

## The 2012 Annual Meeting of the Nebraska Physiological Society

October 6, 2012

Annual meeting of the Nebraska Physiological Society (NPS) was held on Saturday, October 6 at the Frey Conference Suite on the campus of Wayne State College in Wayne, Nebraska. The meeting became the fifteenth annual meeting of the NPS. The meeting was financially supported by the American Physiological Society (APS), Wayne State College, Kent Science Corporation, Transonic Systems Inc., AD Instruments, World Precision Instruments, Data Sciences Int'l, Novus Biologicals, Molecular Devices, Vernier and University of Nebraska Medical Center

Over 90 individuals participated in the scientific/educational conference. The attendees included 27 faculty members, 12 post-doctoral fellows, 17 graduate students, and 9 undergraduate students. In addition, 21 teaching professionals also attended. Overall, institutions from Nebraska, South Dakota, Wisconsin and Washington were represented.

The scientific/educational sessions began with welcome from Wayne State College President Curt Frye and opening remarks from Barbara Engebretsen, Ph.D., President of the NPS from Wayne State College. Following Dr. Engebretsen's introductory remarks, the APS-sponsored keynote research address was made by Jerome Dempsey, Ph.D., from Medicine, Physiology, Kinesiology and Veterinary Science at University of Wisconsin-Madison. His presentation was entitled "Humans in Hypoxia: The Good, the Bad and the Ugly." Dr. Dempsey's presentation was followed by a break in which attendees were able to visit exhibitor booths and view posters. Barbara Goodman, Ph.D., then gave the Vernier-sponsored educational address from Physiology at Sanford School of University of South Dakota. Her talk was entitled, "Use of Inquiry to Enhance Student Learning."

Following Dr. Goodman's presentation, NPS oral presentations were made – one oral presentation selected from undergraduate, graduate and postdoctoral categories based on merit. The first presenter was Murali Ganesan, Ph.D., from Departments of Internal Medicine/DEM at University of Nebraska Medical Center. His talk was entitled "Thromboxane – Prostanoid Receptor Deficiency Reduces Adipose Tissue Macrophage Accumulation and Systemic Insulin Resistance in Obesity." This was followed by a talk by Tamra Llewellyn, a graduate student from Department of Cellular and Integrative Physiology at University of Nebraska Medical Center. Her presentation was entitled "Exercise Training Normalizes SFO-Mediated Sympathoexcitation." The third speaker was Carrie Brown, an undergraduate student from Wayne State College. Her presentation was "Activity and Frequency of the ITPA P32T Variant Among Colorectal Patients."

After the student and postdoctoral presentations, two concurrent breakout sessions took place. Ed and Lee Brogie from Wayne Middle School, Joe Myer from Norfolk, Nebraska, Jim Rynearson from Vernier, coordinated a teaching workshop about "Teaching Physiology Concepts with Vernier Data Acquisition System for Outreach and Education". The workshop was conducted by Dr. Engebretsen, Harold Schultz, Ph.D., from University of Nebraska Medical Center, Karla Haack, Ph.D., from University of Nebraska Medical Center, Dr. Tammy Evetovich, Dr. Goodman and Jim Rynearson from Vernier. The second workshop was organized for undergraduate student, graduate student and postdoctoral research associate and was entitled "What's Next? Career and Professional Development for Trainees." The panelists included: Tamra Llewellyn and Erin Rosenbaugh (graduate students, University of Nebraska Medical Center), Kelly Pitts, Ph.D. (Corgenix Medical Corporation; current Chair of the APS Physiologists

in Industry Committee), Matthew Zimmerman, Ph.D. (Associate Professor of Physiology, University of Nebraska Medical Center), Shawn Percy, Ph.D. (Professor of Biology, Wayne State College), Noah Marcus, Ph.D. (Postdoctoral Research Associate in Department of Cellular and Integrative Physiology at University of Nebraska Medical Center). This workshop was very well attended and produced a great deal of discussion and interest.

Lunch immediately followed the workshops. During the lunch period, attendees also joined the Table Talks with some of the speakers Drs. Dempsey, Goodman, Swenson, Viswanathan, Zimmerman and graduate student Alicia Schiller.

The afternoon sessions commenced with the NPS keynote research address by Erik Swenson, M.D., from Department of Medicine and Physiology and Biophysics at University of Washington. Dr. Swenson's talk was entitled "Acetazolamide and High Altitude Illness: New Appreciation for an Old Hand." This was followed by a two-hour period devoted to poster viewing and judging. During the poster viewing, teachers attended for additional sessions. ADinstruments had a representative to demonstrate online LabTutor.

Following the poster session, Saraswanthi Viswanathan, Ph.D., from Departments of Internal Medicine/DEM & Physiology at University of Nebraska Medical Center gave the NPS local scientist research address. Her talk was entitled "Inflamed Fat: Does Oxidative Stress Start with Fire?"

The afternoon session concluded with poster awards and recognitions. The winner of the undergraduate division received a \$500 travel award to present his/her poster at the 2013 Experimental Biology meeting in Boston, MA. The undergraduate winner was Trent Ahlers from Life Science Department at Wayne State College for his poster entitled "Activation of the Glucocorticoid Receptor by Dexamethasone Enhances BHV-1 Productive Infection." The winner of the graduate division received a \$250 travel award to present his/her poster at the 2013 Experimental Biology meeting in Boston, MA. The graduate winner was Cassandra Hays from Departments of Ophthalmology and Visual Sciences & Cellular and Integrative Physiology at University of Nebraska Medical Center for her poster entitled "Outflow Facility Effects of Two Novel Glaucoma Drainage Devices in Human Ocular Anterior Segments." The winner of the postdoctoral division received a \$250 Lee Zucker Award. The postdoctoral winner was Noah Marcus, Ph.D., from Department of Cellular and Integrative Physiology at University of Nebraska Medical Center for his poster entitled "Carotid Body Denervation Attenuates Increased Sympathetic Nerve Activity in Congestive Heart Failure." In addition, the speakers received a certificate and the students received a gift for their participation in this year's meeting. Cindy Norton, Executive Director of NPS from University of Nebraska Medical Center, received a gift from Dr. Engebretsen and Dr. Lambert for acknowledgement her service to the NPS.

At the conclusion of the meeting, the NPS business meeting was called to order and chaired by NPS President, Dr. Engebretsen. Dr. Karla Haack gave a presentation on outreach activities over the past year. This was followed by an update on the APS Chapter Advisory Committee activities and the chapter grant program reporting by Dr. Engebretsen for Dr. Harold Schultz. NPS Secretary/Treasurer Dr. Hong Zheng from University of Nebraska Medical Center then gave the treasurer's report and this was followed by Science Policy Liaison report by graduate student Alicia Schiller from University of Nebraska Medical Center. Dr. Engebretsen presented the Past-President Award to Dr. Patrick Lambert from Creighton University for his service to the NPS. The NPS council members for 2012-2013 were then announced. President – Keshore Bidasee, Ph.D., University of Nebraska Medical Center; Past-President – Dr. Engebretsen; President-Elect - Carol Fassbinder-Orth, Ph.D., Creighton University; Councilor - Yifan

Li, Ph.D., University of South Dakota; Matthew Zimmerman, Ph.D., University of Nebraska Medical Center, Babu Padanilam, Ph.D., University of Nebraska Medical Center; and Student Councilor – Alicia Schiller. Final remarks were then made by Dr. Engebretsen and the meeting was adjourned.

Respectfully submitted,



Hong Zheng,  
Secretary/Treasurer



Undergraduate Student Poster Awardee, Trent Ahlers with President Elect, Dr. Fassbinder-Orth.



Noah Marcus, Ph.D. winner of the Lee Zucker Award with President Dr. Engebretsen.



Graduate Student Poster Awardee, Cassandra Hays with President, Dr. Engebretsen.



Dr. Engebretsen recognizing teacher participation at the NPS meeting.



Graduate Students participating at the Nebraska Physiological Society Meeting.