



Newsletter

Central Nervous System Section
of the
American Physiological Society
SPRING 2002

EB 2002 is ready to roll into New Orleans



APS NEUROSCIENCE At EB 2002

Summary of the major neuroscience-related sessions

REFRESHER COURSE: TOPICS IN MEDICAL NEUROPHYSIOLOGY

Sat. 8:30 AM-12:00 Noon — Ernest N. Morial Convention Center, Room 255-257

Chair: Cheryl M. Heesch, Univ of Missouri and Thomas J. Cunningham, Univ of Missouri

TECHNIQUES & TECHNOLOGY IN PHYSIOLOGY TUTORIAL: BIOINFORMATICS FOR THE PHYSIOLOGIST

Sat. 1:00-4:00 PM — Ernest N. Morial Convention Center, Room 252-254

Chair: Peter Tonellato, Med Col of Wisconsin

SEX AND NONSEX – ESTROGEN AND THE AGING HYPOTHALAMUS

Sun. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 244

Chair: John T. Clark, Meharry Med Col

Participants:

Barbara Sherwin, Estrogen and Aging Effects on Sex and Cognition

John T. Clark, Hormones, Sex Behavior, and Blood Pressure in Relationship to Aging

James W. Simpkins, Estrogen, Neuroprotection and Behavior

Paul Micevych, Estrogen Responsive Neuronal Circuits

THE SUDDEN INFANT DEATH SYNDROME, SLEEP, AND BREATHING

Sun. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 217

Chair: Eugene Nattie, Dartmouth Med Sch

THE PROMISE FOR THERAPEUTIC INTERVENTION IN OBESITY: THE BRAIN AND BEYOND

Sun. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 207

Chair: David D'Alessio, Univ of Cincinnati

Participants:

Randy Seeley, The CNS melanocortin system: Giving with one hand and taking with the other.

Peter Havel, The role of adipocyte metabolism and hormones in the regulation of energy balance and insulin

Greg Barsch, The application of molecular genetics to understanding body weight regulation

Mark Heiman, Ghrelin a novel peptide linking the regulation of growth with food intake.

ORTHOSTATIC TACHYCARDIA AND HYPOTENSIVE SYNDROMES

Sun. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 211

Chair: David Robertson, Vanderbilt Univ Sch of Med

INCORPORATING CASE STUDIES IN THE PHYSIOLOGY CLASSROOM

Sun. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 214

Chair: William H. Cliff, Niagara Univ

HOW TO BE A GOOD MENTOR; HOW TO BE A GOOD MENTEE

Sun. 9:00 AM-12:00 Noon — Ernest N. Morial Convention Center, Room 218

Organizer: Susan M. Barman, Michigan State Univ

Co-Organizers: Robin Davisson, Margarita Contreras, Kat Kantak

HOW TO GET PUBLISHED IN APS JOURNALS

Sun. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 211

Chair: Dale Benos

BIOINFORMATICS IN PHYSIOLOGICAL GENOMICS

Sun. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 252-254

Chair: Peter Tonellato, Med Col of Wisconsin

CARL LUDWIG DISTINGUISHED LECTURESHIP OF THE APS NEURAL CONTROL & AUTONOMIC REGULATION SECTION

Sun. Between 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 244

Speaker: Suzanne Oparil

FASEB EXCELLENCE IN SCIENCE AWARD LECTURE

Sun. 2:00-3:00 PM — Ernest N. Morial Convention Center, Room 244

Speaker: Phyllis Wise

NEUROBIOLOGY OF OBESITY

Sun. 3:15-5:15 PM — Ernest N. Morial Convention Center, Room 255-257

Chair: William Haynes

RHYTHMS IN REPRODUCTION

Sun. 3:15-5:15 PM — Ernest N. Morial Convention Center, Room 211

Chair: Rosalinda GUEVARA-Guzmán, UNAM, Mexico

Robyn Hudson, UNAM, Mexico

ENDOCRINE/METABOLIC CONSEQUENCES OF OBESITY

Mon. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 255-257

Chair: Barbara Horwitz

JOSEPH ERLANGER DISTINGUISHED LECTURESHIP OF THE APS CENTRAL NERVOUS SYSTEM SECTION

Mon. 9:00-10:00 AM — Ernest N. Morial Convention Center, Room 208

Speaker: Celia Sladek

PHYSIOLOGICAL GENOMICS: TRANSGENIC MODELS AND GENE REGULATION

Mon. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 214

Co-chairs: Kenneth W. Gross, Roswell Park Cancer Inst, Buffalo, NY and Robin L. Davisson, Univ of Iowa

NEURAL MECHANISMS IMPACTING SODIUM BALANCE AND ARTERIAL PRESSURE IN HYPERTENSION AND CHF

Mon. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 213

Chair: Heimo Ehmke, Univ Heidelberg

CARDIOVASCULAR AND ENDOCRINE CONTROL IN MICE: A MOUSE IS NOT A SMALL RAT

Mon. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 208

Chair: Marianna Morris, Wright State Univ

SENSORY AFFERENTS AND CARDIOVASCULAR REGULATION

Mon. 3:15-5:15 PM — Ernest N. Morial Convention Center, Room 212

Co-chairs: Donna Wang, Michigan State Univ & Steven Mifflin, U Texas Hlth Sci Ctr

CAREER OPPORTUNITIES IN PHYSIOLOGY: TAKING THE NEXT STEP

Mon. 5:30-6:30 PM — Ernest N. Morial Convention Center, Room 217

Chair: Francis L. Belloni, New York Medical College

ERNEST H. STARLING DISTINGUISHED LECTURESHIP OF THE APS WATER & ELECTROLYTE HOMEOSTASIS

Tues. 9:00-10:00 AM — Ernest N. Morial Convention Center, Room 210

Speaker: Richard Lifton

Title: Genetics, the Kidney and Hypertension

NEURAL CONTROL OF THE CEREBRAL CIRCULATION

Tues. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 209

Chair: William T. Talman, Univ of Iowa

Participants:

Frank Faraci, Signaling Molecules in Brain: Microvascular Effects

Edith Hamel, Brain Neurons in the Regulation of Microvascular Tone

Costantino Iadecola, Coupling of Neural Activity and Blood Flow in Health and Disease: Lessons from Mice

Michael Moskowitz, Studying Cortical and Meningeal Blood Flow Relationships Using Speckle Imaging

PHYSIOLOGICAL GENOMICS: DISEASE GENE THERAPY

Tues. 10:15 AM-12:15 PM — Ernest N. Morial Convention Center, Room 214

Co-chairs: M. Ian Phillips, Univ of Florida and Curt D. Sigmund, Univ of Iowa

PHYSIOLOGICAL MECHANISMS OF NEURONAL PLASTICITY IN THE MATURE NERVOUS SYSTEM

Tues. 3:15-5:15 PM — Ernest N. Morial Convention Center, Room 209

Chair: Eve E. Marder, Brandies Univ

CHEMOREFLEXES IN HEALTH AND DISEASE: RECENT PERSPECTIVES IN CARDIOVASCULAR CONTROL

Tues. 3:15-5:15 PM — Ernest N. Morial Convention Center, Room 212

Chair: Harold Schultz, Univ of Nebraska Med Ctr

COMMON BRAINSTEM MECHANISMS OF CARDIOVASCULAR AND RESPIRATORY CONTROL

Wed. 8:00-10:00 AM — Ernest N. Morial Convention Center, Room 210

Chair: W.W. (Bill) Blessing, Flinders Univ., Australia and J. Michael Wyss, Univ. of Alabama, Birmingham

Participants:

W.W. (Bill) Blessing, Regulation of regional blood flow by the medulla

Monique Denavit-Saubè, Central transmission of cardio-respiratory signals and possible modulation by the Hypoxia Inducing Factor (HIF1)

Julian Paton, The in vitro brain-lung-heart preparation as a model for understanding neuronal control of the cardiovascular and respiratory systems

Paul A. Gray, Pathological breathing results from disturbances of the pre-Bötzing complex: respiratory and cardiovascular control implications

Remember that in addition to the platform sessions, there are Neuroscience poster sessions each day. We have again grouped together most of the neuroscience posters for each day. Also, late breaking sessions will be added to the program for presentation on Wednesday.

"How to Be a Good Mentor; How to Be a Good Mentee"

The APS Women in Physiology Committee and ASPET Committee on Women in Pharmacology have co-organized a session for EB '02 entitled: "How to Be a Good Mentor; How to Be a Good Mentee" to be held **Sunday, April 21, 9:00 AM - noon in Room 218 of the Morial Convention Center**. This session is designed to provide mentors and mentees of both genders with advice on the importance of good mentoring to promote development from undergraduate through advanced stages of a scientific career. In addition to brief (5-10 min presentations) by 5 invited panelists, considerable time will be devoted to audience participation. This will include opportunities for attendees to offer their input on topics to be covered in the formal presentations and to submit questions to the panelists on issues related to mentoring. Attendees will also work in small groups (5-10 individuals) to discuss how they would respond to some real-life issues that involve interactions of mentors and mentees as presented in "mentoring vignettes." In addition, participants will be given a hand-out that will include valuable information on resources available to assist individuals in being good mentors and good mentees.

"Everything You Ever Wanted to Know about the IACUC But Were Afraid to Ask"

On **April 20, 2002 at 1:00 p.m.**, the National Institutes of Health's Office of Laboratory Animal Welfare (OLAW) and the American Physiological Society will co-sponsor a symposium, "Everything You Ever Wanted to Know about the IACUC But Were Afraid to Ask," at the Experimental Biology 2002 Meeting in New Orleans, Louisiana. This is an opportunity for scientists attending the EB meeting to learn more about the IACUC process. Other symposium co-sponsors include the American Society for Pharmacology and Experimental Therapeutics, American Society for Nutritional Sciences, American

Association of Immunologists, American Association of Anatomists, and the Federation of American Societies for Experimental Biology. This four-hour program is adapted from the IACUC 101 workshop series and will focus on IACUC functions and responsibilities. Representatives from OLAW, USDA Animal Care, and the Association for the Assessment and Accreditation of Laboratory Animal Care will be present to answer questions. The conference agenda and a registration form are available at: http://www.the-aps.org/meetings/eb2002/abs/pa_stallone.htm.

Upcoming APS Meetings

Your steering committee is always on the lookout for new and innovative suggestions for aps-sponsored meetings. If you would like to propose a future meeting or just want to propose a topic, send your suggestions to one of the members of the committee.

Please note: there are considerable APS funds and expertise to support you, if you organize one of these meetings.

EB 2003/2004: JOIN IN THE PLANNING



EB 2003 will be April 12-16, 2003 in San Diego, CA.

EB 2004 will be April 17-21, 2004 in Washington, DC

EB 2005 will be March 31-April 5, 2005 in San Diego and will be a meeting with the IUPS

CNS Steering and Program Committees are programming for EB 2003 and 2004. We need your suggestions for:



joint
The
and

Joseph Erlanger Distinguished Lecturer for 2004

Symposia for 2004

Featured Topics 2003 and 2004

We have received several great proposals for sessions for 2002 and 2003, that will make the CNS sessions better than ever. Keep sending us your ideas for sessions. We need as much input as possible from the members, so as to provide the kind of programming that you want. Please send suggestions to J. Michael Wyss via E-mail (jmwyss@uab.edu), Voice (205-934-6086), FAX (205-934-7029), or regular mail: J. Michael Wyss, Dept. of Cell Biology, UAB, Birmingham, AL 35294-0019

AWARDS

CNS Section requests tax-deductible donations to build the Van Harreveld Award fund

The Van Harreveld Memorial Award is presented annually by the CNS Section of the APS to recognize outstanding research in neuroscience by a graduate student or postdoctoral fellow. Dr. Antonie Van Harreveld was a distinguished neuroscientist who was instrumental in founding the Journal of Neurophysiology. In 1934 he joined the faculty at the California Institute of Technology in 1934 and remained there for his entire career. His research included studies on the innervation of crustacean muscles, spreading depression, and development of the "slam-freezing technique" that allows scientists to evaluate rapid changes in the morphology of the neuromuscular junction, CNS synapses, and extracellular space.

The Van Harreveld Memorial Award was established in 1989 in his honor through generous contributions made by appreciative colleagues, friends, and devoted family. The recipient of the Van Harreveld Memorial Award must be first author on an abstract presented at the Experimental Biology meeting. The Awards Subcommittee of the CNS Section critically evaluates the abstracts of the applicants in selecting the Award winner. The Award is presented at the CNS Section reception held at the EB meeting. Past Award recipients include: Yun Xia ('90), Joseph Erlichman ('93), Mike Ludwig ('94), Susan Hochstendbach ('95), Christine Adreani ('96), Nabil Alkayed ('97), Ana Estevez ('98), Jeffrey Legos ('99), Erin Whalen ('00), and Christopher Madden ('01).

The CNS Section Steering Committee would like to be able to increase the monetary value of the Award from \$300 to \$500 (using interest earned on this account) and at the same time assure that this Award can be made for many years to come. In order to accomplish these goals, it is important that we increase the resources in the restricted account set up by the APS Business Office to fund this Award. Contributions to this account are tax-deductible, and monies in this account are used only for the Award.

If you are interested in supporting the Van Harreveld Memorial Award, please make a check payable to The American Physiological Society and send to the Chair of the CNS Section Steering Committee (Dr. Susan M. Barman, Department of Pharmacology & Toxicology, Michigan State University, East Lansing MI 48824-1317). Please indicate Van Harreveld Award on the check. Your generosity is greatly appreciated by the Steering Committee as well as all future Award winners!

AND this year's winner of the Van Harreveld Memorial Award is Rachel E. Wade (Cal. State U., Hayward CA)
Abstract Title: Dependence of respiratory-related motor output on extracellular K⁺ concentration in the isolated brainstem of larval and adult bullfrogs (*Rana catesbeiana*).

Proctor & Gamble Professional Opportunity Award

These competitive awards, funded by P&G, are presented to students who are first author of an abstract. Each APS Section has the privilege of selecting a winner.

This years CNS Section winner is Christopher Sharp, Louisiana State University

Young Investigator Awards

The CNS Section will provide at least two awards (\$500 each and complimentary registration) for recognition of meritorious research by young investigators who participate in the annual EB Meeting. To qualify for this award, the applicant must have received a PhD or other professional degree within the past 10 years and must present a poster or talk at the EB Meeting. The subject matter of this presentation can be any topic related to the central or peripheral nervous system. Applications are reviewed and rated by the CNS Section Awards Committee.

This year's winners of the CNS Section Young Investigator Awards are:

Yi-Fan Li, PhD, MD (University of Nebraska Medical Center)

Scott Allan Smith, PhD (Univ Texas Southwestern Med Ctr)

Vincent Joseph, DSc, PhD (Hosp Erasme, Brussels)

Be sure to apply for these awards if they are applicable to you or your students and/or postdoctoral fellows. A full description of these and other awards can be found in the "Call for Papers" or at the APS website <http://www.the-aps.org/awards.htm>.

CNS Section Reception at EB '02

The CNS Section Reception will be held on Monday evening (5:30-6:45) in the Marlborough A room at the Hilton Riverside. This social occasion is a time when the CNS Section recognizes outstanding presentations by students and fellows at the EB meeting. It is also an opportunity to meet and interact with Dr. Celia Sladek, this year's recipient of the CNS Section Joseph Erlanger Distinguished Lectureship.

NOMINATE CNS SECTION MEMBERS FOR COMMITTEES

Bill Yates, our new member of the Committee on Committees of APS, needs your input. Although the CNS Section is one of the larger sections of APS, few of our members are appointed to key APS committees. This is problematic considering the fact that APS publishes some of the most important journals in the field (e.g., *Physiological Reviews*, the *Journal of Neurophysiology*, and the *American Journal of Physiology*). Furthermore, APS (as part of FASEB) has played a fundamental role in political activism both to increase funding for research and to protect the use of animals for this endeavor.

APS committees with little or no representation from the CNS section include Animal Care and Experimentation, Awards, Career Opportunities in Physiology, Education, Finance, Membership, Public Affairs, and Women in Physiology.

The section would like you to consider running for appointment on one of these APS Committees. For this purpose, you will need to be "nominated" using the form available at the following web address: <http://www.the-aps.org/committees/nominate.htm>. These nomination forms should be returned to the American Physiological Society at the following address: **9650 Rockville Pike, Bethesda, MD 20814-3991**. Self nominations are encouraged, but you will also need nominations from several of your colleagues (preferably > 10) who are Regular APS Members in order to have a reasonable chance at being appointed. Long, detailed nominations are more effective than short ones.

Members of APS Committees are expected to attend the annual Experimental Biology Meeting held every April.

If you are nominated for an APS committee, your nomination will be considered at the 2002 Experimental Biology meeting by the "Committee on Committees". As representative of the CNS Section on the Committee on Committees, Bill Yates should be contacted so that he can represent you most effectively in discussions. If you have any questions, please feel free to contact Dr. Yates. A full description of APS Committees is available at the following web address: <http://www.the-aps.org/committees.htm>

Thanks for considering this important service to our community. To nominate someone else or yourself for an APS committee, please contact Bill Yates, Ph.D., University of Pittsburgh/School of Medicine, 203 Lothrop Street, Room 106 Pittsburgh, PA 15213, e-mail: byates@pitt.edu, phone: (412) 647-9614; FAX: (412) 647-0108.

ELECTIONS RESULTS

Bill Yates (University of Pittsburgh) was elected Secretary-Treasurer of the CNS Section. Congratulations, Bill. His term of office will begin at the April 21st CNS Steering Committee meeting at EB 2002.

KUDOS

Congratulations to William Willis, MD, PhD for becoming a member of the Long Range Planning Committee of APS.

The CNS Section Steering Committee wants to thank Mike Wyss for serving as the Secretary-Treasurer of the CNS Section for the past three years. He will continue as the CNS Section's Joint Program Committee representative for one more year.

We wish to thank Don McCrimmon for his service on the CNS Steering Committee for the past 4 years and for his excellent service as Chair of the Awards Committee for the section. We also thank Alan Pack for being a member of the Steering Committee for the past several years.

See you in New Orleans



CNS OFFICERS AND COMMITTEE MEMBERS

Chair and SAC Representative

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Representative to the Liaison with Industry Committee

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