential that the EEP Steering Committee maintains dedicated, competent and energetic physiologists. We need your assistance in identifying such individuals, to serve as EEP Councilors, before the April meeting in San Diego, CA. Specifically we need the following:

• **Nominations for EEP Steering Committee members: Councilor for Thermal Physiology and Councilor for Exercise Physiology.** These two Councilors will replace representatives completing

their 3-year term. Please send your recommendations to Mike Sawka ([michael.sawka@us.army.mil](mailto:michael.sawka@us.army.mil)) as soon as possible. Please include a brief comment for your recommendation; if possible, include a NIH-type Biographical sketch for each nominee. EEP Councilors provide section leadership for EB Programming, awards and all other operational issues. Nominees will be reviewed by nominations committee and final candidates are elected by EEP membership voting.

• **Nominations for the 2009 Edward F. Adolph Distinguished Lectureship.** (\$1,000 plus up to \$2,000 travel reimbursement to EB and complimentary registration to the meeting) is given to an eminent research scholar contributing to the areas of environmental, exercise and/or thermal physiology. Recipients are recognized at the EEP Awards Reception at the EB meeting. Candidates must provide copy of their curriculum vitae. All application materials should be submitted online ([www.the-aps.org/awardapps](http://www.the-aps.org/awardapps)). Questions should be directed to Michael N. Sawka, EEP Section Chair, [michael.sawka@us.army.mil](mailto:michael.sawka@us.army.mil). Past lecturers are: 1994 - B. Saltin, 1995 - L.B. Rowell, 1996 - J.T. Reeves, 1997 - C. Jessen, 1998 - K. Baldwin, 1999 - J.O. Holloszy (in place of deceased E.R. Nadel), 2000 - E. Simon (in place of deceased C.V. Gisolfi), 2001 - G. Brooks, 2002 - P.D. Wagner, 2003 - J. Mitchell, 2004 - V. Reggie Edgerton, 2005 - E.A. Richter, 2006 - F.W. Booth, 2007 - J. Boulant, 2008 - R.L. Terjung.

• **Nominations for the 2009 EEP Honor Award** (candidate must be at least 60 yrs of age; (\$1,250 plus reimbursement of the annual meeting advance registration fee). Award recognizes previous or current primary member of the EEP Section who made significant research contributions to the scientific advancement of environmental, exercise, or thermal physiology while enhancing the educational objectives of the section. Applicants must provide a copy of their curriculum vitae. Awardees are recognized at the EEP Awards Reception at the EB meeting. All application materials should be submitted online ([www.the-aps.org/awardapps](http://www.the-aps.org/awardapps)). Questions should be directed to Michael N. Sawka, EEP Section Chair, [michael.sawka@us.army.mil](mailto:michael.sawka@us.army.mil). Past recipients are: 1987 - Bruce Dill, 1988 - Pharo Gage, 1989 - Sid Robinson, 1990 - Robert Grover, 1991 - Robert E. Johnson, 1992 - Steve Horvath, 1993 - Elsworth Buskirk, 1994 - Edgar Folk Jr., 1995 - Suski Hong, 1996 - Harold Ted Hammel, 1997 - Charles M. Tipton, 1998 - John Faulkner, 1999 - Jack Reeves, 2000 - X. Joseph Musacchia, 2001 - Charles Senay, 2002 - David Robertshaw, 2003 - Clark Blatteis, 2004 - John Greenleaf, 2005 - Jack Boulant, 2006 - Kenneth M. Baldwin, 2007 - Jere Mitchel, 2008 - Brian J. Whipp.

## 9. Call for EEP Symposium & Featured Topic Suggestions for EB 2009

Call for program suggestions for EB2009. This is a good opportunity to become involved in EEP Section program development. Two types of program offerings can be developed: 1) Symposium, and 2) Featured Topics. **The forms are available online.** It is essential that all the information requested on the form be provided. Send your proposals to P. Darrell Neuffer ([NEUFERP@ecu.edu](mailto:NEUFERP@ecu.edu)) Deadline is **February 1, 2008.**

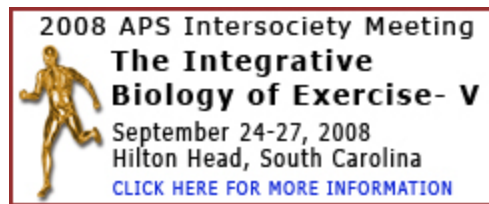
## 10. Welcome New EEP Members!

The following new student and regular members are welcomed to the EEP family consisting of over 1300 Primary and Secondary members. Regular Members: Kevin Currell, Tammi Sue Epp, Lacy A. Halowitz. Student Members: Anni Ember, Alan Kane,

## 11. Integrative Biology of Exercise V.

The APS Intersociety meeting, *Integrative Biology of Exercise V*, is planned for September 24-27, 2008 at Hilton Head, South Carolina. The Abstract submission deadline is June 2, 2008, and the

Advanced registration Deadline is August 25, 2008. The 2008 meeting will be the fifth meeting in the series that has convened every 4 years. The first Integrative Biology of Exercise was held in Colorado Springs in 1992, under the able leadership of Peter Wagner. The Organizing Committee expects that *Integrative Biology of Exercise V* will continue the success of the past meetings. More information is available at the APS website.



## 12. NIH Announces New Loan Repayment Campaign

NIH has launched a new campaign to promote their various loan repayment programs (LRPs). From September 1 to December 1, 2007, the NIH will accept applications for loan repayments of up to \$35,000 annually. The programs also provide coverage for federal and state tax liabilities, more information can be found at the appropriate web site.

<http://www.nih.gov/news/pr/sep2007/od-06a.htm>

## 13. EEP Steering Committee & Issues

If you have any questions, issues or ideas please feel free to discuss them with your EEP Steering Committee members (below). One item for discussion is the format of the EEP Section Meeting. The past 2 years (and this year), have employed the following format: brief EEP update by Chair, award presentation and social hour (cash bar) with complimentary hor'devours. Prior formats consisted of a business meeting with a separate awards dinner. Any suggestions / comments on preferences for future EEP meeting formats, or any other issues, should be communicated to Mike Sawka. Listed below are the EEP Steering Committee member names and phone numbers.

Chair - Michael Sawka (508) 233-5665  
Joint Program Committee Representative - P. Darrell Neuffer (252) 737-1551  
Exercise Physiology Councilor - David Hood (416) 736-2100  
Exercise Physiology Councilor - Scott William Trappe (765) 285-1145  
Environmental Physiology Councilor - Vincent Caiozzo (949) 824-7752  
Environmental Physiology Councilor - Robert Roach (303) 724-1670  
Thermal Physiology Councilor - Samuel Cheuvront (508) 233-5607  
Thermal Physiology Councilor - Lisa Leon (508) 233-4862  
Committee-on-Committees Representative - Michael Hogan (619) 534-2773  
Trainee Advisory Representative - Lacy Holowatz (814) 863-2948  
International Committee Representative - Mark Hargreaves 61-3 83445820  
Liaison with Industry - Jeff Zachwieja (847) 304-2061