MESSAGE FROM THE PRESIDENT:
DR. STAN L. LINDSTEDT
NORTHERN ARIZONA UNIVERSITY

The Arizona Chapter of the American Physiological Society, now in our sophomore year, is maturing into a tradition. Not only did we not experience the expected second year slump, but participation in last fall’s meeting actually increased. Once again we were treated to outstanding student presentations (see winners elsewhere in newsletter) and a stimulating symposium on “Insulin Resistance and Diabetes” (thanks to Dr. Christos Katsanos, ASU). Our two invited speakers both entertained and educated us; thanks to Arizona Distinguished Lecture, Dr. Dick Coast, (NAU), “Fatigue and Training of Respiratory Muscles” and our Keynote speaker, Dr. Jeff Sands (Emory University), “Regulation of Renal Urea Transport by Vasopressin”. You should all take great pride in knowing that our chapter is a model of chapter success at the APS. I think there are two reasons. Most importantly, our chapter was founded on a bedrock of student participation. This meeting provides a unique and valuable venue for students, from undergraduates to completing PhD students, to present their work. The greatest number of comments of “appreciation” that I receive is from this wonderful group of student participants. However, our success is also linked to the hard work and diligence of a wonderful staff, in particular Linda Baughn and the dedication of Dr. Charles Tipton; they are the often unseen engine driving the chapter forward. I am excited that this year we are expanding well beyond our initial UofA roots. Our November meeting in 2010 will be held at Midwestern University. At that meeting I will pass the torch to the second AzPS President, Dr. Scott Boitano. We would like your participation in the planning process for this fall. In particular, we invite suggestions for: 1) Keynote speaker, 2) symposium topic, 3) general ideas of how to make the meeting/experience even better. The success of our Arizona Chapter will continue to increase annually as does the participation. This requires your efforts to recruit friends, colleagues and especially students as you include this year’s meeting into your fall plans. Finally, as was the case last year, we continue to face very difficult economic times in Arizona and I conclude this message with the identical reminder from last year. Now more than ever, we need to share our accomplishments with the general population of Arizona. Yes, we need to sing praises; there is not a lot of higher education singing going on in Phoenix. I look forward to seeing all of you later this fall in Glendale!
On November 20 and 21, the second Annual Meeting of the Arizona Physiological Society was held on the Medical Campus of the University of Arizona. One hundred members registered for the sessions that included 43 Regular Members, 11 Post-Doctoral Trainees, 29 Graduate Student Members and 17 Undergraduate Student Members (Figure 2). The opening session began at 1:00 PM and featured 9 oral presentations by Graduate Student Members in a session chaired by Dr. Scott Boitano of the University of Arizona. The topics were diverse (Genistein’s mechanism(s) of action on intestinal chloride secretion in mice by Steven Sears of Midwestern University and Using trypsin digestion to determine the relative contributions of titin and collagen elastic properties of whole muscle by Krysta Powers of Northern Arizona University), the discussion was informative, and at times lively, and rewarding for advisors and mentors.

Following the oral presentations, the audience moved to the nearby Medical Research Building to view poster presentations by 15 Graduate Student Members (Figures 3, 10-12). The “cozy” environment (criticisms on the evaluation form listed them as overcrowded) facilitated, interesting and at times intense, interactions between the audience and the investigators. Like the oral presentations, the topics were detailed and varied: (From Connexin 40 is required for tissue survival following hindlimb ischemia by Jennifer Fang of the University of Arizona to Lower abundance of complex I subunits and CPT 1B protein despite normal mitochondrial respiration in insulin resistant human skeletal muscle by Natalie Lefort of Arizona State University). The highlight of the evening session was the APS Keynote Lecture by Dr. Jeff Sands, Juha P. Kokko Professor of Medicine and the Director of the Renal Division at Emory University in Atlanta, GA. (Figures 4 & 13). His well presented lecture was entitled Regulation of renal urea transport by vasopressin and was understood and appreciated by the majority in attendance. In fact, many evaluation forms listed it as the best feature of the program. Following his informative lecture, a reception was held in his honor that was enjoyed by those in attendance and an event that received no criticisms on the evaluation form (Figures 6-8, 14-16).

The morning of the second day had 8 poster presentations by Regular Members and Post-Doctoral Trainees and 7 by Undergraduate Student Members. The former presented posters entitled: Role of Kit and P13K pathway in 7,12-dimethylbenz-[A] anthracene-induced ovotoxicity by Connie Kappeler of the University of Arizona and Site-directed mutagenesis of the CBM in aldolase: a molecular tool for the study of metabolic compartments in vascular smooth muscle by Johana Vallejo of Midwestern University whereas the latter had posters with the following titles: Dihydrotestosterone attenuates HIFI-Alpha in cerebral arteries following hypoxia by Anthony Gutierrez of the University of Arizona-Phoenix and Oxidative stress in the vasculature of birds by Christina Smith of Arizona State University. A frequent complaint on the evaluation forms was the schedule did not allow sufficient time to view or to assimilate the interesting information in the various posters.

Following the morning poster session, an interesting symposium was held entitled Insulin resistance and diabetes: mechanisms and clinical aspects which attracted much attention and discussion. It was chaired by Dr. Christos Katsanos from the Center for Metabolic Biology at Arizona State University (Figure 7) and featured Drs. Hussein Yassine from the University of Arizona at Phoenix, Anthony Civitarese from Arizona State University, and Erik Henriksen from the University of Arizona (Figure 1). After introductions by Dr. Christopher Baldi of Northern Arizona University, The Distinguished Arizona Lecture was given by Dr. J. Richard Coast of Northern Arizona University (Figure 9) that was entitled Fatigue and training of respiratory muscles. Like the Keynote Lecture, it generated much interest and discussion because the topic has elements of controversy in exercise and respiratory circles. Also like the Keynote Lecture, it received numerous comments on the evaluation forms as the highlight of the meeting.

Before lunch, a Business Meeting was held that was chaired by President Lindstedt (Figure 6). Before seeking approval of the 2008 minutes, he expressed the appreciation of the Society for the assistance of the departmental staff (Figure 18) and the Physiology Club Members (Figure 17) in making the meeting a success. Although the 2009 minutes are listed in detail on page 3, it should be noted that Dr. Johana Vallejo of Midwestern University (Figure 8) graciously invited the members to attend the 2010 meeting in Glendale on November 5 and 6 and Dr. Thomas Pannabecker (Figure 5) distributed monetary prizes to students whose oral and poster presentations were selected by a panel of judges as “best in the class” (see minutes on page 3).

In the afternoon session, Dr. John Konhilas from the University of Arizona chaired the 6 oral presentations by Regular Members and Post-Doctoral Trainees. The first presentation was given by Chad Carroll of Midwestern University and entitled Cyclooxygenase enzyme activation in human skeletal muscle after acute resistance exercise while the last speaker was Thanh Cao of the University of Arizona at Phoenix whose title was In vitro human fibroblast (HF) injury repair in response to modeled repetitive motion strain (RMS) and myofascial release (MFR). Despite the urge to return home, the discussions were serious, interesting and sufficiently extensive that they went overtime.
CALL FOR REQUEST AND NOMINATIONS
FOR THE GLENDALE MEETING

As noted elsewhere, the 2010 annual meeting will be held on November 5 and 6 on the campus at Midwestern University in Glendale, Arizona. As the Bylaws of the Chapter are focused on the professional development of students and post-doctoral trainees, the program will emphasize oral and poster presentations. However there are opportunities for symposia, point-counterpoint debates, mini-lectures, and oral presentations by regular members. Consequently, recommendations are in order. In addition, nominations are requested for Councillors representing graduate students as well as post-doctoral trainees. In addition, nominations are requested for the Distinguished Arizona Lecturer who must be an AzPS member in good standing and an APS member of a minimum of 10 years who has made significant contributions to the discipline and profession of physiology preferable in the State of Arizona.

Officer nominations must be directed by postal mail to Chairman AzPS Nomination Committee, 101 Gittings Building, The University of Arizona, Tucson, AZ. 85721 or to azps@email.arizona.edu, Attention: Nomination Committee.

Program matters are to be directed via either postal or email to the Chairman of the Program Committee at the same location.

All officer nominations or program recommendations are to be sent on or before June 15, 2010 to the address listed above.

Arizona Physiological Society Meeting Minutes
November 21, 2009

Dr. Stan Lindstedt called the meeting to order at 12:30 P.M. Dr. Lindstedt thanked everyone for attending the Arizona Physiological Society Conference. He also expressed a special thanks to Dr. Tipton and Linda Baughn for their time and effort in planning and coordinating this event. Dr. Lindstedt also emphasized that the group wants to continue to have a close relationship with the American Physiological Society (APS).

First item of business was a motion stated by Dr. Lindstedt to approve last year's business meeting minutes. One of the members said, "I second the motion" and Dr. Lindstedt said, "It is moved and seconded that last year's business meeting minutes be approved," the group members said, "Aye."

Dr. Erik Henriksen resigned as Secretary-Treasurer for the AzPS in June 2009. Dr. Thomas Pannabecker agreed to take over for Dr. Henriksen and was appointed as the Secretary-Treasurer to complete the term of office.

Next year's AzPS meeting will be held at Midwestern University in Glendale, Arizona. Dr. Lindstedt introduced Dr. Vallejo, Assistant Professor, Midwestern University, Department of Physiology who gave a short power point presentation showcasing Midwestern University. Midwestern University is situated on 143 acres, with leading-edge facilities, top-notch regional practitioners, state-of-the-art practice labs, lecture halls, classrooms, and an outpatient clinic. Dr. Vallejo also listed many hotels and several shopping malls that are in close proximity to the campus including the University of Phoenix Stadium which is home to the Arizona Cardinals. Dr. Vallejo was very enthusiastic and upbeat about hosting the AzPS meeting in November 2010.

Dr. Lindstedt announced the results of last month's AzPS elections: Dr. Scott Boitano, President-elect, Associate Professor, The University of Arizona, Department of Physiology, Dr. Jenna Monroy, Post Doctoral Trainee Councilor, Northern Arizona University, and Natalie Lefort, Graduate Student Councilor, Arizona State University.

Dr. Tipton submitted a proposal to change Post Doctoral Trainee Councilor and Graduate Student Councilor to Post Doctoral Trainee and Graduate Student Representative. Dr. Tipton stated that section 2 of Article XII states; impending amendments require a 30 day notice. Article VI concerning Governance indicates the Offices of the Executive Committee include a Post Doctoral Trainee and a Graduate Student Representative.

Section II: The Officers of the Executive Committee shall be a President, President-elect, Secretary-Treasurer, a Post Doctoral Trainee, and a Graduate Student Representative.

The vote to change to Post Doctoral Trainee and Graduate Student Representative will take place within a month.

Dr. Tipton stressed the importance of keeping the chapter student oriented.

Dr. Lindstedt introduced Dr. Thomas Pannabecker who presented the awards.

1st place winners receive $100.00
2nd place winners receive $ 50.00
3rd place winners receive $ 25.00

The winners of the Graduate Oral Presentations are:

1st Place: Kate Lindborg (UA)
2nd Place: Kirsten Osterlund (UA)
3rd Place: Katherine Bliss (UA)

The winners of the Graduate Poster Presentations are:

1st Place: Gabrielle Brown (UA)
2nd Place: Bryan Hudson (UA)
3rd Place: Hilary Wakefield (UA)

The winners of the Undergraduate Poster Presentations are:

1st Place: Vinoo Urity (UA)
2nd Place: Dana McKee (UA)
3rd Place: Christina Smith (ASU)

The winners came up to the front of the room to be recognized for their outstanding work.

Dr. Lindstedt asked for questions for an open discussion. The members did not have any questions or suggestions. Dr. Lindstedt reminded everyone to fill out the questionnaire that was attached to the program.

Dr. Lindstedt motioned to adjourn the meeting. One member said, "I second it." Dr. Lindstedt said, "all in favor to adjourn the meeting say Aye." Members said, "Aye."

The meeting was adjourned at 12:55 P.M.
LISTING OF FIGURES

Figure 1: Dr. Erik Henriksen (UA), Symposium Speaker, Role of Oxidative Stress in the Etiology of Skeletal Muscle Insulin Resistance

Figure 2: Select AzPS members attending the oral presentations at the annual meeting

Figure 3: Members interacting at a poster presentation session

Figure 4: Dr. Jeff Sands of Emory University and the title of his APS Keynote Lecture

Figure 5: AzPS Secretary-Treasurer Tom Pannabecker (UA) distributing checks to undergraduate and graduate students for their oral or poster presentations.

Figure 6: AzPS President Stan Lindstedt (NAU) and Drs. Burt (UA) and Nishikawa (NAU) enjoying a moment at the reception.

Figure 7: Drs. Katsanos (ASU) and Carroll (MW) talking at the reception.

Figure 8: Midwestern University and University of Arizona-Phoenix group enjoying the reception. Pictured are Kristen Osterlund (UA-Phoenix), Dr. Rayna Gonzalez (UA-Phoenix), Mr. Elias and Dr. Johana Vallejo (MW).

Figure 9: Drs. Richard Coast (NAU), Kiisa Nishikawa (NAU) and Jason Pilarski (UA) enjoy a moment at the reception.

Figure 10: Gabrielle Brown (UA), 1st place winner of the Graduate Poster Session, stands by her poster titled “Enhancement of Platelet Activation and Aggregation by Erythrocytes: Role of Red Cells in Thrombosis”.

Figure 11: Vinoo Urity (UA), 1st place winner of the Undergraduate Poster Session, explaining his poster to members. His poster title was “Three-Dimensional Architecture of the Renal Inner Medulla of the Desert Rodent Dipodomys Merriami: Potential Impact on the Urinary Concentrating Mechanism.”

Figure 12: Dr. Bill Montfort (UA) viewing Craig Weber’s (UA) poster titled “Multivalent Tethered Ligands Enhance Cell Targeting Specificity and Reactivity”.

Figure 13: Drs. Jeff Sands (Emory Univ) and Jan Burt (UA) at the AzPS Conference.

Figure 14: Select AzPS members enjoying the reception. Pictured are Dr. Stacy Mazzaalupo (UA), Dr. Ron Lynch (UA), Gabrielle Brown (UA), Kate Lindborg (UA), and John Kanady (UA).

Figure 15: Tea Djandjoulilia (MW), Dr. Layla Al-Nakkash (MW), and Jamie Tedeschi (MW) also enjoying the reception.

Figure 16: A celebrity line up at the reception that includes Dr. Sean Limesand (UA), Mrs. Angelov (UA), Nathaniel Hart (UA), Tony Macko (UA) and Charles Chung (UA).

Figure 17: Members of the Physiology Club that assisted during the conference. Pictured are Jeremy Oulton (UA) and Emily Hein (UA).

Figure 18: Dr. Delamere (UA), Anita King (UA) and Jessica Solyts (UA) at the AzPS reception.