



THE HISTORY OF PHYSIOLOGY GROUP NEWSLETTER

Vol. 20, Number 1

December 2008

MESSAGE FROM THE CHAIR, Dr. Charles M. Tipton



The HPG leadership extends holiday greetings to our membership and the hope that 2009 will be a healthy and productive year for all. We encourage all to join us in New Orleans to see the changes since Katrina and to attend the Experimental Biology Meeting from April 18 to April 23. **Plan to attend our annual Luncheon-Business Meeting on Sunday, April 19th at the Hilton New Orleans Riverside Hotel in the Marlborough A Meeting Room**, which begins at **12:01 PM**. Remember to pick up your food in the buffet line beginning at 11:30AM at the adjoining APS Headquarters Office (Eglinton Winton Room, Hilton New Orleans Riverside Hotel). The Business Meeting will begin at approximately **12:25 PM**. Following an update on previous activities, we will have a **History of Physiology Lecture by Dr. G. Edgar Folk, Jr.** concerning the **history of hibernation** (See below). The session will end at 2:00 PM and well in advance of the time scheduled for the Featured Topic that has been **sponsored** by the **HPG** and by the **Section for Environmental and Exercise Physiology**(See below).

We encourage members to invite non-HPG members and students to attend the luncheon and its History Lecture. We ask that future attendees should advise the committee at tipton@email.arizona.edu of their planned attendance on or before April 1, 2009 so APS Headquarters can plan accordingly.

PROFESSOR FOLK TO PRESENT THE HISTORY OF PHYSIOLOGY LECTURE



For 2009, our annual luncheon lecture will be presented by Dr. G. Edgar Folk, Jr who is a Professor of Physiology and Biophysics in the College of Medicine at the University of Iowa in Iowa City, IA. The title of his lecture will be **“Personalities in the History of Hibernation”**. Professor Folk is a nationally and international renowned investigator in environmental physiology whose hibernation research has made him a “Legend in his time”. Besides being a recipient of the Daggs Award, the EEP Honor Award, and videotaped for the APS Living History Program, he is the last surviving active member of the famous **Harvard Fatigue Laboratory** and uniquely qualified to present this annual Lecture.

******* HPG AND ITS FEATURED TOPIC *******

On Sunday, April 19th, at 3:15-5:15 PM in Room 243 of the Ernest N. Morial Convention Center, HPG leaders Charles Tipton, Kathy Ryan and Suzanne Schneider will participate in the **Featured Topic** entitled **“A Select History of Exercise Thermoregulation.”** This topic was recommended to the HPG Program Committee by a HPG colleague who was unable to appear and present the topic on the designated date. Consequently, the HPG Program Committee assumed the responsibility to present the topic as scheduled. Drs. Craig Crandall and Kathy Ryan will serve as co-chairs, with Dr. Ryan presenting an Introduction to the Topic before introducing Dr. Tipton, who will discuss “Exercise Thermoregulation from Antiquity to the Beginning of the 20th Century.” Dr. Schneider will then present “Exercise Thermoregulation: A Century of Discovery,” in which she will cover developments that have occurred from 1909 to the present day. Following a question and answer session, four additional oral presentations will occur selected from abstracts submitted to either the HPG or the EEP Sections (see below).



Dr. Kathy Ryan



Dr. Craig Crandall



Dr. Charles M. Tipton



Dr. Suzanne Schneider

Symposium Summary: Select History of Exercise Thermoregulation		
Presentation Time	Presentation title:	First Author’s Last Name and affiliation)
3:15 PM	An Introduction to “A Select History of Exercise Thermoregulation”.	Kathy Ryan , US Army Inst Surg Res, Ft Sam Houston
3:20 PM	Exercise Thermoregulation: From Antiquity to the Beginning of the 20 th Century	Charles Tipton , Univ. of Arizona
3:50 PM	Exercise thermoregulation: a century of discovery.	Suzanne Schneider , Univ. of New Mexico.
4:20 PM	Isolated effects of elevated local temperature on sweating in humans	Jonathan Wingo , Univ of Texas Southwestern Med. Ctr.
4:35 PM	Thermoregulatory responses induced by central cholinergic stimulation during exercise are mediated by arterial baroreceptors	Washington Pires , Federal Univ of Minas Gerais
4:50 PM	Human thermoregulation and obesity	Albert Arjaan de Graaf , TNO Quality of Life Biosciences
5:05 PM	Hemodynamics during whole body heating in individuals with type 2 diabetes mellitus	Jessica Rose Sawyer , Mayo Clinic

INTERESTING ASPECTS OF THE 2009 PROGRAM, S. Schneider

This is the first EB meeting I can remember where there was enough interest in thermoregulation to actually have a **“Thermal and Environmental Stress” track**. If you go to the Experimental Biology 2009 meeting website, you will see this track listed along with the times and locations. This track includes topics on thermoregulation in animals and humans from whole body to the molecular level. A Symposium entitled **“Environmental Factors in Heart Disease”** will be chaired by Aruni Bhatnagar and Robert Brook. There will be 3 Featured Topics including our own History Featured Topics. The first is entitled **“Environmental Stress Responses: Cellular, Molecular, and Genetic Mechanisms”** chaired by Keith Choe. The second is entitled **“Thermoregulation in Extreme Environments**, chaired by Shawn Noren. Finally our History Section Featured Topics is entitled **“A Selected History of Exercise Thermoregulation”**, chaired by Kathy Ryan and Craig Crandall. For this last Featured Topics session four additional abstracts were selected from the program and included for oral presentations.

In addition, there are two other thermoregulation sessions not included in the track from the Exercise and Environmental Physiology Section; a symposium entitled **“New Functions of the Dorsomedial Hypothalamus: Thermoregulation and Beyond”** chaired by Andrei Romanovsky and Shaun Morrison and a Featured Topics entitled **“Pre-conditioning and Acquired Tolerance for Protection from Exertional, Environmental and Traumatic Injury”**, chaired by Lisa Leon.

HPG NEWS FROM COUNCIL—*Funds available at APS to videotape Living Histories*

In 2005, Council approved the HPG concept for a **Living History Program**. However, in subsequent years it separated the video taping and profile components while removing any financial support for the program. Although the program has prevailed, it certainly has not thrived; partially because select Chairmen from select institutions have been reluctant to cover the taping, editing, and production costs which can amount to \$1600 or more. However, at the June 2008 Council Meeting, they approved a HPG proposal that **APS would allocate up to \$1,000 to cover taping, editing and production costs of an approved request (requests have to go Dr. Martin Franks); but, would limit the number of approved requests to 10 per year**. To date, APS distinguished members who have or will be taped include (but not limited to) Bodil Nielsen, John Greenleaf, G. Edgar Folk, Jr., Clark Blatteis, Elsworth Buskirk, Eugene Yates, and John West.

EB2008: MINUTES OF APS HISTORY OF PHYSIOLOGY GROUP MEETING (*to be voted on by the HPG at EB2009*)

On 12:00 p.m. on 6 April 2008, the HPG had its annual Business Meeting in the Torrance Room of the San Diego Marriott. Following lunch, Dr. Charles Tipton (Chair of the Group) called the meeting to order. Individuals present then introduced themselves which included Ms. Donna Krupa, APS Communications Director, and Professor Pawan Singal from the University of Winnipeg. The 2007 minutes were approved by unanimous vote.

Dr. Sue Schneider reported the results of the Joint Program Committee (JPC) Meeting held the previous day. The JPC continues to encourage the sections to promote oral presentations by younger persons and recommends that all symposia might contain one senior person with the remainder being younger investigators. Schneider also reported that our History

Symposium for 2009 is as yet undecided but that there are currently three proposals: 1) the history of thermoregulation, organized by George Brengelmann; 2) a symposium to honor Ernest Starling (“100 years of Starling”); and, 3) the history of arctic research laboratories, proposed by Michael Koban. The program committee had previously scheduled a meeting with representatives from the Water and Electrolyte Section immediately after this meeting and will consider the proposals at that time.

Dr. John West, Chair of the APS History Book Committee, reported that the biography of Ernest Starling has been published. Additionally, a biography on Nathan Zuntz authored by Hanns-Christian Gunga has been submitted to Elsevier. West also reported that Jay Dean continues to work on the history of aviation physiology during World War II, and that the Chair of the Department of Medical History at the Uniformed Services University of the Health Sciences is interested in authoring a text that explores the relationships between physiological advances and war. Finally, he reported that Drs. Clark Blatteis and Jack Boulant continue to make slow progress on a book detailing the history of temperature regulation. West stated APS has yet to develop a strong tradition in promoting the history of physiology and hoped that this situation will change in the immediate future.

Ms. Donna Krupa, the Communications Director for APS, reported that she has received the charge to revitalize physiology in cyberspace. She wants to partner with the HPG to ascertain appropriate individuals to create podcasts for the web site. Previously, two HPG members have provided audio podcasts (Drs. John West and Jay Dean), and she would like our help to further this program. In addition to the podcasts, other facets of her program include the journal release program on APS-published articles of interest to traditional medicine communities and the wider public and revamping the web site physiologyinfo.org.

Dr. Tipton reported the Council did not approve the proposal for APS to sponsor a Distinguished Lecture for the History of Physiology. They did recommend that HPG integrate its program with those being offered by the various Sections. Additionally, he reported that the Living History program continues, but that production of each video costs approximately \$1500 meaning that the program needs a sponsor. Tipton also reported that several biographical profiles of distinguished members have been published in *Advances in Physiology Education* and that progress is being made in securing sectional endorsement of deserving individuals.

Subsequently, Dr. Schneider introduced Dr. Alan Hargens of the Dept. of Orthopaedic Surgery of the University of California at San Diego. He presented an interesting and entertaining talk entitled “Pete Scholander’s Legacy: Exploring Physiologic Frontiers with Homemade Instruments and Tensile Solvent.” Hargens was the last graduate student of Dr. Scholander and included numerous anecdotes and stories of their research investigations with plants and animals in extreme environments that involved voyages on the Alpha Helix to the Amazon, Guadeloupe Islands, and to Canada. All appreciated Dr. Hargens’ discussions of Dr. Scholander’s contributions to physiology and especially his personal reminiscences and audio clips of Scholander’s unique personality and character.

Following the talk, Dr. Tipton presented Dr. Hargens with the 2008 HPG Recognition Award. In addition, Professor Pawan Singal from the University of Winnipeg presented Dr. Hargens with a recently-published book dedicated to Dr. Hargens by the International Society for Adaptive Medicine in recognition of Dr. Hargens’ leadership role in establishing this new field of medicine.

The meeting was adjourned at 1:44 p.m. (*Continued on next page →*)

MINUTES OF THE MEETING OF HPG PROGRAM COMMITTEE. After the History of Physiology Lecture, members of the HPG Program Committee (Drs. Tipton, Schneider and Kathy Ryan) met with Drs. Rafael Rubio and Jane Recklehoff (Water and Electrolyte Section). After discussion, this *ad hoc* committee suggested that 2010 should be designed the Year of Starling and be marked by development of a cross-sectional symposium. At this point, the symposium was suggested to be comprised of Dr. John Henderson (author of the recent Starling biography) and members of the Gastrointestinal, Water and Electrolyte and Cardiovascular Sections, who would each discuss Starling's contributions to their field. Drs. Rubio and Recklehoff will serve as co-chairs and Dr. Recklehoff will begin to develop the symposium for submission to the JPC. All agreed that, if accepted as a cross-sectional symposium, it would not be counted as an allocated symposium for the HPG or the other involved sections. Because of this action to honor Starling, the HPG program committee decided to ask Dr. George Brengelmann to further develop his proposal for a history of thermoregulation physiology for presentation as the HPG 2009 symposium. Lastly, the HPG Program Committee recommended that Dr. Edgar Folk Jr. be invited to speak at the 2009 HPG Luncheon and Business Meeting on his arctic experiences.

CALL FOR SUGGESTIONS FOR THE EB2010 PROGRAM

It is time to select the symposium or featured topics programs for the Experimental Biology 2010 meeting. At least one special session will be devoted to honoring the memory of Ernest Starling. Anyone interested in putting together a symposium or Featured Topic in this area should contact a member of the History Group program committee (see end of this newsletter for contact information) before the April Joint Program Committee meeting (April 17, 2009). Also, the History Group is allowed to sponsor a second History-related symposium or Featured Topic. So please send ideas for topics and speakers to a History Group program committee member before the same deadline. We would like to see some new faces for the presentations next year.

KNOW AND CONTACT YOUR LEADERS IN THE HISTORY OF PHYSIOLOGY GROUP

CHAIR

Charles M. Tipton, Ph.D.
Department of Physiology
Ina Gittings Building, Room 109
University of Arizona
Tucson, AZ 85721

Phone: (520) 621-6992
Fax: (520) 621-8170
e-mail: tipton@email.arizona.edu

SECRETARY:

Jay B. Dean, Ph.D.
Department of Molecular Pharmacology
and Physiology
University of South Florida
12901 Bruce B. Downs Blvd,
Tampa, FL 33612-4799

Phone: (813) 974-1547
Fax: (813) 974-3079
e-mail: jdean@health.usf.edu

REPRESENTATIVE TO THE JOINT PROGRAM COMMITTEE (JPC)

Suzanne Schneider, Ph.D.
Department of Physical Performance & Development
University of New Mexico
Johnson Center, Room 126
Albuquerque, NM 87131

Phone: (505) 277-3795
Fax: (505) 277-6227
e-mail: sschneid@unm.edu

NEWSLETTER EDITOR AND WEBMASTER

Kathy Ryan, Ph.D.
US Army Institute of Surgical Research
3400 Rawley E. Chambers Ave.
Ft. Sam Houston, TX 78234

Phone: (210) 916-4366
Fax: (210) 916-5992
Kathy.Ryan@amedd.army.mil

PROGRAM COMMITTEE

Charles Tipton, Ph.D., Chair
Jay Dean, Ph.D.
Kathy Ryan, Ph.D.
Suzanne Schneider, Ph.D.