



The Physiologist

85th President of APS

Susan M. Barman

INSIDE

**Annual Meetings of
the Iowa and
Nebraska
Physiological
Societies**
p. 44

**APS Election
Results**
p. 43

**Barrett Receives
9th Schmidt-Nielsen
Distinguished
Mentor and
Scientist Award**
p. 47

**ACDP Meeting
Highlights**
p. 50

**Randall Lecture:
Colleagues as a
Defense Against
Bad Science**
p. 52

**Andrew Tsin
Receives
PAES-MEM Award
from Obama**
p. 67

I am extremely grateful to the membership of the American Physiological Society (APS) for allowing me to assume the honored and privileged position as their 85th President. As I reviewed the credentials of the three recent APS Presidents while preparing to write this article, I was in awe of their professional accomplishments and am humbled to be in their company. I am also confident that I can match

each past-President in their passion and enthusiasm to work with the Council and the membership of APS to promote and strengthen the discipline of Physiology. As I am sure was the case for my 84 predecessors, a combination of hard work, listening to sound advice, and dedication have been instrumental in first my becoming a physiologist and then gaining the respect of the APS membership as exemplified by their electing me as their next President. These attributes will continue to serve as my guiding principles during the next year as I work to reach the goals I will introduce here. But first, I will describe events that have led to my being given the opportunity to be an APS President. But even before I do this, I want to share my fascination with solving puzzles and invite you to figure out the next number in the following sequence: 48, 75, 80, 85, ____.



Susan M. Barman

Learning about Physiology and Being a Physiologist

I was born and raised in Joliet, IL, the middle child of four siblings. My father was a grocer without a high school diploma, and my mother needed only a high school education to figure out a way to use Dad's very limited income to provide for a comfortable home. None of my parents' siblings had been educated beyond high school, so there was no

expectation of getting a college education let alone a doctoral degree. But I followed the advice of a high school counselor and became the first in my family to apply for admission to a college. I qualified for several scholarships that afforded me the opportunity to attend Loyola Univ. of Chicago. It was during my senior year while working on a BS degree in Biology that I first learned about physiology. As part of a work-study program, I accepted an offer to be a lab instructor in Anatomy and Physiology, a course for nursing students. Fortuitously, in that same year, the Biology Department hired two new faculty members that introduced Vertebrate Physiology and Cell Physiology courses into the Biology major curriculum. I particularly enjoyed learning about the nervous and cardiovascular systems, but the thought of this interest becoming a

(continued on page 39)

The Physiologist

Contents

85th President of APS

Susan M. Barman

APS News

APS Election Results

Chapter News

2011 Combined Annual Meeting
of the Iowa and Nebraska
Physiological Societies

Education

Barrett Receives 9th
Schmidt-Nielsen Distinguished
Mentor and Scientist Award
APS/NIDDK Minority Travel
Fellowship Awards Program
2012 Caroline tum Suden/Frances
Hellebrandt and Steven M.
Horvath Professional Opportunity
Awardees

ACDP

Association of Chairs of
Departments of Physiology
Meeting Highlights
Solaro Honored at Annual
ACDP Meeting

Randall Lecture in Biomedical Ethics

Colleagues as a Defense Against
Bad Science
Gerald P. Koocher

NMRI Anniversary

NIH's NIDDK Network of Minority
Research Investigators (NMRI)
to Hold its 10th Anniversary
Celebration

Membership

New Regular Members
New Graduate Student Members
New Undergraduate Student
Members
New Affiliate Members
Recently Deceased Members

Mentoring Forum

Conflict Resolution: How to
Keep Everyone Happy!

Science Policy

President Proposes Flat Budget for
NIH, Increase for NSF
Research Chimpanzee Colony
is Valuable Resource
APS Urges Public-Private
Partnership on Public Access
National Science Board Revisits
NSF Merit Review Criteria

People & Places

Andrew Tsin Receives PAES-MEM
Award from President Obama

Senior Physiologists' News

Positions Available

The Wine Wizard

APS Membership Application

Calls for Papers

Meetings & Congresses

Published bimonthly and
distributed by
The American Physiological
Society

9650 Rockville Pike
Bethesda, Maryland 20814-3991
ISSN 0031-9376

Joey P. Granger

President

Peter D. Wagner

Past President

Susan M. Barman

President-Elect

Martin Frank

Editor and Executive Director

Councillors

Kenneth M. Baldwin,

David P. Brooks,

Dennis Brown, Patricia E. Molina,

Ida Llewellyn-Smith,

Usha Raj, Jane F. Reckelhoff,

Curt D. Sigmund, Alan F. Sved

Ex Officio

John C. Chatham,

Thomas A. Pressley,

Hershel Raff,

Jeff M. Sands,

Ann Schreihof

Publications Committee: *Chair:*
Hershel Raff; *Members:* Kim E.
Barrett, William M. Chilian, Asrar
B. Malik, David M. Pollock, Helen
E. Raybould, Joseph Mark
Metzger, Susan J. Gunst. *Director*
of Publications: Rita Scheman.
Design and Copy Editor: Joelle R.
Grossnickle.

Subscriptions: Distributed to
members as part of their member-
ship. Nonmembers in the USA
(print only): individuals \$85.00;
institutions \$135.00. Nonmembers
in Canada: individuals \$125.00;
institutions \$170.00. Nonmembers
elsewhere: individuals \$125.00;
institutions \$170.00. Single copies
and back issues when available,
\$20.00 each; single copies and back
issues of Abstracts issues when
available, \$30.00. Subscribers to
The Physiologist also receive
abstracts of the Conferences of the
American Physiological Society.
The online version is available free
to all worldwide.

The American Physiological Society
assumes no responsibility for the
statements and opinions advanced
by contributors to *The Physiologist*.

**Please notify the APS Member-
ship Department as soon as
possible if you change your
address or telephone number.**

Headquarters phone: 301-634-7118

Fax: 301-634-7241

Email: webmaster@the-aps.org

<http://www.the-aps.org>

Printed in the USA

Little did I realize that I would get paid about \$235/month to get a degree in physiology, thanks to a National Institute of Health (NIH) Medical Science Predoctoral Trainee Grant (1972-1975) that allowed me to study neural control of the cardiovascular system with my advisor Robert D. Wurster in the Department of Physiology at Loyola Univ., Stritch School of Medicine.

in Maywood, IL. The Chair of the Department, Walter C. Randall (55th APS President), ensured that all students became members of the APS and encouraged them to present their work at Fall APS meetings held on college campuses and at FASEB meetings (predecessor to Experimental Biology meetings) in Atlantic City. Randall also knew how important it was for students to be familiar with both historical and current events in physiology so that we could place our own research in the proper context. Students had to give seminars describing a study of a historical person and a current investigator. For the later, I presented a paper by Gerard L. Gebber that I later learned was the study that he considered as his entry into the APS. Randall had invited him to speak at a FASEB symposium,

Many would agree that once you get a degree in physiology, do physiological research, pay dues to the APS, attend Experimental Biology meetings, and publish in physiological journals you certainly warrant being called a physiologist. But for me, those criteria were not enough. To be a physiologist, I think it is important to give back to the

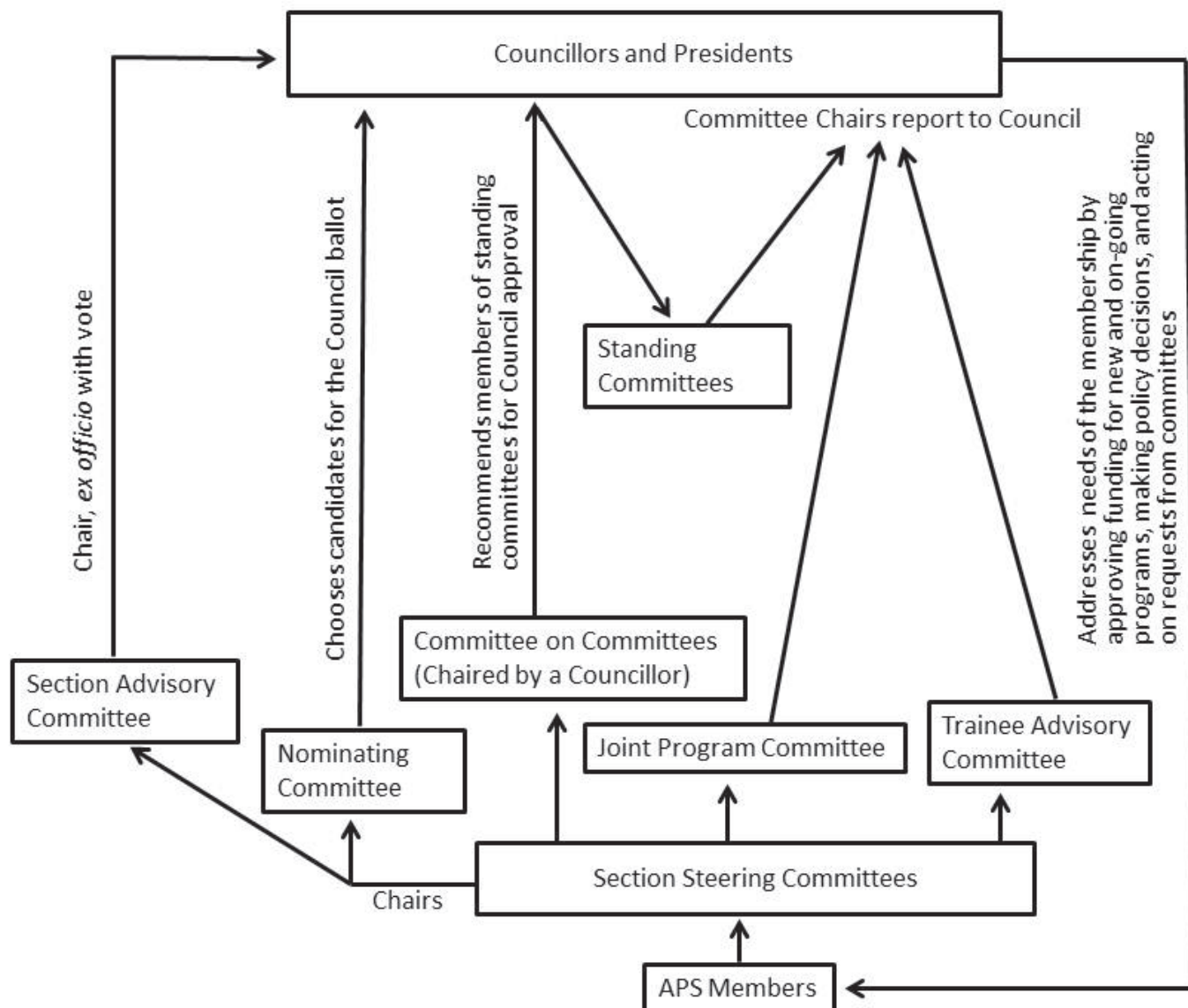


Figure 1. The interrelationships of Section Steering Committees, APS standing committees, and the APS Council.

Introducing Susan M. Barman

Susan M. Barman is a Professor in the Department of Pharmacology & Toxicology (PHM/TOX) in the College of Human Medicine (CHM) and in the Neuroscience Program at Michigan State Univ. (MSU) in East Lansing, MI. Amongst her leadership roles at MSU, she is currently Chair of CHM Graduate Studies Committee; and she is Chair of the PHM/TOX Faculty Advisory Committee, a position to which her colleagues have elected her to serve in 11 of the past 14 years. Barman also recently served as Vice-Chair and then Chair of the MSU Institutional Animal Care and Use Committee. She is a recipient of the Outstanding Univ. Woman Faculty Award from the Faculty Professional Women's Association of MSU and a CHM Distinguished Faculty Award.

Barman received her PhD in Physiology from Loyola Univ. Stritch School of Medicine in Maywood, IL in 1976. She completed her doctoral research on spinal cord control of sympathetic nerve activity and regional blood flow under the direction of Robert D. Wurster. Barman did her postdoctoral work in the laboratory of the late Gerard L. Gebber in the Department of Pharmacology at MSU. She remained there and became an Assistant Professor in 1979; she was the first woman to reach the rank of Professor in that department. Her collaborative research with Gebber on brainstem control of sympathetic nerve activity continued for 33 years until his death. Barman has authored or co-authored 96 peer-reviewed journal articles, including 75 in APS journals, and 33 invited reviews, book chapters, or editorials. She is a co-author of the latest two editions of Ganong's Review of Medical Physiology in which she assumed the responsibility to revise and update the neurophysiology content.

A primary research focus for Barman has been the identification of brainstem neurons that comprise a critical network for setting the level and pattern of activity in sympathetic nerves that control cardiovascular target organs. Her research was rewarded with a National Institutes of Health Method to Extend Research in Time (MERIT) Award (1995-2005).

Like virtually all other physiological control systems, the sympathetic nervous system is characterized by the presence of rhythmic activity. The hallmark of sympathetic nerve activity is the presence of rhythms synchronized to the respiratory and cardiac cycles. But sympathetic networks are complex and generate a mixture of periodicities that range between 0.04 and 10 Hz, depending on the physiological conditions, type of nerve being analyzed, and the species. Despite the prevalence of these rhythms, their function is often not obvious, which leads to the question: what can one learn about neural control of the cardiovascular system by studying rhythms in sympathetic nerve discharge? Barman and colleagues have used a combination of frequency-domain (power density spectral) and time-domain (autocorrelation) analyses to quantify how various perturbations such as manipulating neurotransmission in specific medullary regions can impact the level and pattern of sympathetic nerve activity. Their work supports the view that rhythmic activity leads to more effective activation of sympathetic neurons than randomly occurring activity and that rhythmicity is important for coordinating activity in different sympathetic nerves and in formulating complex cardiovascular response patterns.

Barman recently established two new research collaborations. One is at her home institution where she and Stephanie W. Watts are working together to identify whether a centrally-mediated reduction in sympathetic nerve activity contributes to the fall in blood pressure produced by a chronic administration of serotonin which is typically considered to be a vasoconstrictor agent. Shaun F. Morrison at Oregon Health and Science Univ. is also a major partner in this research effort. The second collaboration is with Bill J. Yates at the Univ. of Pittsburgh. They are examining the integrative influences of vestibular and baroreceptor inputs on the firing patterns of rostral ventrolateral medullary (RVLM) neurons in an effort to better understand the cardiovascular responses to changes in posture. An emphasis is placed on RVLM neurons

with cardiac-related activity; this work is the first to record from such neurons in a conscious animal.

Within the APS, Barman has been active in many capacities. Since 1995, she has been either a regular or ex officio member or Chair of the Steering Committee of the Central Nervous System Section (CNS) of the APS. She was one of the original members of the Joint Program Committee. As Chair of the CNS Section, she also served on the APS Nominating Committee and Section Advisory Committee. She was Chair of the Section Advisory Committee (2003-2005); and she was a member or Chair of the Women in Physiology Committee (1996-2001). As Chair of that committee, she was the APS representative to the FASEB Excellence in Science Award Committee. In 2005, Barman was elected to a three-year term on the APS Council and served as Incoming Chair and then Chair of the Committee on Committees. In 2008 she chaired the APS Pipeline Taskforce. In 2010 she began a term as a member of the Animal Care and Experimentation Committee and as the APS representative to the Council of Academic Societies. Both positions ended when she became President-elect of the APS. Currently, she is a Council representative to the Science Policy Committee and an ex officio member of the Publications Committee and the Finance Committee. Barman has also been on the Editorial Boards of American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology and American Journal of Physiology: Heart and Circulatory Physiology for over 10 years. She has been active in several outreach and training initiatives of the APS including being an Instructor for Professional Skills Training Writing and Reviewing for Scientific Journals Workshop and for the beta-test of the online format for two professional skills courses (Scientific Writing and Presentation Skills). Barman was a Physiologist-in-Residence for the APS Retreat for High School/Middle School Science Teachers, and she has participated in Physiology Understanding (PhUn) Week. ❖

Society and be a real player in its activities. This does not mean that you need to become President or a Councillor. Indeed, one of the easiest ways a person can begin to “make a difference” is to volunteer to serve on a Section Steering Committee. To the best of my knowledge, all recent Presidents, including myself, have participated at this grass roots level. Figure 1 shows a simple chart of the organization of APS committees and their relationship to the APS Council. It shows the many ways that members of the Section Steering Committees can influence the rest of the Society. As illustrated in Figure 1, Experimental Biology programming (Joint Program Committee), membership on APS standing committees (Committee on Committees), and even election to Council and President (Nominating Committee) take root in responsibilities of the Sections. It is also an important venue for trainee members to have a voice in determining how the APS can assist in their professional development (Trainee Advisory Committee). Although Council appoints an individual to Chair these other committees, APS members wanting to gain experience on a Section Steering Committee do not require Council approval. One only needs to contact a member of their Section Steering Committee to express their willingness to get involved.

For much of the past 17 years, I have had a presence on a steering committee, standing committee, or the Council of the APS. The information I share here captures a few of the things that I have been able to accomplish in my varied roles while working with the Society. During the coming year, I hope to inspire at least a few APS members to become active participants and help shape the future of the Society. The APS Council and the talented and dedicated staff of the APS in Bethesda warmly welcome ideas from the membership.

In 2000, when I became Chair of the Women in Physiology Committee, I read through the APS Operating Guide and noted that this committee was expected to coordinate activities with comparable groups in our “sister societies.” I took advantage of the fact that I was also a member of the Women in Pharmacology Committee of American Society of Pharmacology and Experimental Therapeutics (ASPET) to propose a jointly-sponsored mentoring workshop

to be held at the Experimental Biology meeting. The session “How to Write, Review, and Publish in APS and ASPET Journals” in 2001 began what is now a staple at these meetings and also the seed for the first of the Professional Skills workshops organized by the APS Education Office.

In 2003, after serving as Chair of the Central Nervous System Steering Committee for four years, I was elect-

“During the coming year, I hope to inspire at least a few APS members to become active participants and help shape the future of the Society.”

ed as Chair of the Section Advisory Committee, a position I really enjoyed because it is a major link between the membership and the Society leadership. The Chair of the Section Advisory Committee is an ex officio member of Council with voting privileges and allows you to be engaged in conversations with committee chairs during the Summer Council Meeting. One year I heard the Chair of the International Committee express a desire to increase the number of international members on APS committees and other activities. I went back to the members of Section Advisory Committee (i.e., all the section chairs) and encouraged them to recruit an international member to serve on their steering committees. This was an easy way to have 12 individuals from outside of the US become engaged at a section level and, thus, have a say in APS activities. Many sections subsequently followed through with this proposal. For those that did not, I encourage them to take this simple step.

In 2005, when elected to the APS Council, I volunteered to serve as Incoming Chair and then Chair of the Committee on Committees. In that role, I strongly promoted the involvement of trainee members on more of the APS standing committees because so many trainees had applied for openings but only a few committees had such a position. I proposed successfully to Council that a trainee be given the opportunity to gain experience on committees (e.g., Awards and Communications) that did not typically include a trainee. In 2008, I chaired the APS Pipeline Taskforce and successfully recommended the participation of Directors of Graduate

Programs in Physiology at the fourth meeting of the National Directors of Graduate Studies (NDOGS) in Pharmacology held in East Lansing in 2011. The biannual NDOGS meeting is an excellent forum for discussing common issues that graduate programs are facing in terms of recruiting, funding, and training to meet the future needs of the biomedical work force.

Goals for the Coming Year

I begin my term as President at a very exciting time for the Society. Not only is the Society in a strong financial state with almost 11,000 members spanning several countries, career tracks, and generations, but just before my entry onto the Executive Cabinet (Presidents: current, elect, and past and Executive Director Martin Frank), the Society held a Strategic Planning Meeting. The goal of the meeting was to develop long range plans to address the challenges that confront our membership, including reduced federal funding for biomedical research and for training the biomedical scientists of the future, less visibility of physiology in undergraduate and professional school curriculums, and the growing presence of animal rights groups. The outcome of discussions at the Strategic Planning Meeting was the identification of five strategic priorities that will be the framework for development of new initiatives to shape the future of our Society. The five strategic priorities are: increase efforts to ensure awareness of, and advocacy for, the discipline of Physiology; actively work to attract, meet the needs of, engage, and retain membership subgroups; develop strategies to strengthen the Society's publications in this changing world; enhance opportunities for scientific interaction and exchange; and increase the exposure to physiology in life sciences and health sciences education. More details regarding these priorities can be found in an article by Marty Frank in *The Physiologist* (3). Council appointed five task forces aligned with each strategic priority, and by Fall 2011 they had completed initial discussions to develop ideas on how to implement

these priorities. More detailed plans will be made available for the Spring 2012 Council meeting. Thus, a major goal for the coming year is for me to lead the Council as we begin the process of prioritizing the ideas stemming from the task forces and moving them to reality and ultimately to turn the challenges we face into exciting new opportunities for our membership.

Kidney Diseases (NIDDK) to support their minority efforts (e.g., Frontiers in Physiology and Minority Travel Fellowships). But like so many APS members, the Education Office received word that this funding opportunity is being terminated. Having participated as a mentor for a few Minority Travel Fellows, I know how important this resource has been to these students as

officials that determine funding priorities. APS members are fortunate to have an outstanding Science Policy Office under the direction of Alice Ra'anan that deals with these issues. This office has been working in conjunction with the APS Science Policy Committee to increase communication with the Directors at NIH and legislators on Capitol Hill. As a Council representative to the Science Policy Committee, in September 2011 I joined other committee members for a visit to Capitol Hill to meet with legislative staff. We emphasized the importance of maintaining federal funding for research and described the health and economic benefits that result from investing in human and animal research. For the past two years, the Executive Cabinet and the Science Policy Committee Chair, John Chatham, have met with officials at the NIH to promote enhanced communication between this funding agency and the membership of the APS. The meeting this past Fall led to the organization of a workshop to be held at EB 2012 entitled "National Institutes of Health: Programs and Policies Update from Institutes." Experimental Biology meeting attendees will have an opportunity to learn about current programs and new initiatives from National Heart Lung and Blood Institute (NHLBI), the NIH Common Funds Program, the impact of a recent strategic planning effort of the National Institute of General Medical Sciences (NIGMS) on training opportunities, and the latest news regarding NIH peer review. Ample time has been given for the NIH representatives to answer questions from the audience. Our dialogs with the Directors of the NIH and legislative staff on Capitol Hill will continue.

As described in an article co-authored by Peter D. Wagner (83rd APS president), Granger, and me in the December 2011 edition of Physiology (1), over the past several years the APS has established increased ties with physiological societies of other countries. This past July the APS Executive Cabinet met with the leadership of The Physiology Society during their annual meeting in Oxford. This has opened the doors to identifying possible ways for the two societies to collaborate, perhaps even with a joint effort to start an open access journal. Organizers of the Congress of the Brazilian Society of Physiology have invited me and leaders of other physiological societies to speak at a symposium.

"One of my goals as President of the Society is to encourage inclusion of young scientists (graduate students, postdoctoral trainees, or junior faculty) on all symposia programmed by the membership, along with a continued effort for gender equity on symposia panels."

Being a trainee in the 1970s, I benefited from having frequent opportunities to give oral presentations at scientific meetings. Today poster sessions far outnumber oral sessions at meetings, and few invitations to speak are extended to junior researchers. One of my goals as President of the Society is to encourage inclusion of young scientists (graduate students, postdoctoral trainees, or junior faculty) on all symposia programmed by the membership, along with a continued effort for gender equity on symposia panels. These will be requirements for the organizers of each of the Physiology InFocus sessions at EB 2013. One of the responsibilities of the APS President is to oversee the Physiology InFocus sessions at the EB meeting at which they preside. I have selected the theme "From Animal to Human Models of Disease." The sessions will highlight work that uses various models of a disease (cystic fibrosis, eating disorders, and irritable bowel syndrome) to gain a better understanding of the disease process and work toward improving human and animal health. I also hope to follow the lead of Joey P. Granger (84th APS President) who invited a Nobel laureate to give a talk on the final day of EB 2012, followed by a reception for trainees to meet the Nobel prize winner.

The Education Office of the APS, under the superb leadership of Marsha Matyas, has managed various programs of the highest quality that have benefited many individuals and groups spanning K-12 through postgraduate levels. The APS has received long-term (25 years) funding from the National Institute of Diabetes and Digestive and

they develop into the next generation of physiologists. Although Matyas and her staff are seeking new funding sources, I will propose to Council that the APS provide the funds to continue this program until other extramural resources are obtained. This can likely be accomplished by redirecting funds from other programs that are no longer needed to meet the goals for which they were originally developed. For example, in 1995 the Physiological Genomics Fellowship Program was established as a mechanism to allow someone trained in integrative physiology to gain expertise in genomics or vice versa. When genomics was in its infancy, this was a unique program to address the fact that advances in genomics ultimately required a functional understanding in the context of the organism, and special training was needed to conduct this type of research. Physiological genomics is no longer a "new biology." The costs to run this program are nearly identical to the funds needed to support the Minority Travel Fellowship. It is perhaps time to consider shifting these funds to support the minority travel program to impact the lives of many young physiologists that would otherwise not be able to attend EB meetings and be mentored by an APS member.

The issue of reduced federal funding for research and training impacts all biomedical scientists. As stated by Granger in his message to the members last year (4), to assure that APS members can compete for funds, we need to be in a position to influence the legislators on Capitol Hill that determine the amount of funding available and NIH

sium entitled "Perspectives for the Physiological Sciences and the Societies of Physiology on the 2012-2022 decade" at their meeting in September. The APS has also been invited by the Chinese Association for Physiological Sciences to participate in the International Physiology Conference in China next November. The APS Council has agreed to support two symposia for presentation at this conference. These are just a few examples of the way APS has been partnering with international societies to affirm our commitment to international outreach.

Closing Remarks

In closing, I would be remiss if I did not mention that there is at least one quality that sets me apart from 81 of my 84 predecessors. I am only the fourth woman to have been given the opportunity to serve as APS President. In 1995, as a member of the newly formed Joint Program Committee, I made my first visit to the APS conference room. For those who have never been there, pictures of all APS Presidents appear on the walls. I recall walking around the room to see how many of them I knew, or at least had met, when Marty Frank asked, "Are you looking for pictures of

the women?" In 1995, there was only one such picture gracing the wall. In 2002 I had the good fortune to meet the first woman elected to this position, Bodil M. Schmidt-Nielsen (48th APS President), while I was preparing an article for *The Physiologist* entitled "Growing participation of women in physiology: 1987-2002" (2). What an awesome woman she is and a role model for all who have followed. I also had the opportunity to serve on Council, as chair of the Section Advisory Committee or as an elected member, when Barbara A. Horwitz (75th APS President) and Hannah V. Carey (80th APS President) led the Society. It seems that it might now be time to update that 2002 article as the last 10 years have seen an increase in the number of women who have been successful in gaining a leadership role within the APS. And now it is time to give the answer to the number sequence problem I presented earlier. The correct number sequence is 48, 75, 80, 85, 86 – the presidential lineage with a woman as President. I was thrilled to learn that Kim E. Barrett was elected as the 86th APS President, and this means that for the first time there will be two women on the APS Executive Cabinet. I look forward with great enthusiasm and dedication to work with Kim Barrett, Joey

Granger, the members of Council, Committee Chairs, APS staff, and of course Marty Frank, during the next 12 months. I have high hopes that this team will work together effectively to make steady progress in implementing exciting new initiatives arising from the strategic planning process and to make the APS a place we all—young and old, clinician-scientist and basic scientist, researcher and educator, here and abroad—feel welcome.

Finally I would like to thank my friends, Sandy Gebber and Stephanie Watts, who read drafts of this article and offered very helpful advice. ❖

References

1. Barman SM, Granger JP, and Wagner PD. Physiologists without borders. *Physiology* 26: 378, 2011.
2. Barman SM and CM Liedtke. Growing participation of women in physiology: 1987-2002. *The Physiologist* 46: 1-5, 2003.
3. Frank M. Towards a strategic plan: Summary of APS strategic planning meeting. *The Physiologist* 54: 113-120, 2011.
4. Granger JP. 84th President of APS. *The Physiologist* 54: 41-49, 2011.

APS News

APS Election Results

The American Physiological Society announces the results of the election of officers for 2012. **Kim E. Barrett**, Univ. of California, San Diego is the new President-Elect. The three newly

elected Councillors taking office on April 25, 2012 are **Pamela K. Carmines**, Univ. of Nebraska College of Medicine; **Marilyn Merker**, Medical College of Wisconsin; and **William**

Talman, Univ. of Iowa Hospitals & Clinics. The Councillors will each serve a three year term. ❖



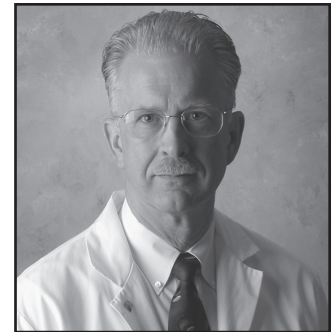
Kim E. Barrett



Pamela K. Carmines



Marilyn Merker



William Talman

2011 Combined Annual Meeting of the Iowa and Nebraska Physiological Societies October 21-22, 2011

A combined meeting of the Iowa (IPS) and Nebraska (NPS) Physiological Societies was held on Friday and Saturday, October 21-22 at the Olsen Medical Education Center (OMEC) on the campus of Des Moines Univ. (DMU) in Des Moines, IA. The meeting became the 15th and 14th annual meetings of the IPS and NPS, respectively. The meeting was financially supported by The American Physiological Society (APS), DSI, Kent Scientific, AD Instruments, the Department of Cellular and Integrative Physiology at the Univ. of Nebraska Medical Center, the Univ. of Iowa, and Des Moines Univ.

On Friday evening, a social event was held at the OMEC which included dinner and music performed by the DMU Chamber Orchestra. A total of 51 individuals attended the social. On Saturday, 109 individuals participated in the scientific/educational conference. The attendees included 36 faculty members, 17 postdoctoral fellows, 29 graduate students, and 20 undergraduate students. In addition, one high school teacher and seven other individuals, not included in the aforementioned categories, also attended. Overall, institutions from Iowa, Nebraska, South Dakota, Minnesota and Wisconsin were represented.

The Saturday scientific/educational sessions began with opening remarks from IPS president Julia Moffitt, from the Department of Physiology &

Pharmacology, Des Moines Univ. Following Moffitt's introductory remarks, the NPS keynote education address was made by Arri Eisen, from Emory Univ. His presentation was titled "Freshmen, Post-Docs, and Monks: My Journey into Learning How to Teach." Eisen's presentation was followed by a break in which attendees were able to visit exhibitor booths and view posters. The NPS "local" research address was then given by Keshore Bidasee for the Department of Pharmacology and Experimental Neuroscience at the Univ. of Nebraska Medical Center. His talk was titled "Reactive Carbonyl Species: A New Player in the Pathogenesis of Diabetic Heart Failure."

Following Bidasee's presentation, two graduate student research presentations were made. One student from the IPS and one from the NPS were selected based on the quality and novelty of their submitted abstracts. The first presenter was Erin Rosenbaugh from the Department of Cellular and Integrative Physiology at the Univ. of Nebraska Medical Center. Her talk was titled "Neuronal Uptake and Subcellular Localization of Nanoformulated Copper/Zinc Superoxide Dismutase." This was followed by a talk by Katrin Hollinger from the Department of Animal Science at Iowa State Univ. Her presentation was titled "PGC-1-alpha Over-expression Rescues Dystrophin

Deficient Skeletal Muscle."

After the graduate student presentations, three concurrent workshops took place. For college/university faculty, a teaching workshop was conducted by Mark Chapleau and Clay Peterson, both from the Univ. of Iowa. Chapleau's presentation was titled "Computer Simulation," while Peterson's talk was on "Technology in Teaching." Another workshop was conducted for high school teachers and this was chaired by Gina Schattemen from the Univ. of Iowa. Schattemen presented "Working with the National Institutes of Health Curriculum Supplements." The third workshop was organized for undergraduate, graduate, and postdoctoral students and involved a panel discussion with various professionals from outside academia and was titled "Alternative Career Opportunities." The panelists included: Kelly Pitts, Corgenix Medical Corporation, current Chair of the APS Physiologists in Industry Committee; Darin Glyten, Cardiac Rehabilitation, Univ. of Iowa Hospitals and Clinics; Jack Johnson, General Manager, Aspen Athletic Club; Meg Robison, Medical Writer, Robison & Associates Medical Communications, LLC; Mike Dixon, (UNeMed Corporation, Univ. of Nebraska Medical Center), and Lisa Vroegh (Des Moines Univ. Admissions). This workshop was very well attended and produced a great deal of discussion and interest.



Kari Scrogin, IPS Keynote Research Speaker.



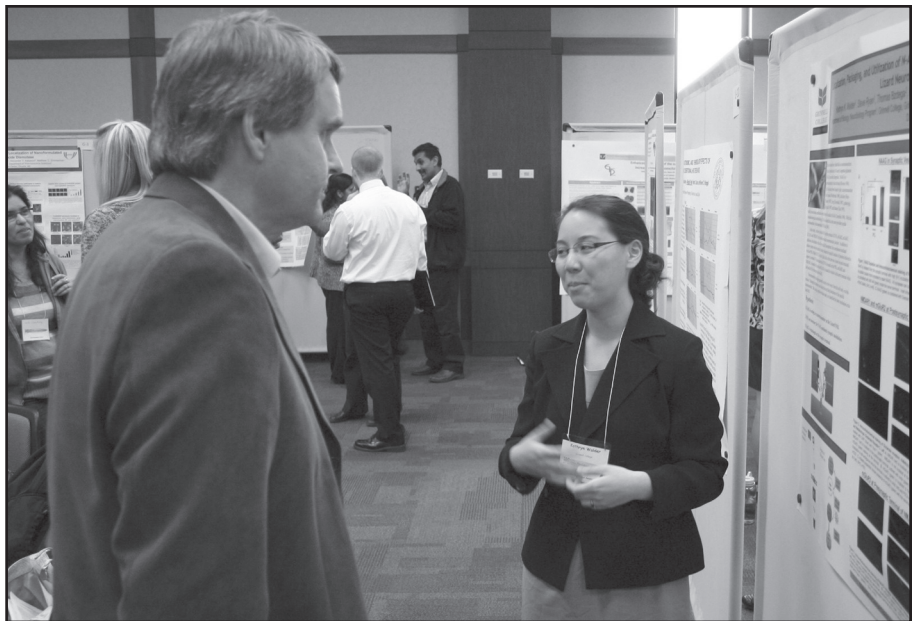
Dr. Arri Eisen, NPS Keynote Education Speaker.



Dr. Mike Lyons, IPS "Local" Education Speaker.



Dr. Keshore Bidasee, NPS "Local" Research Speaker.



The combined meeting drew 13 undergraduate posters, 22 graduate posters, 15 postdoctoral posters, and five faculty posters.

Lunch immediately followed the workshops. During the lunch period, Harald Stauss, Univ. of Iowa, and the current chair of the APS Chapter Advisory Committee, gave an informative presentation entitled "News from the Chapter Advisory Committee."

The afternoon sessions commenced with the IPS keynote research address by Karie Scrogin, the Department of Molecular Pharmacology and Therapeutics at Loyola Univ. Scrogin's talk was titled "New Tricks from an Old Molecule: Discovery of a Novel Role for Serotonin in the Neural Control of the Circulation." This was followed by a two-hour period devoted to poster viewing and judging.

Following the poster session, Mike Lyons, Kirkwood Community College, gave the IPS "local" education address. His talk was titled "Undergraduate Research in Two- and Four-Year Institutions: How to Develop, Implement, and Assess Research Experiences for First-time Physiology Students."

The afternoon session concluded with poster awards and recognitions. The winners of the undergraduate and graduate divisions each received a \$1,000 travel award to present their posters at the 2012 Experimental Biology meeting in San Diego, CA. The undergraduate winner was Kari Echtenkamp, Univ. of Nebraska at Omaha, for her poster entitled "Reduced Transtubular K Gradient

(TTKG) in the Distal Nephron of BK-44 knockout mice (4KO) on Na Deficient, High K Diets." The graduate winner was Jessica Freeling, Univ. of South Dakota for her poster entitled "Attenuated Parasympathetic Nervous System Control of the Heart in the Aging Mouse." In addition, all undergraduate, graduate, and postdoctoral poster presenters received a certificate and gift bag for their participation in this year's meeting. Concluding remarks were made by IPS president, Julia Moffitt.

At the conclusion of the meeting, the individual societies held their annual business meetings.

The IPS business meeting was chaired

by Julia Moffitt, from Des Moines Univ. and attended by Harald Stauss, Secretary/Treasurer from the Univ. of Iowa; Kim Tran, from Des Moines Univ.; Ron Torry, from Drake Univ.; Mark Chapleau from the Univ. of Iowa, and Gina Schatteman. Tran was unanimously elected president for 2012. Stauss provided the treasurers report and then discussion of plans for next year's meeting was put forth. In addition, possible chapter grant application ideas were discussed as were the association of IPS with the Iowa Academy of Sciences.

The NPS business meeting was called to order and chaired by Past-President, George Rozanski, from the Univ. of



Undergraduate poster presenters at the 2011 Combined Meeting of the Iowa and Nebraska Physiological Societies.



Graduate poster presenters at the 2011 Combined Meeting of the Iowa and Nebraska Physiological Societies.

Nebraska Medical Center (current President, G. Patrick Lambert, from Creighton Univ., was unable to attend due to a death in the family). A presentation on outreach activities over the past year was given by NPS Councilor David Holtzclaw. This was followed by an update on the APS Chapter Advisory Committee activities and the chapter

grant program by Harold Schulz, from the Univ. of Nebraska Medical Center. NPS Executive Director Cindy Norton then gave the treasurer's report and this was followed by the presentation of the Past-President Award to Rozanski by Engebretsen for his service to the NPS. The NPS council members for 2011-2012 were then announced. These are: President, Barbara Engebretsen, Wayne State College; Past-President, G. Patrick Lambert, Creighton Univ.; President-Elect, Keshore Bidasee, Univ. of Nebraska Medical Center; Secretary/Treasurer, Hong Zheng, Univ. of Nebraska Medical Center; Councilor, Yifan Li, Univ. of South Dakota; Councilor, Carol Fassbinder-Orth, Creighton Univ.; Councilor, Matthew C. Zimmerman, Univ. of Nebraska Medical Center; and Student Councilor, Tamra Llewellyn, Univ. of Nebraska Medical Center. Final remarks were then made by President-Elect Engebretsen regarding ideas for next year's meeting and the meeting was adjourned. ❖

Respectfully submitted,

*G. Patrick Lambert
NPS Past-President*

*Julia Moffitt
IPS Past-President*



Kari Echtenkamp, winner of the undergraduate EB 2012 travel award, with Dr. Julia Moffitt.



Jessica Freeling, winner of the graduate EB 2012 travel award, with Julia Moffitt.



Postdoctoral poster presenters at the 2011 Combined Meeting of the Iowa and Nebraska Physiological Societies.

Barrett Receives 9th Schmidt-Nielsen Distinguished Mentor and Scientist Award

The APS Women in Physiology Committee is pleased to announce that Kim E. Barrett, Department of Medicine, Univ. of California, San Diego, School of Medicine, has been selected as the ninth recipient of the Bodil M. Schmidt-Nielsen Distinguished Mentor and Scientist Award. The Committee was extremely impressed with both her mentoring excellence and her outstanding contributions to physiological research.

Barrett received her BSc in Medicinal Chemistry and her PhD in Biological Chemistry from Univ. College London, England. In 1982, she then ventured across 'the pond' to work for three years as a Visiting Fellow at the National Institute of Allergy and Infectious Diseases, National Institutes of Health in Bethesda, MD. In 1985, she was recruited to the Department of Medicine at the Univ. of California, San Diego (UCSD) as a junior faculty member of the Division of Gastroenterology by the late Kiertisin Dharmsathaphorn, at that time an up and coming researcher in the area of epithelial transport physiology. In 1988 she was appointed Assistant Professor of Medicine and rose through the ranks at UCSD to become a full Professor of Medicine in 1996 and Vice-chair of Research for the Department of Medicine in 1999, a position she held for seven years. She is currently Dean of Graduate Studies at UCSD and was recently re-appointed for a second term.

Among her many research contributions, Barrett has pioneered the area of growth factor regulation of epithelial ion transport, immensely increasing understanding of the multiple roles of growth factors and mitogenic signaling pathways in the acute regulation of intestinal epithelial function. She has also generated key insights into bacterial manipulation of epithelial function, roles for commensal bacteria in intestinal homeostasis, and mechanisms of action of probiotics in regulating epithelial function in models of inflammation. She has over 100 original scientific publications, over 100 review articles and book chapters, and 225 invited speaking engagements to her credit.

In addition to shaping our thinking on physiological systems through her research and review articles, Barrett has also had a profound influence on



Kim E. Barrett

the teaching of physiology. This includes publishing articles on the teaching of physiology. She has also written several book chapters, served as lead author and overall editor for the 23rd Edition of *Ganong's Review of Medical Physiology*, in 2010, and wrote a textbook of her own entitled *Gastrointestinal Physiology*, published in 2006. She has also received a number of awards for teaching from UCSD.

As a mentor, Barrett has been an invaluable guide for the many postdoctoral scholars and students who have worked with her. Her support and mentoring of her trainees has paid great dividends as many of her mentees have gone on to establish their own independent research careers, generate their own independent funding and win national awards.

Barrett has been a self-less advocate for young researchers at both institutional level, as chair of the UCSD Biomedical Sciences PhD program and chair of the committee on research and faculty development at UCSD, and also at national level through her active participation in the American Physiological Society and the American Gastroenterological Association (AGA). She has also given her time and effort to conduct symposia and deliver seminars to thousands of trainees and junior faculty at national meetings on how to determine a career path and navigate the academic promotion system. She has also been a powerful advocate for many associations and groups especially for women in science and women in physiology in particular. This has led

to recognition in various forms including a YWCA TWIN (Tribute to Women in Industry) Award, in 2009. She has worked tirelessly to promote scientific awareness, the need for enhanced NIH funding, and the importance of graduate education among members of the legislature, and to increase awareness in the media. Her outreach efforts have also encompassed an NSF-funded GK-12 program that places graduate students as partners with teachers in local high school classrooms.

Barrett has won numerous honors recognizing her research accomplishments including the APS Henry Pickering Bowditch award, the APS Davenport Lecturer award, the AGA Young Investigator Award, an honorary Doctorate of Medical Science from Queen's Univ., Belfast, and election as a Foreign Member of the Swedish Royal Society of Sciences. In 2008 she received one of the awards of which she is proudest when she was selected as one of the AGA Outstanding Women in Science. Her scientific accomplishments were also recognized by her colleagues at UCSD School of Medicine when she received the Faculty Distinguished Lecturer Award in 1999. She has also served as a reviewer on numerous NIH study sections and on NIH advisory panels.

Barrett brings a great heart to all her endeavors through her passion for science, her dedication to the academic mission of her institution and the associations to which she has dedicated huge efforts, in particular the APS, and most notably to the countless individuals she has touched with her compassion and willingness to help, be they humble undergraduates or senior professors. Her generosity is well-known and was notably recognized by the San Diego Chapter of the Crohn's and Colitis Foundation of America (CCFA), who presented her with their prestigious "Heroes with Hearts" award in 2007 to acknowledge her many, often unheralded, services to the CCFA at both local and national level.

In addition to being an incredible role model for women in science, Barrett has been a wonderful servant to the American Physiological Society. She has served on committees for both the Gastrointestinal and Cell sections, and chaired a number of committees

including the Women in Physiology Committee, and the Committee on Committees. She has also devoted a significant portion of her career to editorial duties on behalf of APS. She served as Editor-in-Chief for the *American Journal of Physiology: Cell Physiology* for six years (1996-2002), and chaired the APS Publications Committee (2005-2010). She is currently vice-chair of the Publications

Committee with a special responsibility for ethical issues. In addition, she is currently Deputy Editor-in-Chief and Senior Editor of the *Journal of Physiology* and has served on the editorial boards of a number of other prominent journals. Indeed, her service to APS will increase further as she has just been selected to serve as APS President-Elect (2013).

There will be a reception in Dr.

Barrett's honor at which she will give a talk on mentoring during the 2012 Experimental Biology meeting in San Diego, CA. It will be held on Monday, April 23 at 12:00 pm at the San Diego Marriott Marquis & Marina Hotel. All trainees and mentors are invited to attend.

APS congratulates Dr. Barrett on this well-deserved honor. ❖

APS/NIDDK Minority Travel Fellowship Awards Program

Since its inception in 1987, the APS/NIDDK Minority Travel Fellowship Program has awarded more than 810 travel fellowships to over 555 undergraduate, graduate, and postdoctoral students and to faculty members at minority institutions. It is an effective program model that capitalizes on a critical impact point where professional societies can make a real difference—catalyzing

the development of important professional networks for undergraduate, graduate, and postdoctoral minority students in physiology and biomedical research that can increase their retention in these fields.

The APS, on behalf of the Porter Physiology Development Committee, is pleased to congratulate the following awardees of the APS/NIDDK Minority Travel Fellowship Awards to

attend Experimental Biology 2012:

For more information about the APS Minority Travel Fellowship Awards, contact Brooke Bruthers, Minority Programs Coordinator, at bbruthers@the-aps.org or visit <http://www.the-aps.org/mm/Education/Minority-Program/Educational-Projects/Minority-Travel-Fellows-Program>. ❖

Sherry Adesina	Emory Univ.
Nicholas Aguirre	Univ. of California, Davis
Kevin Anderson	UCSD Medical Center, Hillcrest
Stan Andrisse	Saint Louis Univ., MO
Christopher Arellano	Univ. of Colorado, Boulder
Alfonso Brito	California State Univ., Los Angeles
Kristen Brown	Univ. of Michigan
Amber Brown	Tennessee State Univ.
Tahisha Buck	Univ. of Oregon
Denise Coley	Univ. of Louisville
Heidy Contreras	Univ. of LaVerne
Mark Cunningham	Univ. of Florida
Bethany Davis	Univ. of North Dakota
Mary Garcia-Cazarin	Univ. of Kentucky
TanYa Gwathmey	Wake Forest Univ.
Anniesha Hack	Johns Hopkins Medical Inst.
Ronee Harvey	Mayo Clinic
Debra Irsik	Univ. of Nebraska Medical Center
Annet Kirabo	Vanderbilt Univ.
Sydney Lopez	Univ. of California, Davis
Keisa Mathis	Univ. of Mississippi Medical Center
Monica Nadal-Quiros	Univ. of Puerto Rico, Rio Piedras

Michael Ongele
Elimelda Onger
M. Cecilia
Ortiz-Capisano
Jaume Padilla
Ricardo Paez
Ana Palei
Daniel Paredes
Neil Phillips
Kristi Porter
Vanessa Ramseyer
Abigail Ruiz-Rivera
Marissa Saenz
Lakeisha Tillery
Ashlee Tipton
Inimary Toby
Jose Pablo
Vazquez-Medina
Jose Viscarra
Junie Warrington
Annie Whitaker
Clintoria Williams

Howard Univ.
North Carolina A & T State Univ.
Henry Ford Hospital
Univ. of Missouri
Massachusetts Inst. of Technology
Univ. of Mississippi Medical Center
Univ. of New Mexico
Univ. of Florida
Emory Univ.
Henry Ford Hospital
Ponce School of Medicine
Univ. of California, Davis
Meharry Medical College
Georgia Health Sciences Univ.
Univ. of Oklahoma HSC
Univ. of California, Merced
Univ. of California, Merced
Univ. of Oklahoma HSC
Louisiana State Univ., New Orleans
Emory Univ./Atlanta VA Med. Ctr.

2012 Caroline tum Suden/Frances Hellebrandt and Steven M. Horvath Professional Opportunity Awardees

Thanks to generous donations from several sources, the APS offers four abstract-based awards for graduate students and postdoctoral fellows:

- Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards (36)
- Fleur L. Strand Professional Opportunity Award (1)
- Steven M. Horvath Professional Opportunity Awards (2)
- Gabor Kaley Professional Opportunity Awards (2)

To be considered for these awards, the candidate must apply to the tum Suden/Hellebrandt awards, be the first author of an abstract submitted to APS for the Experimental Biology meeting, and must be a member of APS in good standing at the time of application (either Student or Regular).

These awards provide funds for junior physiologists to attend and participate fully in the Experimental Biology meeting.

The awardees receive \$500 and

complimentary advance rate registration reimbursement for the Experimental Biology meeting. The Strand Awardee, the top ranked applicant, receives \$1,000 and complimentary advance rate registration reimbursement. Awardees are selected by the Women in Physiology Committee.

For more information about these awards, visit <http://www.the-aps.org/mm/awards/OtherAPS-Awards> or contact the Education Office at education@the-aps.org. ❖

Gerald Audet	West Virginia Univ.	Kim Pedersen	LSU Health Sciences Center
Martin Bahls	Purdue Univ.	Hua Peng	Tulane Univ., Medical School
Jill Barnes	Mayo Clinic	Bill Pryor	Univ. of Georgia
Erik Behringer	Univ. of Missouri-Columbia	Vanesa Ramseyer**	Henry Ford Hospital
Namjik Cho	Univ. of Florida	Nabil Rashdan	Oklahoma State Univ.
Mark Cunningham	Univ. of Florida	Steven Romero	Univ. of Oregon
Shekhar Deo	Univ. of Missouri	Arun Roj***	Univ. of Alabama at Birmingham
Michael Devinney	Univ. of Wisconsin	Joseph Santin	Wright State Univ.
Laura Gilliam	East Carolina Univ.	Melissa Scroggin	LSU Health Sciences Center
Styliani Gouloupoulou	Georgia Health Sciences Univ.	Ali Shawki	Univ. of Cincinnati
Jennifer Iddings	Georgia Health Sciences Univ.	Frank Spradley***	Georgia Health Sci. Univ.
Debra Irsik	Univ. of Nebraska	Inger Stallmann-Jorgensen	Georgia Health Sci. Univ.
Nicholas Jendzjowsky	Univ. of Alberta	Michelle Sullivan	Colorado State Univ.
T King	Univ. of Missouri, Columbia	Dharendra Thapa	West Virginia Univ.
Jessica Kutz	Pennsylvania State Univ.	Sara Turner*	Univ. of Wisconsin, Madison
Min-Young Kwak	Tulane Univ.	Jose Pablo Vazquez-Medina	Univ. of Calif., Merced
Steven Laurie	Univ. of Oregon	Patricia Villalta	Univ. of South Alabama
Jacqueline Limberg	Univ. of Wisconsin, Madison	Kedra Wallace**	Univ. of Mississippi
Domagoj Mladinov	Medical College of Wisconsin	Rob Wust	Univ. of Leeds
M. Cecilia Ortiz-Capisano	Henry Ford Hospital	Jie Xie	Indiana Univ.
Ana Palei	Univ. of Mississippi		

* Strand Awardee

** Horvath Awardees

*** Kaley Awardees

Annual Meeting of the Lake Cumberland Biological Transport Group

The 47th annual meeting of the Lake Cumberland Biological Transport Group will take place Sunday, June 17 through Wednesday, June 20, 2012 at the Lake Cumberland State Resort Park in Jamestown, KY. This is an excellent, inexpensive forum for principal investigators, post-doctoral fellows and graduate students to present both published data or work in progress and receive feedback. Submission of a presentation title (ie. no abstracts) is all that is necessary. Cell biology, physiology, molecular biology, and biochemistry presentations centered around the theme of biological transport are all welcome. Presentations are made in

an informal atmosphere with open discussion encouraged. The scientific sessions will be held morning and evening. Afternoons are free to enjoy swimming, fishing, golfing, riding, hiking, or just relaxing in this beautiful 3,000 acre state park. Registration fees are only \$15 for students, \$25 for post-docs, and \$60 for established investigators. To find out more, please visit <http://www.cumberlandbio.org/> or contact the Chair (Eleanor Lederer, e.lederer@louisville.edu), the Vice Chair (Silvia Dossena, silvia.dossena@pmu.ac.at), or the Chair Emeritus (Charity Nofziger, charity.nofziger@pmu.ac.at). ❖

Association of Chairs of Departments of Physiology Meeting Highlights

The Association of Chairs of Departments of Physiology (ACDP) held its annual meeting at Playacar Palace, Playa del Carmen, Mexico, on December 1-4, 2011.

President Gary Sieck (Mayo Clinic) developed a program focused on physiology education, ranging from K-12 through faculty.

The fifth Arthur Guyton Lectureship was given by Paul Welling (Univ. of Maryland Medical School) on "Potassium Channels Find Their Way in Membrane Traffic." The interim chair research presentations were by David Kreulen (Michigan State Univ.) on "Neural Control of Veins in Hypertension" and by Jay Dean (Univ. of South Florida) on "Insights on Neuroprotection Against CNS Oxygen Toxicity." In addition, R. John Solaro (ACDP Distinguished Service Awardee from Univ. of Illinois at Chicago) discussed his scientific career in a presentation entitled "Tipping Points in a Scientific Life." The group also received an update on APS activities from current President, Joey Granger (Univ. of Mississippi).

The presentation focusing on K-12 physiology education was given by Bill Joyner (East Tennessee State Univ.)

entitled "An Epidemic, Childhood Obesity: Physical Activity With GoTrybe As Part of the Solution!" reporting on his group's efforts to formulate a youth fitness program (GoTrybe.com) that could be used with K-12 students. The graduate school presentation was by William Jackson (Michigan State Univ.) and entitled "National Directors of Graduate Studies (NDOGS) 2011: A Successful Collaboration Between Physiologists and Pharmacologists," reporting on the first joint meeting (ndogs.phmtox.msu.edu/facilities.html) between the two groups of graduate directors this past summer. Phil Clifford (Medical College of Wisconsin) presented on "Postdoctoral training: Qué es y qué debe ser?" pointing out the need for training beyond research training, especially in the area of careers. Meredith Hay (Univ. of Arizona) led a discussion of "Mentoring and career development strategies for faculty." For continuing education, Joseph LaManna, President of FASEB, brought members up-to-date information from Capitol Hill and NIH in his presentation "Challenging Times Ahead."

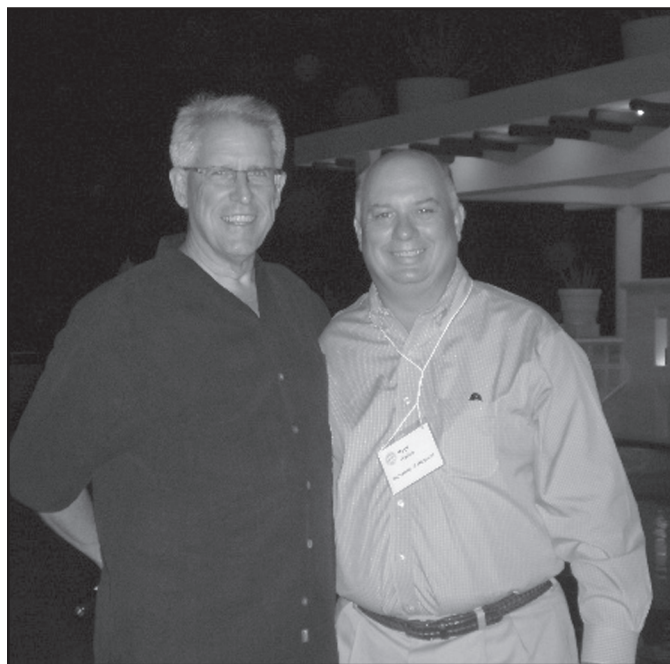
All non-scientific presentations are available on the ACDP website at

www.acdponline.org/Meetings/2011fallmeeting.htm.

Officer elections were held with the following results. Muthu Periasamy (Ohio State Univ. College of Medicine) was elected President-elect, Bishr Omary (Univ. of Michigan Medical School) and Charles Wood (Univ. of Florida College of Medicine) were elected to three-year terms as Councilor. R. Clinton Webb (Georgia Health Sciences Univ.) was elected to a three-year term as Council of Academic Societies (AAMC) Representative and L. Gabriel Navar agreed to serve for one additional year as the second CAS Representative to allow for staggered terms.

R. Clinton Webb (Georgia Health Sciences Univ.) was thanked for his service as Past President. Nicholas A. Delamere (Univ. of Arizona) was thanked for his service as Councilor.

President-elect Marshall (Chip) Montrose (Univ. of Cincinnati College of Medicine) announced the 2012 ACDP annual fall meeting location is still under consideration. For more information on the 2012 meeting, watch the website for news <http://www.acdponline.org/>. ❖



ACDP President Gary Sieck presents Paul Welling with the 5th Guyton Lectureship Award.



Playacar Palace, Playa del Carmen, Mexico.

Solaro Honored at Annual ACDP Meeting

Gary Sieck (Mayo Clinic), President of the Association of Chairs of Departments of Physiology (ACDP), presented the ACDP's highest award, the Distinguished Service Award, to R. John Solaro, Chair, Department of Physiology and Biophysics, Univ. of Illinois at Chicago (UIC), College of Medicine, during the organization's 2011 fall meeting in Playa del Carmen, Mexico.

Solaro was selected to receive the ACDP Distinguished Service Award for his long and illustrious service to ACDP, to science, and to physiology.

Solaro has been an educator, administrator, and researcher with significant impact in the field of molecular and integrated control of cardiac physiology, pathology and pharmacology. He has served as Chair of the Department since 1988. He is currently one of a handful of Distinguished Univ. Professors in the Univ. of Illinois System. He is the founder and past director of the UIC Center for Cardiovascular Research. He is an Honorary Professor at the Univ. of Manchester in England. At UIC, Solaro received the Univ. Scholar Award and the Faculty of the Year Award.

Solaro received his undergraduate degree in Pharmacy from the Univ. of Cincinnati. He then went to the

Department of Physiology at the Univ. of Pittsburgh School of Medicine, where he trained with F. Norman Briggs. He received his PhD in 1972. He was appointed Assistant Professor at the Medical College of Virginia that year, and in 1975-76, he was a Fellow of the American and British Heart Associations working with S. V. Perry in Birmingham, England. From 1977-1988, he was a professor at the Univ. of Cincinnati College of Medicine. In 1987, he was a Fogarty Fellow working with David Allen at Univ. College London.

The focus of Solaro's scientific work is on control of molecular motors of cardiac sarcomeres. He has done seminal work on the role of troponin in switching on contraction, on the role of myofilament protein phosphorylation in the control of cardiac dynamics in the transition to heart failure, and on the enhancement of myofilament activation by pharmacological agents, two of which, Acardi (Pimobendan) and Simdax (Levosimendan) are in clinical use. His current translational studies center on therapies involving peptides and micro-RNAs with an emphasis on common cardiac disorders and on cardiomyopathies genetically linked to mutations in sarcomeric proteins. These studies are currently funded by

three grants on which Solaro serves as PI: an RO1, a MERIT Award now continued to year 37, and a Program Project Grant. He also holds a joint grant from the Medical Research Council with colleagues at the Univ. of Manchester, England.

Solaro has been active in many societies and in service on review panels and editorial boards. He is past president of the Cardiac Muscle Society and ACDP and Secretary General of the International Society for Heart Research. Solaro is currently Chair of the NIH Skeletal Muscle and Exercise Physiology Study Section and served as past Chair of the Cardiovascular Sciences Study Section and member of the Physiology Study Section. He serves as Associate Editor of the *Journal of Molecular and Cellular Cardiology* and is past Associate Editor of the *American Journal of Physiology (Heart)*, where he is now Consulting Editor. He also serves on the Editorial Board of *Circulation Research*. He has served as guest editor of special issues in *Circulation Research*, *Cardiovascular Research*, *Journal of Molecular and Cellular Cardiology*, and *The Journal of Biological Chemistry*.

Solaro has a distinguished career as a mentor to over 70 pre- and postdoctoral fellows and visiting scientists. He has been PI of an institutional training grant funded into its 25th year. He was honored as the UIC Mentor of the Year.

Because of his scientific endeavors; his dedicated service to the field of gastrointestinal and pancreatic physiology and physiology as a whole; and his distinguished service to APS, ACDP, and other scientific organizations, the ACDP was proud to present its 2011 Distinguished Service Award to R. John Solaro. ♦



ACDP President Gary Sieck presents R. John Solaro with the 2011 Distinguished Service Award.

Walter C. Randall Lecture on Biomedical Ethics Colleagues as a Defense Against Bad Science

Gerald P. Koocher, PhD, ABPP

Professor of Psychology and Associate Provost at Simmons College, Boston, MA

This article is based on the author's presentation of the Walter C. Randall Lecture on Biomedical Ethics, American Physiological Society, and Washington, DC April 12, 2011.

What factors contribute to dishonesty in scientific research and how often does it occur? What can individuals do to reduce instances of such dishonesty or to correct it when we observe it? One survey study (13) found nearly all respondents reporting they would personally intervene if they viewed an act as unethical, but do researchers truly behave this way in real life situations? These questions form the foundation for work my colleagues and I undertook with Federal grant support. The context of our work focused on the belief that our colleagues constitute the best defense against scientific misconduct and that offering a range of potential solutions will ultimately reduce the motivation of those tempted to veer off the path of scientific honesty and rigor.

Behavioral scientists have had a long standing interest in the study of dishonest behavior as a human character flaw. In the 1920's Hartshorne and May (4) began a series of studies on human character in which they tempted children to engage in dishonest behavior. They began with the common sense assumption that virtuous behavior presupposed possessing certain attitudes or knowledge (e.g., children who belonged to the Boy Scouts or participated in religious instruction regularly should certainly demonstrate more honesty than those who did not). Their most significant finding showed that they could not categorize children as virtuous or not, but rather "moral behavior" appeared situation or context specific. A substantial body of subsequent research (2) suggested that a more fruitful approach to the study of honesty would require consideration of cognitive factors including the beliefs and motivation of the person in a specific context.



Gerald P. Koocher

Proximal cause and scientific dishonesty

Applying what we know about the study of honesty in society at large, three factors will influence whether and when biomedical or other scientific researchers will most likely intentionally engage in dishonest acts related to their work. First, their commitment to discovering the truth, to patient care, or to other core scientific values would have to fail or become compromised. Second, the potential for significant reward or meeting perceived urgent need must exist. Finally, potential dishonest actors must appraise their chances of detection as low. Often the process follows an internal process of rationalization. For example, investigators may justify falsifying data as acceptable because they believe the actual results would turn out as they expected in any case; because taking a shortcut seems necessary to meet an important deadline; or because the chance of someone uncovering forged data seems nil.

We certainly can improve training and emphasis on high standards of research integrity in science, but we cannot control human nature or the motives and perceived needs of individuals. We can, however, take additional

steps to erect situational constraints as primary barrier to the intentional commission of dishonest acts. In this context such colleagues, simply by virtue of their proximity, stand in a position to observe or learn about the misbehavior constitute the principal source of such constraint. These same colleagues also provide the most readily available resource for preventing and correcting unintentional errors. In so doing, one's colleagues can become a powerful defense against bad science.

What do you mean by "bad science?"

Most commentaries on scientific misconduct focus on the so-called "big three, FF&P" fabrication, falsification, and plagiarism. Fabrication usually takes the form of creating "dry lab" data—simply inventing the values or purported sample. Falsification can take several forms often referred to as "smoothing" or "cooking" the data to better fit the desired result or expected outcome. Another related tactic called "trimming" involves dropping actual collected data points to delete outliers or otherwise unwanted information. Unfortunately, the Federal authorities and Office of Research Integrity, in particular, will not investigate beyond FF&P (6, 9).

Can we agree on plagiarism? Not necessarily, particularly when taking a cross-cultural perspective. The common scholarly convention in North American and European circles would define plagiarism as the use of another person's words, ideas, or other intellectual and creative work without attribution, and representing it as one's own.

In some circles scholars also worry about "self-plagiarism," defined as reusing one's own previously published materials without specific attribution. However, Samuelson (10) has provided several cogent defenses for doing so ethically. For example, the author's prior work requires restatement to lay the groundwork for a new contribution in the second work; repeating portions of previous work to deal with new evidence or arguments; addressing differ-

ent audiences to get the message out; or having difficulty finding a better way to say something than one did in the earlier work. Even so, one could ideally cite the first instance of publication when repeating one's prior work and journal editors will typically appreciate scholars who do so.

In some parts of the world scholars and students have advanced an assortment of cultural justifications for the use of another's work without attribution. One recent study reported on the use of internet plagiarism by Iranian business school students (11). Some of their students rationalized such plagiarism observing:

- students must do absurd assignment assigned by their professors;
- discovering new things makes me worried so I prefer to copy others' work;
- if professors know that I don't understand, I feel ashamed;
- cheating culture is accepted in universities;
- in our college, establishing a good relationship with professors is better than strong academic work;
- nowadays, graduating is more important than achieving scientific knowledge;
- internet plagiarism helps me to graduate more easily;
- I retaliate for professors' cheating; professors plagiarize Power Point files found on Google;
- internet plagiarism is the students' right, not immoral;
- in college the quantity outweighs quality; by internet plagiarism I increase my works' quantity.

Perpetuating the Bozo factor

Although often ignored in the study of research misconduct, ineptitude or incompetence can cause significant damage to the scientific record, if undetected. Inappropriate designs, poor or biased sampling procedures, misused or wrongly applied statistical tests, inadequate record-keeping, and just plain carelessness can compromise scientific research and slip past peer reviewers on the way to publication. Even though there may be no intent to deceive, inaccurate information can also seriously damage the research record.

One might assume (or hope) that such inaccuracies, purposeful or not, will be discovered and the scientific record will self-correct over time, but we cannot count on this happening.

The odds of correcting errors through replication studies have declined as funding sources have shown appropriate reluctance to support such research, particularly expensive or complex projects. As a result, researchers have little incentive to repeat projects that do not seem critical. In addition, most scholarly journals do not normally publish pure replication studies. An investigator would have to risk significant time, effort, and expense with little assurance of scholarly visibility in conducting replication work, unless their new results prove significant in an unexpected direction. Most funders and investigators would prefer to bet their resources on perceived innovation.

Zero Federal Oversight for Some Naughtiness

Apart from the Bozo factor many other issues that can easily compromise research integrity simply do not qualify for attention by federal authorities. Intentional biases, such as rigging a sample to maximize support for one's hypotheses, withholding methodological details that might imply less than rigorous quality, and deceptive or misleading reporting of results or their interpretation, will not qualify for investigation by the Office of Research Integrity.

Although many peer-reviewed journals now have policies to address misleading or inappropriate authorship practices, questionable practices do not attract the attention of government regulators. Examples include: publishing a paper or parts of the same study in different publication outlets without informing the editor or readers; undeserved "gift" authorships; coerced authorship; or omitting someone who deserved an authorship or other form of credit. Unless a publication outlet takes steps to verify the validity of an author's status, ample room for chicanery abounds.

Enforcing the regulations of science is largely delegated to local institutions and some researchers choose not to follow the letter or spirit of the rules. Examples might include: sidestepping or ignoring an Institutional Review Board (IRB) or its directives; circumventing or ignoring human participant requirements with regard to informed consent, confidentiality, or risk assessment; and inadequate care of research animals violating federal research poli-

cy. If the local IRB and Institutional Animal Care and Use Committee (IACUC) do not police such policies vigorously, unscrupulous investigators can often avoid compliance with the letter, if not spirit, of such standards.

Behaving like a bully also falls below the radar screen of Federal oversight, while adding significant tension and stress to the research enterprise. For example: mistreatment or disrespectful treatment of subordinates; sexual harassment or other form of exploitation; playing favorites and other factors that create poor morale or acting out by subordinates; and conflicts with the administration or administrative policies. Some of these behaviors may lead to governmental enforcement outside the research regulation penumbra (e.g., sexual harassment in the workplace), however the quality of the research enterprise may become compromised long before workers complain. The same situation applies when investigators engage in dishonest acts only indirectly related to their researcher role. Examples might include: unreported conflicts, such as a financial interest in the outcome of an experiment; misuse or misappropriation of grant funds; inflating, distorting, or including bogus accomplishments on a resume. Some of these might, ultimately, lead to prosecution, particularly when fraud occurs. In some cases, however, major institutions have overlooked questionable or selfish acts by highly visible principal investigators who generate significant indirect cost revenues or fund a multitude of graduate students and postdoctoral fellows.

Difficulties in Detection

Most highly publicized scientific misconduct scandals have occurred in biomedical research laboratories. No one knows for sure whether the incidence of such behaviors runs higher in biomedical science than in the social and behavioral sciences, or whether it is simply easier to detect fraud in the biomedical context. Most social and behavioral research does not involve conducting chemical analyses, growing tissue cultures, documenting changes in physical symptoms, sampling with invasive procedures, or similar activities yielding "hard" documentation.

Social science data often take the form of scores from questionnaires, psychological assessments, performance measures, or qualitative data based on

interviews or behavioral observations. By the time data analysis takes place, the participants have long since gone, taking their identities with them. Unless recorded in flawless fashion, such data become relatively easy to generate, fudge, or trim. Such quality audio-visual data collection recording does not normally occur in the majority of behavioral science projects. Even when such recording does occur, external requests to audit the transcription or coding of the data sets are rare.

Engaging Colleagues as a Defense Against Bad Science

In conducting of our research (5) we searched the National Institutes of Health (NIH) Computer Retrieval of Information on Scientific Projects (CRISP) database, approaching more than 5,000 principal investigators. All were contacted via e-mail, although we do not know how many actually received our invitations because of outdated addresses or spam filters. We directed willing anonymous participants to an online survey site where they could report encounters with scientific misconduct by others that had occurred at any time in their careers. A total of 2,599 respondents reported 3,393 accounts of suspected wrongdoing and other errors related to the conduct of research.

Only 406 of respondents indicated that they had no incidents to share.

What risks materialized and who got hurt?

In 1,169 (42%) of the incidents reported to us for which the participant took some action, the actors experienced no negative consequences as a result of their intervention.

Another 296 participants (11%) reported experiencing an elevation in workplace status as a result of intervening. Examples included commendation from superiors and praise from colleagues as a result of the action they took. Almost half of our participants who reported taking some action reported suffering to some degree. Most recounted feelings of emotional distress, as opposed to career or social standing damage. Some reported serious consequences, such as feeling shunned by peers, feeling forced to leave a job, or losing previously close friends or allies. A few feared becoming defendants in law suits, although none ever materialized.

Despite the personal risks associated with taking some action, two-thirds of our participants claimed to have attempted to prevent or correct a wrong in progress, or to minimize damage that had already occurred. Very few participants initially reported their concerns to another entity, opting to attempt informal corrective steps or achieve damage control on their own or in partnership with other colleagues. The most common reasons offered for acting included feeling a commitment to research integrity, seeking to avoid damaging one's own reputation, protecting the reputation of one's lab or institution, or to prevent an associate from making a mistake. Almost all respondents took direct action when the suspected perpetrator was their own postdoctoral fellow or assistant.

Who took action?

A binary logistic regression analysis yielded profile characteristics of researchers who proved likely to intervene when suspecting wrongdoing. Most likely to take action were those who:

- held a higher professional or employment status than the suspected wrongdoer;
- had less regular interaction or involvement with the suspected wrongdoer;
- based their suspicions on strong evidence (i.e., direct observation or direct disclosure the transgressor rather than second-hand accounts or hearsay);
- perceived the transgression as unintentional;
- held a belief that individuals have a primary responsibility to become actively involved in maintaining scientific integrity.

The vast majority of those who felt victimized or who believed that they might personally suffer blame also proved likely to intervene individually or by reporting the matter, suggesting that acts involving direct threat to oneself will likely lead to taking some type of action. The highest rates of intervention occurred for projects described as taking place in the context of high stress that compromised research quality.

Those who did not act.

About a third of our research participants did not take action regarding any incident they shared with us. The largest subset of this group revealed that they felt too remotely involved or

knew that others were already taking action. Another third claimed they simply did not know what to do. Reluctance to deal with a suspected offender perceived of as a difficult person or who was their superior were other common reasons for inaction, as was an unwillingness to act when evidence seemed insufficient. One key message inherent in these findings connects to the importance of research ethics education in helping to guide junior colleagues and those who might have concerns about the integrity of bullies in the workplace.

Social relationships, job security, and status become more salient in close working conditions. It seems understandable, but also disappointing that those who worked closely with suspected wrongdoers seemed less likely to take any action. In a sense, those people with the best opportunity to observe wrongs and stop or correct them may also prove least likely to act when the offender holds superior status or seems personally intimidating. We asked if those who reported taking no action on their suspicions experienced any lingering reservations. Forty percent of those who did not get involved at the time, even though they had direct evidence of wrongdoing, reported still feeling misgivings, sometimes even after many years had since passed.

Rogues' Gallery

Some of the more egregious cases of research misconduct that seem to crop up all too often in the recent press accounts give an indication of how serious consequences can result.

Consider the case of Dr. Eric T. Poehlman (8) a former tenured research professor at the University of Vermont (UVM) College of Medicine, who agreed to a comprehensive criminal, civil, and administrative settlement related to his scientific misconduct in falsifying and fabricating research data in numerous federal grant applications and in academic articles between 1992 and 2002. He became the first academic scientist in the United States to serve prison time for misconduct (not involving fatalities) and received a lifetime ban on federal research funding. Poehlman plead guilty to acting alone in falsifying and fabricating research data and filing false grant applications, for which the National Institutes of Health paid \$542,000. He agreed to pay \$180,000 to settle a civil complaint related to numerous false

grant applications he filed while at UVM and paid \$16,000 in attorney's fees for Walter F. DeNino, a research assistant whose complaint of scientific misconduct spurred the initial investigation by UVM. Poehlman initially had attempted to deflect blame to DeNino.

Another significant malefactor, Paul Kornak (7, 15) pled guilty to criminally negligent homicide for falsely representing results of blood chemical analyses in a chemotherapy study. Kornak had responsibility for organizing, coordinating, implementing, and directing all research elements in the Stratton VA Medical Center (Albany, NY) oncology research program. He participated in a scheme to defraud sponsors of clinical studies by repeatedly submitting false documentation regarding patients to qualify them for study protocols, even when test data clearly contraindicated their participation.

Mr. Kornak caused the death of one participant when he "knowingly and willfully" misrepresented blood chemistry analysis relating to the patient's renal and hepatic functioning and other medical problems which did not meet the inclusion/exclusion criteria. The patient then received the chemotherapeutic drugs docetaxel, cisplatin, and 5-FU in connection with a clinical trial protocol in late May, 2001, and died as a result less than two weeks later. In addition to 71-month prison term, Kornak was directed to pay restitution to two pharmaceutical companies and the VA in the amount of approximately \$639,000 (15).

The recent case of former Harvard professor Marc Hauser more clearly demonstrates what can happen when junior members of a research team speak up. On August 20, 2010 the Boston Globe(1) reported:

"Harvard University said Friday that it had found a prominent researcher, Marc Hauser, solely responsible for eight instances of scientific misconduct. Marc Hauser worked in the field of cognition and morality. Hours later, Dr. Hauser, a rising star for his explorations into cognition and morality, made his first public statement since news of the inquiry emerged last week, telling The New York Times, "I acknowledge that I made some significant mistakes" and saying he was

"deeply sorry for the problems this case had caused to my students, my colleagues and my university."

Hauser took a year's leave, and in July, 2011 resigned his tenured professorship to pursue, "some exciting opportunities in the private sector." This decision followed a vote of the department faculty to prohibit him from teaching.

When the story first appeared in 2010, I received a call from an investigative reporter based on the publication of our manuscript in *Nature* a few weeks earlier. The reporter worried that Harvard had covered something up by not dismissing Hauser outright. I replied that I thought the university showed appropriate restraint because of ongoing investigations, but praised the authorities for investigating based on what could only have been allegations of less powerful individuals in the hierarchy, most likely graduate students. A few days after the Globe published the story, I received a letter that read in part:

"I'm writing to express my gratitude and appreciation for your... comments... about Harvard's handling of Marc Hauser's misconduct. As the mother of one of the graduate students who brought the misconduct to the attention of the Dean of Faculty. I was especially touched by your comments about how very difficult this was for my son and how much courage it took for him to risk his career to make sure the misconduct could not continue..."

The message clearly indicated the toll taken by initial press speculation about disgruntled individuals or those with some nefarious motives had undermined Hauser.

As we think about the sensational cases, we must remain mindful of the cost to society in misspent research dollars, the cost to patients when research misconduct leads to clinical misdirection and actual harm, and the cost to innocent people who try to do the right thing.

What can we do?

My co-principal investigators and I have called for some culture shifting that erects strong situational constraints by mobilizing colleagues as active participants in reducing the

sense of would-be malefactors that they will succeed undetected. We seek to encourage active engagement in gentle alternatives to whistleblowing by freely distributing a user friendly guide to responding to research wrongdoing (3) that grew out of our research.

The most important elements of our guide are easily summarized.

To begin with, we strongly advocate for education on research ethics and standards that include the "big three" (i.e., fabrication, falsification, plagiarism) and beyond. We believe it is important to educate junior colleagues and reeducate our more senior colleagues – particularly those in roles administering and overseeing research enterprises. Part of the educational process should encourage establishing peer cohorts or links to mentors for purposes of informal consultation. Such colleagues will prove enormously helpful when one feels in doubt about what actions to take or how to proceed in a challenging situation. Creating a safe climate for sharing concerns in a professional manner and context with engaged colleagues will go far to reduce misconduct.

A second step involves adopting a helpful or concerned stance when approaching a colleague one suspects of dishonesty. This can prove particularly useful when dealing with colleagues who may suffer from competence problems or who feel under particular stress. Consider asking, "I think I see a problem. Can I give you some help with that data analysis?" or "You seem under a great deal of pressure lately, is there anything I can do to assist?" Such offers may enable the colleague in trouble to see alternatives and prevent them from taking the wrong pathway.

Finally, consider adopting the role of the confused colleague. Face saving can go a long way toward helping a defensive colleague, including one caught in a dishonest act, to back down. Instead of taking a confrontative or threatening approach, consider asking a question from a perplexed or baffled stance. Examples might include: "Are we allowed to drop outlier data like that, or is there some policy we need to follow?" "How much modification does the journal permit on the photos of our tissue slides?" "Shouldn't we be using a different statistical technique on these data?" "Will we ruin the validity of our data, if we don't recalibrate between sample batches?"

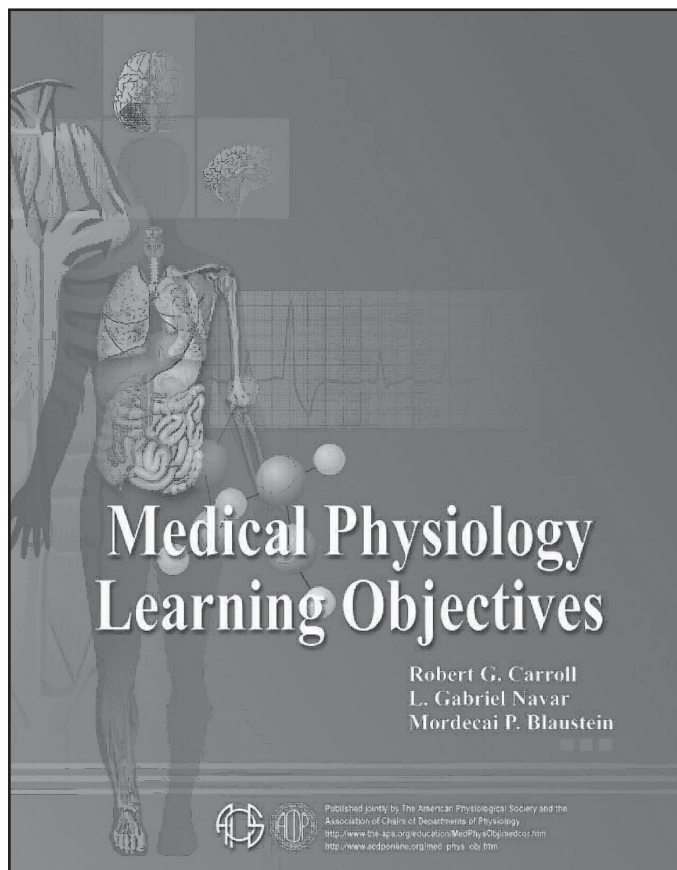
Risk managers have recognized the importance of creating a culture of practice that encourages the reporting of human error and near-miss situations to improve medical practice, as well as apologizing when appropriate. These lessons translate well to the research context. When we recognize and acknowledge that we all make mistakes, and welcome engaged colleagues who ask us about these in constructive ways, we improve the quality of our work. We also create a climate in which attentive colleagues help to continuously assist in defending against poor quality research.

References

1. Boston Globe: <http://www.boston.com/Boston/whitecoatnotes/2011/07/embattled-harvard-psychology-professor-resigns/Yb6hnLhdPuBkPf4f0rTXpO/index.html>.
2. Burton, R. V. (1963). Generality of honesty reconsidered. *Psychol. Rev.* 70, 481-499.
3. *Ethicsresearch.com*: <http://www.ethicsresearch.com/freeresources/rwresearchwrongdoing.html>.
4. Hartshorne, H. & May, M. A. (1928-1930). *Studies in the nature of character*. NY: Macmillan.
5. Koocher, G. P. & Keith-Spiegel, P. (2010). Opinion: Peers nip misconduct in the bud. *Nature*, 466, 438-440.
6. Martinson, B. C., Anderson, M. s. & de Vries, R. *Nature* 435, 737-738 (2005).
7. ORI Kornak <http://ori.hhs.gov/misconduct/cases/Kornak.shtml>.
8. ORI Poehlman http://ori.hhs.gov/misconduct/cases/press_release_poehlman.shtml.
9. ORI Questions and Answers: 42 CFR Part 93 (2006). Available at: <http://ori.dhhs.gov/documents/QandA/reg.6-06.pdf>.
10. Samuelson, P. (1994). "Self-plagiarism or fair use?". *Communications of the ACM* 37:8, 21-25. doi:10.1145/179606.179731.
11. Sohrabi, B. G. A. & Mohammadesmaeli, N. (2011). Effects of Personality and Information Technology on Plagiarism: An Iranian Perspective. *Ethics & Behavior*, 21:5, 367-379.
12. Swazey, J.P., Anderson, M. s. & Lewis, K. s. *Am. Sci.* 81, 542-554 (1993).
13. Wenger, N. S., Korenman, S. G., Berk, R. & Liu, H. *Evaluation Rev.* 23, 553-570 (1999).
14. Whitley, B. E. & Keith-Spiegel, P. *Academic Dishonesty: An Educator's Guide* (Lawrence Erlbaum Associates, 2002).
15. United States of America v. Paul H. Kornak, Criminal Action No. 03-CR-436 (FJS), U.S. District Court (N.D.N.Y.) (January 18, 2005).

Correspondence may be addressed to the author at: Koocher@simmons.edu.

NIH Grant No. 1R01 NS049573 to Simmons College, Gerald P. Koocher, Principal Investigator; Patricia Keith-Spiegel and Joan Sieber, Co-Investigators. Full materials on the survey described are available for download free for charge at www.ethicsresearch.com.



NEW 2012 Revision

APS/ACDP Medical Physiology Learning Objectives

Available now in pdf form at <http://www.the-aps.org/med-physobj>.

Updated in 2012:
Neurophysiology

Updated in 2011:
Cardiovascular, Cell,
Endocrinology, Gastrointestinal,
Integration & Exercise, Muscle
and Renal

Download your copy now!

NIH's NIDDK Network of Minority Research Investigators (NMRI) to Hold 10th Anniversary Celebration

In 1999, NIH Director Harold Varmus called the new Director of the NIDDK, Allen Spiegel, into his office to discuss what could be done to increase the number of minority researchers in the United States, and by default (it was hoped) encourage research on health disparities. At the time, the US Department of Health and Human Services (DHHS) had instituted an initiative for each of the NIH Institutes to establish programs to address these problems. Spiegel returned to the NIDDK and called Lawrence Agodoa, the Director of Chronic Kidney Disease and End Stage Renal Disease Programs and the newly appointed Director of the Office of Minority Health Research Coordination (OMHRC), to ask him to lead this new DHHS initiative for the NIDDK. Agodoa, with support from Spiegel, established the Network of Minority Research Investigators (NMRI) as one initiative to address the lack of minority researchers involved in diseases of interest to the NIDDK; the same diseases that were disproportionately affecting minorities in the US.

During the next decade, the NMRI recruited, cajoled, and influenced the state of research to markedly improve participation of minority investigators in the research enterprise. Beginning with a concerted effort to enlist senior investigators to serve as "owners" of the Network, Agodoa found a select group willing to accept the responsibility of finding and mentoring junior minority investigators with the goal of providing entry into the medical research fields of interest to the NIDDK.

al or regional workshop. As Agodoa tells workshop attendees, *"The NMRI belongs to you. The NIDDK will support the Network by funding NMRI activities, like these workshops, but the Network will succeed or fail depending on the enthusiasm and hard work of its members."*

"The NMRI gave me massive help while I was applying for a faculty position. I had made some unforgivable errors in my first series of interviews. Some of the senior fellows at the NMRI corrected my interview style and were helpful in the next series. I am now an Assistant Professor."

An evolving strategy to expand the reach of the NMRI is to develop partnerships with national scientific organizations, such as the American Physiological Society (APS). Speakers from the APS have been included on the agendas of the annual workshops and NMRI members offer their participation as speakers and/or breakout session leaders at national scientific meetings. In addition, the NMRI works closely with organizations such as the APS to support their minority training activities.

After almost a decade, enough data have been collected from members to make an assessment about whether the NMRI is doing what Spiegel (and the current NIDDK Director Griffin Rodgers) and Agodoa foresaw as they worked to create the NMRI. In response to questionnaires completed online by NMRI members, a steady progression of career advancement has occurred among members, with many members attributing participation in

many focus of NMRI workshop training sessions, the number has increased dramatically over the decade. Although participation in the NMRI does not guarantee successful grant applications, most members completing the NMRI questionnaire have felt the instruction and mentoring processes

have increased their capability to write a winning grant application.

Increasing the number of minority researchers as a goal of the NMRI has been met in the past decade, but there still is a large gap to close in creating a representative research environment, especially in these stressful economic times. Because the NMRI has become a model program at the NIH for increasing minority participation in medical research, other NIH Institutes are discussing how to implement a program such as the NMRI, or possibly how to allow the expansion of the NMRI to include minority researchers in disciplines outside the NIDDK mandate, such as heart disease, cancer, and infectious diseases.

The NMRI will be celebrating its 10th anniversary at the 2012 NMRI Annual Workshop on April 19-20 in Bethesda, MD. The anniversary is a time to look back and see the progress made for increasing minority participation in medical research, but also an opportunity to look forward to the remaining challenges. The next 10 years promise to see continuing gains in research participation for minority scientists, but only if programs such as the NMRI continue to be supported by those who "own" the Network by bringing in the next generation of minority researchers, mentoring their progress, and giving them the knowledge and skills necessary to access the research enterprise.

Information about the Network of Minority Research Investigators can be found at <http://nmri.niddk.nih.gov/>. ❖

"The NMRI workshops were the first time I saw there was a slew of people like me. It made me feel less alone. Good role models of success in academia."

Success was not long in coming as the NMRI became nationally known as an avenue for career promotion and peer mentoring for minority researchers that could strengthen a junior investigator's knowledge, experience, and resume.

Since the NMRI was established in 2002, it has grown to more than 100 active members, with another 300 who have attended at least one NMRI annu-

the NMRI as a significant influence. At the same time, mentor/mentee pairings have increased from 4 in 2008 to 23 in 2011; this indicates the future is brighter for meeting the goals of the NMRI. At each NMRI workshop, members are asked to report on career promotions, successful grant applications, and number of publications. Each of these areas have increased in the past five years. For grant applications, a pri-

New Regular Members

*transferred from student membership

Nancy M. Aguilar-Roca
Univ. of California, Irvine

Sufyan Akram
Al I Muhammad Ibn Saud Islamic Univ., Saudi Arabia

Maria L. Alarcon Fortepiani
Univ. of the Incarnate Word, San Antonio, TX

Federico Aletti
Politecnico Di Milano, Milan, Italy

Mohamed Hadi Amiri
UAE Univ., Dubai, United Arab Emirates

Kofoworola O. Awotedu
Walter Sisulo Univ., South Africa

Ahmed Badar
Univ. of Dammam, Saudi Arabia

Megan Elyse Bardgett*
Univ. of Texas

Richard Scott Beard*
Univ. of South Florida, Tampa

Michael Beckstead
Univ. of TX HSC, San Antonio

Karen Francoise Bernard
Univ. of Alabama, Birmingham

Md. Shenuarin Bhuiyan*
Cincinnati Children's Hospital, OH

Dimitrios Bourdas
Univ. of Athens, Greece

Julie Ann Blendy
Univ. of Pennsylvania

Charlotte Boninier
Louisiana State Univ., Baton Rouge

Jason C. Brown*
Univ. of Western Ontario, Canada

Simon Bulley
Univ. of Tennessee

Anda-A. Calinescu
Univ. of Michigan, Ann Arbor

Georgina Carr
Newcastle Univ., UK

William Peter Cawthorn
Univ. of Michigan, Ann Arbor

Cory D. Champagne
Univ. of California, Santa Cruz

George Kaniyanthara Chandy
Univ. of California, Irvine

Robert Tephon Chapkin
Texas A&M Univ.

Suchita Chaudhry
Univ. of Maryland, Baltimore

Xiaodi Chen
Women and Infant's Hospital, Providence, RI

Scott A. Conger
Univ. of Pittsburgh, PA

Pierre-Antoine Crassous
New Jersey Med. Sch., Newark

Ryan H. Cunningham
Univ. of Manitoba, Winnipeg, Canada

Suzanne Currie
Mount Allison Univ., Sackville, Canada

Erica A. Dale*
Univ. of Wisconsin, Madison

Margie H. Davenport
Univ. of Calgary, Canada

Lisandra E. De Castro Bras
Cardiovascular Proteomics Ctr., San Antonio, TX

Alain De Cheveigné
CNRS/ENS/Univ. Paris Descartes, France

Carmen De Miguel*
Georgia Health Sciences Univ.

Cassidy Amy Delaney
Univ. of Colorado, Denver

Ashwani Dhawan
Maharaja Agarsan Med. Coll., Agroha, India

Christina M. Dieli-Conwright*
Univ. of Southern California, Los Angeles

Charles A. Downs
Emory Univ., Atlanta, GA

Jorge G. Farias
Univ. De La Frontera, Chile

Michale Sean Fee
Massachusetts Inst. of Tech.

Robert Fellner
Georgia Health Sci. Univ., Augusta

Kyle L. Flann
Univ. of Portland, OR

Raymond Fox
Univ. of California, San Deigo

Jessica M. Francel
Northeast Ohio Med. Univ.

Naoki Fujimoto
Univ. of Texas SW Med. Ctr., Dallas

Tohru Fukai
Univ. of Illinois, Chicago

Raúl Garcia
Fed. Univ. of Juiz De Fora, Brazil

James Peter Garnett
Univ. of London, UK

Sharon Gerecht
Johns Hopkins Univ., Baltimore, MD

Aron Geurts
Med. College of Wisconsin

Melanie Dawn Goodman*
St. Jude Med., Plano, TX

Scott Thomas Grafton
Univ. of California, Santa Barbara

Jessica Delores Gumerson*
Univ. of Maryland, Baltimore

Yuexian Guo
Third Hosp. Hebei Med. Univ., China

Alexander Gutschalk
Univ. of Heidelberg, Germany

Sarah A. Hale
Univ. of Vermont

Volker Hans Haase
Vanderbilt Univ., TN

Lewis George Halsey
Univ. of Roehampton, London, UK

Christopher James Hasson
Northeastern Univ., Boston, MA

Jacob M. Haus*
Univ. of Illinois, Chicago

Thiago Gomes Heck*
Univ. Reg. Noroeste Estado Rio Grande, Brazil

Ahlke Heydemann
Univ. of Illinois, Chicago

Larry Hoffman
Univ. of California, Los Angeles

Mackenzie Hofmann
Oregon Health and Science Univ.

Margaux A. Horn
Univ. of Manchester, UK

Noriko Ichinoseki-Sekine
Juntendo Univ., Inzai, Japan

Jeffrey Iliff
Univ. of Rochester, NY

Urmila Jagadeshwaran
Washington State Univ.

Jessy John
Govt. T.D. Med. College, Alappuzha, India

Darwin D. Jorgensen
Roanoke College, Salem, VA

Fredrick Rosario Joseph
Univ. of Texas HSC, San Antonio

Lisa Anne Joss-Moore
Univ. of Utah, Salt Lake City

Seung Ho Jung*
Univ. of South Carolina, Columbia

Kari Kalliokoski
Univ. of Turku, Finland

Paige S. Katz*
Tulane Univ., New Orleans, LA

Hesham Ahmad Khairy
Univ. of Calgary, Canada

W. Michael King
Univ. of Michigan, Ann Arbor

John Knight
Wake Forest Baptist Health, NC

Benedict J. Kolber
Duquesne Univ., PA

Leah Krubitzer
Univ. of California, Davis

Michael F. La Fountaine*
Seton Hall Univ., NJ

Djamel Lebeche
Mount Sinai Sch. Med., NY

Cuiping Li
Stanford Univ., CA

Jingning Lu
Louisiana State Univ., New Orleans

Esther G. Meyron-Holtz
Technion-Israel Inst. of Tech., Israel

Kevin Minard
Battelle, Richland, WA

Anil Mishra
Cincinnati Children's Hospital, OH

Ko Momotani
Univ. of Virginia, Charlottesville

Ju-Young Moon
Kyung Hee Univ. Hosp., Rep. Korea

Ruth Muchekeh
Covx-Pfizer Inc., San Diego, CA

Kimberly X. Mulligan*
Vanderbilt Univ., Nashville, TN

Tracy M. Mullins-Vermilyea
Northwest Christian Univ., Eugene, OR

Sydney R. Murphy*
Univ. of Mississippi Med. Ctr.

David B. Murray
Univ. of Mississippi

Aditya Murthy
Indian Inst. of Sci., Bangalore, India

Takeshi Nikawa
Univ. of Tokushima Grad Sch., Japan

Eisuke Ochi
Meiji Gakuin Univ., Yokohama, Japan

Shigehiko Ogoh
Toyo Univ., Kawagoe-Shi, Japan

Vahagn Ohanyan
NEOMED, Rootstown, OH

Alexandre Hideki Okano
Fed. Univ. of Rio Grande
Do Norte, Natal, Brazil

Adetunji S. Onasanwo
Univ. of Ibadan, Nigeria

Jose G.S. Organig
Univ. of California, Merced

Thomas Otis
Univ. of California, Los Angeles

Junichi Oyama
Saga Univ., Japan

Thomas K. Pelling
Salisbury Univ., Salisbury

Ranjan Kumar Pradhan
Medical College of Wisconsin

D. Mark Pritchard
Univ. of Liverpool, UK

Sadiqa K. Quadri
Columbia Univ., NY

Morten Raastad
Emory Univ., GA

Hema Raina
Univ. of Maryland, Baltimore

P. Srirama Rao
Univ. of Minnesota

Sakthivel Sadayappan
Loyola Univ., IL

Takamitsu Saigusa
Med. Univ. of South Carolina

Kathleen M. Salerno
Univ. of Pittsburgh, PA

Alapakkam P. Sampath
Univ. of Southern CA, Los Angeles

Alex Petrovich Sarapultsev
Ural Branch of RAS, Russian Fed.

Shannon Saszik
Northeastern Illinois Univ., Chicago

Naomi Sayre
Univ. of TX HSC, San Antonio

Carlos Manuel Nicolas Schreck
Mount Sinai Sch. of Med., New York,

Christopher E. Schwartz*
New York College of Med., Hawthorne

Amir Hossan Shaikat
Chittagong Vet. & Animal Scis. Univ.,
Bangladesh

Michael Shapira
Univ. of California, Berkeley

Farah Sheikh
Univ. of California, San Diego

Garry Shen
Univ. of Manitoba, Winnipeg, Canada

Ross Ashley Sherman
Grand Valley State Univ., MI

Sreerama Shetty
Univ. of Texas HSC, Tyler

Xuemei Shi
Baylor College of Med., Houston, TX

Marc Slutzky
Northwestern Univ., IL

Sergey V. Smirnov
Univ. of Bath, UK

James Smoliga
High Point Univ., High Point, NC

Zoltan Somogyvari
KFKE Res. Inst., Hungary

Flavia Moreira Souza
Louisiana State Univ., New Orleans

William Charles Stacey
Univ. of Michigan

Garrett B. Stanley
Georgia Inst. of Tech., Atlanta

Alexis Stranahan
Georgia Health Sciences Univ.

Huabo Su
Univ. of South Dakota, Vermillion

Giannis Taxis
California Inst. of Tech.

Ryoichi Teruyama
Louisiana State Univ., Baton Rouge

Cory Teuscher
Univ. of Vermont, Burlington

Ling Tian
Univ. of Alabama, Birmingham

Yvonne M. Ulrich-Lai
Univ. of Cincinnati, OH

Masuko Ushio-Fukai
Univ. of Illinois, Chicago

Rohan Varshney
Oklahoma State Univ.

Audrey A. Vasauskas
Univ. of South Alabama, Mobil

Manjeri Venkatachalam
Univ. of Texas, San Antonio

Yanxia Wang
Univ. of North Texas

Junie Paula Warrington*
Univ. of Oklahoma HSC

Amanda Waterstrat
Somerset Comm. College, London, KY

Lei Wei
Indiana Univ.

Virginia M. Weis
Oregon State Univ., Corvallis

Donghai Wen
Univ. of Nebraska Med. Ctr.

TingTing Weng
Univ. of Texas HSC, Houston

Crystal Ann West*
Univ. of Florida, Gainesville

Jonathan Mark Wittamore
Univ. of Florida, Gainesville

Bernard Wone*
Univ. of Arizona, Tucson

Alencia V. Woodard-Grice*
Kimberly Clark Corp., Roswell, GA

Chang Xiao*
Cincinnati Children's Hosp., OH

Guang-Yin Xu
Soochow Univ., Suzhou, China

Fang Yan
Vanderbilt Univ. Med. Ctr., TN

Ajit P. Yoganathan
Georgia Institute of Tech., Atlanta

Peng Yuan
Rockefeller Univ., NY

Wei Zhang
Univ. of Michigan, Ann Arbor

Guo-Qing Zhu
Nanjing Med. Univ., Nanjing, China

Jaroslav Zmijewski
Univ. of Alabama, Birmingham

Moving?

If you have moved or changed your phone, fax or Email address, please notify the APS Membership Office at 301-634-7171 or Fax to 301-634-7241. Your membership information

can also be changed by visiting the Members Only portion of the APS Website at <http://www.the-aps.org>. ❖

New Graduate Student Members

Bumsoo Ahn Univ. of Florida	Graham Mathew Fraser Univ. of Western Ontario	Lilia Ornelas San Francisco State Univ., CA
Maryam Baraka Akor-Dewu Ahmadu Bello Univ., Nigeria	Rachel Friedman Washington Univ., MO	Sung-Min Park Albert Einstein College of Med., NY
Uwaifoh Akpamu Ambrose Alli Univ., Nigeria	Rachel Anna Gioscia-Ryan Univ. of Colorado, Boulder	Sudip Paul Banaras Hindu Univ., India
Ayed Allawzi Brown Univ., RI	Shanalee S. Gollimore Florida A&M Univ.	Syed Siraj Ahmed Quadri Univ. of Louisiana, Monroe
Timothy Daniel Allerton Louisiana State Univ., HSC	Ashley Nicole Guillory Univ. of Houston, TX	Abeer Rababah Univ. of Houston, TX
Dan Orlando Altamirano Sarmiento National Univ., Trujillo, Peru	Lauren Haar Univ. of Cincinnati, OH	John J. Reho Univ. of Akron, OH
Raffaele Altara FHML, Maastricht Univ., Netherlands	Chady Hakim Univ. of Missouri	Brad Michael Reinholt Virginia Tech
Saheed Adekunle Amuda Chicago State Univ., IL	Arif Hamid Univ. of Michigan	Abigail Renoux Univ. of Michigan
Jenna M. Apicella Univ. of Connecticut	Andrew Michael Hammond Macquarie Univ., Australia	Rogério Faustino Ribeiro EMES-CAM Med. Sch., Brazil
Ryan Ashworth Univ. of South Carolina	Ashlyn Christine Harmon Univ. of Mississippi Med. Ctr.	Jennifer Rorex Univ. of Arizona
Kara M. Beasley Univ. of Oregon	Christopher M. Hearon Univ. of Colorado	Whitney Trotter Ross East Tennessee State Univ.
Steven Paul Blurton Univ. of Regensburg, Germany	Thiago Gomes Heck Univ. of Regional Noroeste, Brazil	Abigail Ruiz-Rivera Ponce School of Medicine, Puerto Rico
Nadine Brew Monash Univ., Australia	Angelina Marie Hernandez Indiana Univ., Sch. of Med.	Ricardo J. Samms Univ. of Nottingham, UK
Tony Carlisle Flinders Univ., Australia	Jamie K. Hill Univ. of South Alabama	M. Saravanan Pondicherry Inst. of Med. Sci.
Carmen Chu Univ. of Alberta, Canada	Austin Dean Hocker Univ. of Oregon	Kyle A. Schultz Indiana Univ., Sch. of Med.
Jeffrey Coble Univ. of Iowa	Justin Michael Hoffman Univ. of Arizona	Danielle Lee Shepherd West Virginia Univ.
Jillian Alane Condrey Univ. of Florida	Nang San Hti Lar Seng Univ. of Arkansas	Sierra Smith Univ. of Utah
Vinicius Fernandes Cruzat Univ. of São Paulo, Brazil	Ali Jalali Villanova Univ., PA	Kurt Spurgin Univ. of California, Riverside
Adrian B. Curtin Drexel Univ., PA	Nicholas G. Jendzjowsky Univ. of Alberta, Canada	Kara Jean Thornton Univ. of Idaho
Abigail Ann Curtis Univ. of California, Los Angeles	Alexis Brooke Jones Oklahoma State Univ.	Nsini Alease Umoh Howard Univ., DC
Jared Davies St. Boniface Research Ctr., Canada	Morvarid Sadat Kavosh Univ. of Manitoba, Canada	Matthew Valdez Univ. of California, Riverside
Angel A De La Cruz Landrau Univ. Central Del Caribe, Puerto Rico	David Gray Lassiter Univ. of Texas	Micah J. Waltz West Virginia Univ.
Andrew Thomas Del Pozzi Univ. of Alabama	Rachel N. Lippert Vanderbilt Univ., TN	Kuei-Chun Wang Univ. of California, San Diego
Sonia Diaz Univ. of California, Riverside	Jill Maples East Carolina Univ., NC	Yves T. Wang Cleveland Clinic, OH
Elizabeth M. Dlugosz Univ. of California, Riverside	Ramesh Mariappan Pondicherry Inst., India	Xuexiang Wang Univ. of Mississippi Med. Ctr.
Maryetta Donna Dombrowski Wayne State Univ., MI	Aleksandar Marinkovic Harvard Univ., MA	Ian Christopher Wenker Univ. of Connecticut
Debapriya Dutta Univ. of Florida	Tawanda Muzhingi Tufts Univ., MA	Tim Werner Virginia Tech
Heder Frank Gianotto Estrela Fed Univ. of São Paulo, Brazil	Cody Nichols West Virginia Univ.	Michelle L. Wright Univ. of North Dakota
	Henry Cameron Norris Univ. of Oregon	

New Undergraduate Student Members

Rebecca Ann Smith Marywood Univ., PA	Christopher William Engler Univ. of Nebraska Med. Ctr.	Haley Elizabeth Gillham Univ. of Oregon
--	--	---

New Affiliate Members

Chelsea Barrera
Univ. of Texas, San Antonio

Lisa Hays
Evergreen Valley College, PA

Mingxia Wang
West Virginia Univ.

Recently Deceased Members

Mary E. Avery
Boston, MA
Joseph R. DiPalma
Philadelphia, PA
Jeffrey B. Graham
La Jolla, CA
Hans-Ludwig Hahn
Hamburg, Germany

Gabor Kaley
Valhalla, NY
Hansjoerg E.J.W. Kolder
Iowa City, IA
Johannes Piiper
Gottingen, Germany
Fleur L. Strand
Snowmass, CO

Wylie W. Vale
La Jolla, CA
Jo Rae Wright
Durham, NC

Mentoring Forum

Conflict Resolution: How to Keep Everyone Happy!

Experimental Biology 2012 Conference
Women in Physiology Mentoring Symposium
Wednesday, April 25, 2012, 8-10 AM

Symposium Summary

Conflict resolution is an important skill set for all scientists. A laboratory cannot run well if there is conflict among the lab members. In addition, a scientist must often resolve conflicts in a departmental or university situation. The Women in Physiology Mentoring Symposium for the Experimental Biology 2012 conference will focus on how best to approach conflict resolution.

Conflict resolution is a complicated issue, and strategies to prevent and resolve conflicts may differ depending on the training level of the Principal Investigator and the others with whom he/she interacts. The challenges of conflict resolution with superiors, colleagues, laboratory employees, students and postdoctoral fellows, and lab mates will be addressed by three individuals, each providing a different perspective. The presentations in this symposium will focus on strategies for identifying, preventing, and resolving conflicts.

Symposium Chairs

Roy L. Sutliff
Associate Professor of Medicine
Emory Univ. and Atlanta VA Medical Center

Angela J. Grippo
Assistant Professor of Psychology
Northern Illinois Univ.

Symposium Presentations

Squashing Squabbles

Patrick Smith
Associate Dean for Faculty Affairs and
Professor of Family Medicine
Univ. of Mississippi School of Medicine

The goal of this presentation is to provide a practical approach for the identification of conflict, understanding the nature of the conflict, and reviewing specific steps toward addressing conflict. Conflict occurs in varying forms and the impact can range from minor to severe. In order to manage conflict, leaders are expected to be skilled in conflict management. Leaders should understand conflict, investigate conflict, manage the effects of conflict, and be able to utilize various resources toward conflict management.

Understanding and investigating conflict requires time and communications. Leaders conduct interviews to learn the topic, source, duration, and any actions related to the conflict. Individual investigative conversations occur with those involved in the conflict, as well as those impacted by the conflict. During the investigative stage, leaders learn the nature of interactions between the parties, what actions each party would like taken (expectations), and begin to develop steps toward resolution or acceptable conflict management.

In summary, conflict is common in organizations and leaders should be skilled facilitators for dispute resolution and conflict management. Unchecked conflicts intensify and the effects escalate the consequences, damage, and organizational toxicity. Leaders should be skilled and prepared to quickly, objectively, and fairly interrupt conflict in a candid manner as the culture of the organization depends upon their leadership to maintain morale and productivity.

Patrick Smith Biography



Patrick Smith

Patrick Smith is Associate Dean for Faculty Affairs and Professor of Family Medicine at the Univ. of Mississippi School of Medicine. Within these roles, he oversees leadership recruitment, provides ombuds services, manages principles of academic life (viz., appointment, promotions, and tenure), maintains a primary care psychology practice and provides training to postdoctoral fellows. He has served in leadership roles with the Mississippi Psychological Association, the Mississippi Board of Psychology, the Association of Psychologists in

Academic Health Centers, and the National Register of Healthcare Providers in Psychology. He is actively involved in the Association of American Medical Colleges through the Council of Academic Societies and the Group on Faculty Affairs.

Disagree and Advance Your Career: Nonviolent Approaches for Dealing with Your Superiors

Barbara Horwitz

Vice Provost of Academic Affairs
Univ. of California at Davis

Whether in industry, academia, or government, we work with individuals that do not all think alike (which is a good thing), and thus, it is inevitable that disagreements will arise. While “constructive” disagreements (e.g., those that are respectful and are not personalized) generally result in more thoughtful outcomes even if those involved do not come to agreement, many disagreements can poison the environment unless handled appropriately. Moreover, the situation can be more difficult if there is a power difference between the individuals involved.

This presentation will focus on the latter situation – that is, conflict/disagreement with someone at a higher level of authority/power. We will first consider ways to prevent disagreements/annoyances that may start as mole hills from escalating to mountains. We will then discuss strategies when disagreements could not be prevented. The importance of understanding expectations and the “unwritten rules” in the work unit, of thinking through potential solutions to the problem, of keeping the end goal in mind, and of using available resources (including mentors) will be emphasized, as will approaches for having “difficult conversations.”

Barbara Horwitz Biography



Barbara Horwitz UCLA and Davis

Barbara Horwitz is a Distinguished Professor at the Univ. of California, Davis. She received her PhD in physiology from Emory and her postdoctoral training at UCLA and Davis

before appointment to the UC Davis faculty. She has served as department chair, as Vice Provost for Academic Affairs, and as Interim Provost and Executive Vice Chancellor. Her research focuses on the genetic, neural, and hormonal factors that modulate physiological regulation of energy balance/metabolism. She has authored 188 research papers, has had continual funding from NSF/NIH since her faculty appointment, and received an NIH MERIT award in 1992 from NIA. She has numerous teaching/mentoring awards, is an AAAS fellow, and was President of the Society for Experimental Biology & Medicine and of the American Physiological Society.

Dealing with Conflict as a Trainee

Jennifer Sasser

Assistant Professor of Pharmacology
Univ. of Mississippi Medical Center

Being in a laboratory environment can provide sources of conflict for trainees that are different than what would be seen in other work environments. Working space, equipment, reagents and even the Principal Investigator's time are at a premium, and labs are composed of diverse individuals with many different backgrounds, personalities, and educational experiences. In addition, the scientific environment itself can be competitive for students and postdocs, so rivalry and jealousy can increase the likelihood of conflict. As scientists, we're not ever really taught how to manage conflict and deal with the “people issues” that arise in science, but lab conflicts can be terribly detrimental to early career scientists if not addressed properly.

This presentation will focus on steps that all of us can take to try to make the lab a more harmonious environment. Before joining a lab, try to get a picture of what the PI's management style is like and if that matches your personality. Once you're in the lab, try to maintain open communication with your advisor, and work with your PI to set goals for your professional development as well as research/coursework milestones. Go over these and revise them periodically to make sure you're both on the same page regarding your progression in the lab. Recognize that

all of the lab members have different goals and different needs, and try to be sensitive to those differences. It's also important to define what your own needs are as well. When dealing with conflicts within the lab, first communicate with others in the lab, and work together and brainstorm to mutually decide on a best-fit solution. More serious issues arise when authorship or matters of intellectual property are in question. Plan ahead when starting a new project. Address issues relating to your role in the lab early on in order to promote an environment of cooperation rather than competition and to help prevent “turf wars.” Talking about these issues rationally and setting up some ground rules at the beginning of a project can help to avert conflict that can arise after people have become emotionally invested in the project and have their own perceptions of what their role was.

Jennifer Sasser Biography



Jennifer Sasser

Jennifer Sasser has a BChE degree in Chemical Engineering from Georgia Institute of Technology and a PhD in Biomedical Science from Medical College of Georgia. She conducted her postdoctoral

training in Physiology and Functional Genomics at the Univ. of Florida. Her research interests have focused on the roles of nitric oxide and endothelin in hypertension and chronic kidney disease and on renal adaptations to pregnancy. She is currently funded by the American Heart Association to study the protective mechanisms of relaxin, a hormone that is normally increased during pregnancy, on the kidney and cardiovascular system during hypertension. Her current research is focused on the actions of relaxin to stimulate the production of nitric oxide and activate the renal endothelin system to lower blood pressure and prevent renal injury. ♦

President Proposes flat Budget for NIH, Increase for NSF

President Obama's Fiscal Year (FY) 2013 budget recommendations announced February 13, 2012 include flat funding for the National Institutes of Health (NIH) and a 4.8% increase for the National Science Foundation (NSF). Medical and Prosthetic Research at the Department of Veterans Affairs (VA) would be increased by 0.3%.

The FY 2013 budget plan was developed in the shadow of the 2011 Budget Control Act (BCA), which requires that discretionary spending be cut by \$1 trillion over the next 10 years. The bill also had a provision giving authority to a special congressional committee to come up with a plan to achieve deficit reduction. However, because the so-called super committee failed to reach agreement, federal agencies will also face the prospect of a 7 to 10% reduction next year, although this is not discussed in the budget proposal. These cuts, known as sequestration, will go into effect in January 2013 unless Congress comes up with an alternative plan.

National Institutes of Health

In its briefing materials, NIH characterized its \$30.7 billion budget request as "preserv[ing] NIH's highest priority activities within overall budgetary constraints." The proposed budget would fund a pool of about 9,400 new and competing grants, an increase of about 8%. The increased number of grants will come about by reducing noncompeting grant budgets by 1%, discontinuing inflation-based increases for the subsequent years of grants, and limiting the growth in the average size of awards. During a budget briefing, NIH Director Francis Collins said the size of the new and competing grant cohort is also due to "more churn in the system," including a decrease in the average duration of grants plus the fact that a large number are coming up for renewal in FY 2013. Other grant policies NIH plans to implement include equalizing the success rates of new and established investigators and providing additional scrutiny to new grants for principal investigators who already have grants with \$1.5 million or more in total costs.

According to Collins, 54% of NIH's funds will support basic research and 46% will support applied research, a

proportion that has been more or less constant in recent years. Nevertheless, the budget does include notable increases in some disease-specific and applied research. On February 7, even before the budget was released, President Obama announced that NIH would allocate \$50 million to Alzheimer's disease research in the current fiscal year and another \$80 million in FY 2013. The budget also includes a \$64 million or 11% increase for the new National Center for Advancing Translational Sciences (NCATS) that will bring its funding level to \$639 million. According to an NIH budget handout, the mission of NCATS is to "reengineer elements of the development pipeline that moves basic research findings into new diagnostics and therapeutics."

Research advocates have expressed concern about the cumulative loss of purchasing power in the NIH budget. According to David Moore of the Association of American Medical Colleges, the budget is about 20% smaller than it was a decade ago when adjusted for inflation. FASEB Director of Legislative Relations Jennifer Zeitzer told *Nature* that the president's request "is not what we need to take advantage of the scientific opportunities that are before us."

FASEB recommended \$32 billion for NIH in FY 2013.

National Science Foundation

The National Science Foundation is slated to receive an additional \$340 million (4.8% increase) in FY 2013 to bring its budget total to \$7.37 billion. This is part of a broader administration initiative to increase the federal investment in non-defense research and development. (For budgetary purposes, NIH funds are considered health spending rather than science.) The overall budget request for Research and Related Activities overall is \$5.98 billion, which represents a 5.2% increase of \$294.2 million. However, the Biological Sciences (BIO) Directorate's increase is only 3% (\$21.5 million) for a total budget of \$733.8 million. The BIO Directorate provides about 62% of federal funding for non-medical, basic life sciences research at US academic institutions.

The increase for Education and Human Resources (EHR) at NSF will be \$4.6 million or 5.6%. The total budget for EHR will be \$875.6 million. One new education initiative is Expeditions in Education, a \$49 million program is intended to "inte-

grate, leverage, and expand STEM education research and development to improve learning in science and engineering disciplines and capitalize on the scientific assets across NSF."

FASEB recommended at least \$7.3 billion for NSF.

VA Medical and Prosthetic Research

The Medical and Prosthetic Research program at the Department of Veterans Affairs will receive a \$2 million increase, amounting to 0.3% above its FY 2012 level. VA estimates that with a \$583 million budget it will be able to fund 2,209 research grants in FY 2013. These projects will include support for "fundamentally new directions for VA research," such as developing new models of care, improving social reintegration following traumatic brain injury, reducing suicide, evaluating the effectiveness of complementary and alternative medicine, developing blood tests to assist in the diagnosis of post-traumatic stress disorder and mild traumatic brain injury, and advancing genomic medicine in VA through the use of new technology.

FASEB recommended \$621 million for VA Medical and Prosthetic research.

Research Chimpanzee Colony is Valuable Resource

Chimpanzees in biomedical research colonies are "responsibly managed, well-regulated, and offer a resource of international value that benefits the health of humans and supports wild ape conservation efforts," the APS told the US Fish and Wildlife Service (FWS). The APS comments, submitted January 27, 2012, were made in response to a request for information about a proposed change to the listing of captive chimpanzees under the Endangered Species Act. A group of animal rights and conservation organizations led by the Humane Society of the United States (HSUS) had petitioned the FWS to re-classify captive chimpanzees as endangered. Currently, wild chimpanzees are considered endangered while chimpanzees that were in captivity as of 1976 along with their offspring are considered threatened. Classifying research chimpanzees as endangered would effective-

ly halt their use in biomedical research.

The petitioners argued that the use of captive chimpanzees in entertainment, the pet trade, and biomedical research undermined conservation efforts aimed at stabilizing wild chimp populations. The APS comments pointed out that the evidence presented to substantiate this claim that the use of captive chimpanzees negatively affected wild populations focused on the pet and entertainment sectors. In contrast, a stable population of research chimpanzees, maintained in modernized and ethologically appropriate facilities, is in keeping with conservation goals.

The APS noted the layers of regulation and oversight in place to ensure humane care of chimpanzees in research. In addition to protections already in place, the National Institutes of Health (NIH) has recently adopted the recommendations of an Institute of Medicine (IOM) committee that assessed the need for chimpanzees in medical research. This panel looked at current NIH-funded research involving chimpanzees and recent scientific trends. It concluded that while “the chimpanzee has been a valuable animal model in past research,” the need for chimpanzees as a research model has declined and will likely continue to do so. Nevertheless, the panel foresaw potential future need and recommended that a colony be maintained to ensure against emerging disease threats.

The US colony also serves as an international resource. Between 2005 and 2010, organizations based in Italy, Japan, Denmark, Belgium, Spain, and France funded a total of 27 studies involving US chimps. Moreover, both the European Commission’s Scientific Committee on Health and Environmental Risks and the Royal Netherlands Academy of Arts and Sciences have affirmed that research with chimpanzee can offer valuable insights and directed scientists to conduct necessary research in the United States.

In addition to aiding human health research, the US colony has also contributed to the development of vaccines to help wild apes. Recently a proof of concept study conducted with six chimpanzees at the New Iberia Research Center demonstrated that a potential Ebola vaccine successfully stimulated an immune response and was safe for the vaccinated apes (See “Chimps on the Forefront of Discovery,” *The Physiologist*, April 2011). This study

moved forward an ongoing effort to protect wild apes against Ebola, which is estimated to have decreased the wild gorilla population by one third. The increase in ecotourism, as well as permanent human populations that come into contact with apes, has led to an increase in chimpanzees and gorillas exposed to diseases to which they have no prior immunity, a phenomenon that only increases the likelihood that research into more vaccines for wild apes will be needed.

The full text of the APS comment letter is available at <http://www.the-aps.org/SciencePolicy/FWSChimpanzees>.

APS Urges Public-Private Partnership on Public Access

On January 11, 2012, APS responded to a Request for Information from the Office of Science and Technology Policy concerning public access to peer-reviewed scholarly publications resulting from federally-funded research. The request posed questions on topics related to scholarly publishing.

Since 2000, all articles in APS journals have been made freely available through the journal websites 12 months after publication, whether the research was federally funded or not. APS members get free access to the journals, and the Society also participates in several international collaborations that provide free access to scientists in developing nations.

In its comments, APS recommended that federal agencies “work in a collaborative manner with all stakeholders to develop an approach [to public access] that balances competing interests, ensures the rights of copyright owners, and provides for continued growth and innovation in scientific communication.”

In response to a question about whether government agencies should maintain centralized custody of all published content to ensure that it remains available and maximize its usefulness in terms of interoperability, the APS noted that publishers have introduced “many new technologies to meet researchers’ demands for faster and more user-friendly delivery of scholarly information” without government mandates to do so. One limitation to centralizing content is that it may in fact limit innovation. The APS, therefore, recom-

mended that the government “seek to leverage the private sector’s rapidly evolving expertise, technologies, products, and services in order to efficiently and effectively improve the quality and scope of services available to the public.”

The comments note further that duplicating the efforts of publishers by delivering government-funded scientific content to end users is not a good use of agency resources. Rather, federal agencies should focus on enhancing the dissemination of scientific literature by developing standards that ensure robust distribution of metadata and interoperability.

The full text of the letter is available on the APS website at <http://www.the-aps.org/mm/SciencePolicy/About/Comments-Letters/OSTPRFTRResponse2012.pdf>.

National Science Board Revisits NSF Merit Review Criteria

On January 10, 2012, the National Science Board (NSB) released recommendations on the National Science Foundation’s (NSF) Merit Review Criteria. The Board made no changes to the criteria themselves but told NSF to provide definitions to articulate better the essential elements of the criteria. It also called for making a more clear connection between the criteria themselves and a set of core principles to guide NSF funding decisions.

NSF’s review criteria are:

- Intellectual Merit: the potential to advance knowledge.
- Broader Impacts: the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The NSB recommended that NSF’s funding decisions should be guided by these core principles:

- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals.
- Assessment and evaluation of NSF funded projects should be based on appropriate metrics.

The complete National Science Board report is available at <http://www.nsf.gov/nsb/publications/2011/meritreviewcriteria.pdf>. ❖

Andrew Tsin Receives PAESMEM Award From President Obama

APS Member Andrew Tsin, professor of biochemistry and physiology at the Univ. of Texas at San Antonio, received a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring from President Barack Obama.

The National Science Foundation administers and the White House awards the presidential award which recognizes the crucial role that mentoring plays in the academic and personal development of students studying science and engineering, particularly those who belong to groups underrepresented in these fields.

"Through their commitment to education and innovation, these individuals and organizations are playing a crucial role in the development of our 21st century workforce," said Obama. "Our nation owes them a debt of gratitude for helping ensure that America remains the global leader in science and engineering for years to come."

Tsin is a nationally recognized scientist with a 30-year record of mentoring minorities and other underrepresented groups of students. Under his leadership, more than 100 undergraduate and graduate students completed their degrees and either continued their educational journeys or took positions as scientific researchers, medical physicians or educators.

Benjamin T. Corona is now a Research Physiologist in the Extremity Trauma and Regenerative Medicine, US Army Institute for Surgical Research, Fort Sam Huston, TX. Prior to this move Dr. Corona was a Postdoctoral Researcher in the Institute for Regenerative Medicine, Wake Forest Univ., Winston Salem, NC.

Jinping Fan has recently assumed the Director position at the Center for Primary Care and Integrative Medicine, Houston, TX. Fan is also a teaching faculty at the Methodist Hospital affiliated to Weill Cornell Medical College. Prior to this move, Fan was a Bugher Fellow at Baylor College of Medicine, TX.

Deborah P. Hyink is now an Assistant Professor in the Department of Medicine and Nephrology at Baylor College of Medicine, Houston, TX. Hyink had been an Assistant Professor in the Department of Medicine at Mt. Sinai School of Medicine, NY.

Roberta Lima is now Physiology Professor of the Department of Physiology at Univ. Estadual de Ciencias da Saude de Alagoas, Alagoas, Brazil. Previously, Lima was Postdoctoral Fellow in the Department of Physiology at the Univ. of Mississippi Medical College, Jackson.

Stephen G. Lisberger is now a Professor of Neurobiology at Duke Univ., Durham, NC. Prior to this move Dr. Lisberger was a Professor of Physiology at the Univ. of California at San Francisco.

David I. Soybel is now Nahrusld Professor of Surgery at Penn State Hershey Medical Center, Hershey, PA. Prior to this move he was Professor of Surgery at Brigham & Women's Hospital, Boston, MA. ❖



APS Member Andrew Tsin, professor of biochemistry and physiology at the Univ. of Texas at San Antonio, was greeted by President Barack Obama when Tsin received a Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.

Senior Physiologists' News

Letter to William Dantzler

Anthony Perks writes: "Many thanks for your letter of the summer, and my sincere apologies for the late reply. Your letter arrived while I was away in my house in Gloucestershire in England, 50 miles from Oxford. I spend

July and August there every year. It is near the Cotswolds, with their pretty golden, stone cottages, the stuff of candy and chocolate tins! My pile of Vancouver mail took time to plough through, and I was immediately immersed in work in OB/Gyn—even a departmental seminar, while I was still

jet-lagged! I sent a concise potted life history to that American Biographical company, which publishes such stuff, and this is probably what you are looking for; unfortunately, I kept no copy, and since that company annoys me by making money out of me, then trying to sell my plaques saying I am the great-

est-scientist in the world (which I'm not), I have lost their address and reference, deliberately, but I am sure they have bothered you directly. I presume, that if you have my ancient birthday, you probably have lots of details of me already, so I will only pick out some salient points here.

"I was born in Gloucester, England, and after school at Sir Thomas Rich's Bluecoat School, I entered Christ's College, Cambridge (Darwin's old college), to study Physiology, changed to Medicine for a short time, then returned to Physiology for my BA (Honors) and MA. I then moved to the Univ. of St. Andrews, Scotland, Scotland's first university, now celebrating its 600-year anniversary, and the third oldest English-speaking university. It is most famous for the dating and wedding of two of its recent graduates, William and Kate. It is a wonderful university, full of ghosts and old, old buildings. There, I was Nuffield Scholar in Comparative Endocrinology, and completed my PhD on the shark neurohypophysis. I continued this work as a postdoctoral fellow in the Physiology Department of the Univ. of Florida College of Medicine (I was their first postdoctoral fellow, in the brand-new Medical School, and they said that when I die, I will be stuffed and put in a glass case in the corridor, next to Steve Cain, their first graduate student). My connection continued until recent years, when I went down regularly to work with Dr. Sidney Cassin, and formed a wonderful friendship with the great Dr. Donald Barron, the father of Experimental Obstetrics. After my post-doc, I went to work with Bill Sawyer as an instructor in the Pharmacology Dept. of the College of Physicians and Surgeons of Columbia Univ., at 168th street., New York. I still keep up with Bill in Christmas letters and the like, and received a very warm, and much appreciated letter from him a year ago.

"After two years in New York, I wanted to change to Fetal Physiology, because I felt that comparative studies could add a great deal to that field, and be of direct use to medicine. Accordingly, I was offered the equivalent to an Assistant Professorship in Oxford Univ., to work with prof. Geoffrey Dawes, a well-known expert on Fetal Function, in the Naffield institute for Medical Research. I joined Wadham College, and took an Oxford

MA, along side my research. After two years, I moved to Biology, as an Associate Professor, in Bill Hoar's department in the Univ. of British Columbia, in Vancouver, Canada. This allowed me to pursue both fetal and comparative work at the same time. There I was faced with physiology classes of 350 students, so lectures were more like theatrical performances! However, I found I enjoyed this, and found the students fun! My family had been politicians in the 1700s, but had become honest, and transferred to the stage, and I found this buried ability suddenly came out in me!

"In UBC, research prospered, and opened up many endocrine influences during fetal life, and I had many enthusiastic graduate students—mostly doing Master's degrees, to help them get into Medicine. Eventually, I reached mandatory retirement age: I left grumpily, as I still had lots to do, and we were publishing more than ever. I was like a bear with a sore head! Fortunately, some of my graduate students had become Big Wheels in the Medical School—things like a Head of Basic Research in the Medical Faculty, a Director of the Research Program in OB/Gyn, and even an Associate Dean of Medicine. Accordingly, I was rescued and became, as I am now, Professor Emeritus in Obstetrics and Gynecology, and I have continued to teach three different courses for the last 15 years, and I am still going at 80! Work included running and chairing the weekly seminars, asking awkward, and probably stupid, questions of Distinguished Speakers, chairing oral examinations, and lots of research committees. I found that, unlike many supervisors, I had the time to really get to know the students as people, and their enthusiasm, kindness, and friendship have definitely kept me young. I have had to become conversant with many forms of Chinese English, and I have spent many hours reading through student's papers, and inserting 'thes' and plurals, absent in Chinese! The Oriental students have avoided the 'youth-only' culture, and make an old scientist feel revered!

"In recent years, two special things have happened. Firstly, the Univ. of St. Andrews has awarded me a DSc degree (by examination, not honorary). Secondly, I succeeded to the Barony of Corcomroe, as 16th Baron. It was in my family tree, through Lady Harriet

Villiers, mother of my great-x5 grandfather, William Pitt, Earl of Chatham. You may know of him from American history; he was a staunch supporter of the American colonists, and a friend of Benjamin Franklin (the Rebel). He was responsible for planning the Seven Years War, which took Quebec and Fort Duquesne from the French, and removed the French threat to the Americans of the south (and made it safe for them to revolt against the King—and even side with the French!). Fort Duquesne was renamed Pittsburgh, after my greatx5 grandfather. He collapsed, and later died, speaking to the House of Lords against the Separation of the Colonies—he wanted their grievances rectified, but not their separation. The Barony links me to many fascinating people, such as Mistresses of two English Kings—one just awful!

"My life here in Vancouver is great. The city offers all the things of a big city, with a minimum of violence, and a beautiful background of snowy mountains. (I drove through snowflakes this morning, although the winter down near the sea is usually mild, and Mediterranean). My long-term lady-friend, Darlene, has a house up in the Interior, in the High Cariboo, real cowboy country, so I often drive the canyons of the Frazer and Thompson, not to mention the near-desert of Cache Creek. The mountains are magnificent, especially in the fall, but in winter, the trip can be a little over-exciting—the highway is closed at present, due to hazards from avalanches! My interests down here are the Vancouver symphony, Ballet and Opera, and I enjoy reading History. My paper in the Journal of the Royal Society of Medicine on "Stonehenge: A View from Medicine" (JRSM (2003), 96: 94-98), caused a media frenzy—even phone calls from Bogata! It, and its better sequel in the UBC Archives (by Internet), some thought scandalous—but they did not throw me out of UBC! My present major project is to leave sufficient money to found a Research Scholarship in Life Sciences, in perpetuity, in Wadham College, Oxford, with preference for graduates from St. Andrews, Christ's College, Cambridge, or from Canada or the USA, to compete for D.Phils. in Oxford. This would return some of the support I had to students of the future." ♦

Faculty Positions

Faculty Position in Cardiovascular Physiology:

The Penn State Heart and Vascular Institute is recruiting an outstanding scientist to have a tenure-track appointment at the Pennsylvania State College of Medicine. Applications are encouraged from individuals at the Assistant Professor rank. Applicants should have a strong commitment to research as demonstrated by a strong extramural funding and publication record. Although all aspects of cardiovascular physiology are of interest, we encourage applicants with a background in neurotransmission in autonomic ganglia. A strong research program in this area would significantly enhance the research mission of the Heart and Vascular Institute through synergistic interaction with existing research programs in diabetes/obesity, heart failure, hypertension, and peripheral vascular disease. The intention is to recruit an exceptional scientist who interacts with the existing cardiovascular community at the College of Medicine and Heart & Vascular Institute at Hershey Medical Center. Questions regarding the position can be directed to the Chair of the Search Committee (Dr. Marc Kaufman, mkaufman@hmc.psu.edu) but applicants must submit a curriculum vitae and brief statement of research plans to: nmaher@hmc.psu.edu. Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

Assistant Professor in Animal Epigenetics and Stress Physiology:

The Univ. of California at Davis is pleased to announce recruitment for a tenure-track faculty position in Animal Epigenetics and Stress Physiology. The successful candidate will join the Department of Animal Science in the College of Agricultural and Environmental Sciences at the rank of Assistant Professor. Criteria for appointment include: a PhD or equivalent, a strong interest in improving sustainable animal production by understanding how environmental, nutritional, hormonal, and behavioral stressors interact with gene expression, a record of excellence in scholarly research, and demonstrable potential to establish a competitively-funded research program relevant to animal stress in sustainable animal agriculture. The appointee will be responsible for teaching an undergraduate course incorporating stress physiology and additional contributions to the departmental curriculum, be actively involved in undergraduate advising, curricular development and department and university service. The appointee is also expected to guide and mentor graduate students and participate in the outreach programs of the department and college. Applicants should submit materials via the following website: <https://secure.caes.ucdavis.edu/Recruitment/>. Additional inquiries can be directed to Professor Trish Berger, 530-752-1267, tberger@ucdavis.edu. The position will remain open until filled

but to ensure consideration, applications should be received by April 30, 2012. UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, veterans, and individuals with disabilities.

Faculty Position: The Department of Molecular & Cellular Physiology of the Louisiana State Univ. invites applications for a tenure track position at the level of Assistant/Associate Professor. Successful applicants will be expected to develop an independent, nationally funded research program. Preference will be given to individuals with an interest and record of achievement in cardiovascular research. Information about the departmental research focus is available at <http://www.shreveport-physiology.com>. A generous startup package and appropriate space will be offered. Applicants should have a Doctoral degree and relevant postdoctoral experience. Applications will be reviewed as they are received until the position is filled. Send curriculum vitae and names of three references to: D. Neil Granger, PhD, Boyd Professor & Head, Department of Molecular & Cellular Physiology, LSU Health Sciences Center, 1501 Kings Highway, Shreveport, Louisiana, 71130-3932, Fax: 318-675-6005, Email: dgrang@lsuhsc.edu. LSU Health Sciences Center is an Affirmative Action/Equal Opportunity Employer. ❖

Science Policy Symposia at EB 2012 in San Diego

Building Public Support for Animal Research

During the past decade, public support for animal research has dwindled. One reason for this is that scientists have not made sufficient efforts to inform the public about the contributions of animal research. The APS Animal Care and Experimentation (ACE) Committee will sponsor a symposium at EB 2012 to help scientists feel more prepared to explain the importance of their research and their commitment to the humane treatment of animals.

Public Outreach and Animal Research: A Toolkit for Investigators will be presented on Saturday, April 21, 2012, from 1:00-3:00 PM in Room 25B of the San Diego Convention Center. This symposium is intended to provide scientists the background they need to broach the topic of animal research with their students, neighbors, and family members. Speakers include research advocates Dario Ringach of UCLA, John D. Young, of Cedars-Sinai Medical Center and Jim Newman, Oregon Health & Science University. The session will be chaired by ACE Committee Chair Bill Yates.

NIH Update at EB 2012

Several NIH institutes will report on their research and policy initiatives at EB 2012. **"National Institutes of Health: Programs and Policies Update from Institutes"** will be presented on Tuesday, April 24, from 2-4 PM in Room 1A of the San Diego Convention Center. Drs. Susan Shurin of the National Heart, Lung, and Blood Institute (NHLBI); Judith Greenberg of National Institute of General Medical Sciences (NIGMS); Richard Nakamura of the Center for Scientific Review (CSR); and Elizabeth Wilder of the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) will discuss research programs and policy priorities.

The session is jointly sponsored by the American Physiological Society, American Association of Anatomists, American Society for Biochemistry and Molecular Biology, American Society for Investigative Pathology, American Society for Nutrition and the American Society for Pharmacology and Experimental Therapeutics. The session will be co-chaired by APS President-elect Susan Barman and Science Policy Committee Chair John Chatham.

The Wine Wizard Peter Wagner

Hi gnarly dudes (see below).

Sadly, things are on the up and up. Wine prices, I mean. Used to be, you could get a quite decent cabernet for \$10. Same quality is now \$15. A really drinkable cabernet used to be \$20, now \$30. And the “name brands” will cost you \$50 +++++. So my column is having to reflect those trends. The fact that I am listing ever higher priced wines is, therefore, not due to a drift in my criteria, it is precisely due to adherence to those criteria. But let me start you off with some not so bad news: Based on the tasty Crane Lake 2010 petite sirah I told you about last month, we went out and bought one bottle of every varietal they make. Five whites, one pink, and three other reds. Got a discount of 10% as a result, making them \$2.70 each. That’s almost in the Two Buck Chuck universe. Here I tell you about the whites, next time the reds.



Peter Wagner

White wines:

2009 Crane Lake Sauvignon Blanc, California \$3. Bad stuff. Dirty, sulfurous and good only for cleaning mineral deposits off surfaces like teeth, glasses, and drains.

2010 Crane Lake Chardonnay, California \$3. Actually quite drinkable. An excellent party wine when you have large numbers of enological newbies attending. It is simple, but clean, citric/apply in flavor, but balanced in acidity, light in oak, and dry on the finish.

2010 Crane Lake Riesling, California \$3. Started off with a little “wet socks” nose (meaning a bit of sulfur smelling truly like woollen socks out of the washing machine). This blew off. The palate was better; lemon and floral notes. It lacked the characteristic kerosene element that makes this grape interesting. It was also quite sweet, but because the acid was not high, this wine is OK only when drunk really cold. But then it is actually

drinkable if you like sweet Riesling.

2011 Crane Lake Gewurtztraminer, California, \$3. This wine was quite clean, with a sweet floral nose and palate and a touch of the spiciness associated with the grape. Nice flavors of peach/lime/apricot. If the Riesling was sweet, this was very sweet, but again, drunk cold, it had enough acid to cope. Ya gotta like sweet.

2011 Crane Lake Moscato, California \$3. If the prior wine was very sweet, this one was very, very sweet. However, the fruit was clean, floral and intense, and drunk cold.....

2010 Kim Crawford Sauvignon Blanc, Marlborough, New Zealand \$13. This wine appears in this column every year. This vintage is unmistakable NZ SB. It probably was better a year ago. Right now it seems a bit overripe with herbaceous gooseberry but a dry grassy edge to stop it from being cloying. Nonetheless, very tasty, with good acid, and a nice, clean, passionfruit finish. I

include one non-Crane lake on the off chance that you might argue Crane lake is not really wine.

Red wines

2009 Martin Ray Cabernet Sauvignon, Sonoma, \$15. This wine has a forward blackberry/blackcurrant nose, and a fruit-driven dark berry palate. There is a touch of herbalness (that’s OK). It has excellent structure with medium tannin and good acid.

2009 Ancient Peaks Cabernet Sauvignon, Paso Robles \$13. Rents are lower in Paso, which explains the \$2 lower price.....I think. The nose is intense with lots of dark berry fruit. This is a rich, extracted wine with ripe, almost jammy fruit. (Almost jammy is good; jammy is bad). Medium oak and tannin and balanced acid, blackberry fruit and good length.

2010 Mollydooker “Two Left Feet” red blend, South Australia \$22. I don’t recall the label indicating the blend, but who cares. At 16% alcohol you would forget it anyway. The nose is forward with plums and vanilla and seems very fresh. The palate is lush, with dark plum, and some vanilla/caramel. Acid is balanced, tannins soft, length is good, and there is touch of heat (ethanol) at the end. But who cares? Not me. Yum.

2010 Two Hands Shiraz “Gnarly Dudes” Barossa Valley, South Australia \$22. Don’t know whether I would prefer being labeled as having two left feet or as a gnarly dude, but who cares (there is a theme here). Almost 15% alcohol, this wine has a gnarly nose of dark berry, earth and oak. A gnarly palate too, with tons of ripe dark fruit. There is a bit of gnarly forest floor (the elitist version of earthiness). It is a big, extracted, gnarly wine with lots of gnarly balance and gnarly length. Dude, try some. ❖



MEMBERSHIP APPLICATION FORM

The American Physiological Society

1. Check membership category you are applying for: ☐ Regular ☐ Affiliate ☐ Graduate Student ☐ Undergraduate Student

2. Name of Applicant: _____
Last Name or Family Name First Name Middle Name

3. Date of Birth _____ Optional: Male ☐ Female ☐
Month Day Year

4. Institution Name _____ Department _____
(Please do not abbreviate Institution Name)

5. Institution Street Address _____

6. City/State/Zip/Country _____

7. Home Address (Students Only) _____

8. Work Phone _____ Home Phone _____

9. Fax _____ E-mail _____

10. Educational Status:  **IMPORTANT for STUDENTS:** ** If you are enrolled as a graduate student for an advanced degree, or as an undergraduate student, please include the month and year you expect to receive your degree.

Dates** Degree Institution Major Field Advisor

11. **WHAT IS YOUR SECTION AFFILIATION?** Please identify your primary sectional affiliation with a "1" and check (✓) up to two additional sections with which you would like to affiliate. **There can be only one "Primary" affiliation.**

☐ Cardiovascular	☐ Endocrinology & Metabolism	☐ Renal Physiology
☐ Cell & Molecular Physiology	☐ Environmental & Exercise Physiology	☐ Respiration Physiology
☐ Central Nervous System	☐ Gastrointestinal & Liver Physiology	☐ Teaching of Physiology
☐ Comparative & Evolutionary Physiology	☐ Neural Control & Autonomic Regulation	☐ Water & Electrolyte Homeostasis

12. **DO YOU WORK IN INDUSTRY?** ☐ YES ☐ NO

13. **SPONSORS** (Sponsors must be Regular APS Members. If you are unable to find sponsors, check the box below, and we will locate them for you.) *Undergraduate Students do not require sponsors but must supply proof of enrollment such as transcripts or letter from your advisor.*

CHECK THIS BOX IF APPLICABLE: ☐ Please locate sponsors on my behalf.

#1 Sponsor Name _____

Mailing Address _____

Phone _____

Fax _____

E-mail _____

Sponsor Signature* _____

#2 Sponsor Name _____

Mailing Address _____

Phone _____

Fax _____

E-mail _____

Sponsor Signature* _____

*signature indicates that sponsor attests applicant is qualified for membership.

 **Please turn over for more questions...and mailing instructions.**

Membership Application (Continued...) Applicant Last Name (please print) _____

14. OCCUPATIONAL HISTORY [Check if student ☐

Current Position:

Dates	Title	Institution	Department	Supervisor
-------	-------	-------------	------------	------------

Prior Positions:

Dates	Title	Institution	Department	Supervisor
-------	-------	-------------	------------	------------

15. LIST YOUR MOST SIGNIFICANT PUBLICATIONS, WITH EMPHASIS ON THE PAST 5 YEARS (Publications should consist of manuscripts in peer-reviewed journals. List them in the same style as sample below.)

Sample: MacLeod RJ and Hamilton JR. Volume Regulation initiated by Na⁺-nutrient cotransport in isolated mammalian villus enterocytes. Am J Physiol Gastrointest Liver Physiol 280: G26-G33, 1991.

16. DOCTORAL DISSERTATION TITLE (if applicable):

17. POSTDOCTORAL RESEARCH TOPIC (if applicable):

18. WHICH FACTOR INFLUENCED YOU TO FILL OUT OUR MEMBERSHIP APPLICATION?

☐ Mailer ☐ Meeting (Which meeting? _____) ☐ Colleague ☐ Other _____

Mail your application to:

Membership Services Department, The American Physiological Society
9650 Rockville Pike, Bethesda, Maryland 20814-3991 (U.S.A.)

(or fax to 301-634-7264) (or submit online at: www.the-aps.org/membership/application.htm)

Send no money now—you will receive a dues statement upon approval of membership.

Approval Deadlines: Membership applications are considered for approval on a monthly basis.

Questions? Call: 301-634-7171 • Fax: 301-634-7264 • E-mail: members@the-aps.org • Web: www.the-aps.org

Current Calls for Papers

Physiological Genomics

Mitochondrial Metabolism

NextGen Sequencing Technology-Based Dissection of Physiological Systems

Technology Development for Physiological Genomics

Understanding the Mechanisms of Disease Using Biomarkers

(Submission deadline: June 1, 2012)

American Journal of Physiology—Renal Physiology

Aldosterone and Epithelial Na⁺ Channels

(Submission deadline: July 1, 2012)

Journal of Applied Physiology

Commentaries on Point:Counterpoint and Viewpoint Articles

Advances in Physiology Education

Teaching and Learning of Professional Ethics

American Journal of Physiology—Gastrointestinal and Liver Physiology

Physiology and GI Cancer

Intestinal Stem Cells in GI Physiology and Disease

Innovative and Emerging Technologies in GI Physiology and Disease

American Journal of Physiology-Regulatory, Integrative and Comparative Physiology

Inflammation and Immunity in Organ System Physiology (Submission deadline: April 30, 2012)

Integrative Aspects of Energy Homeostasis and Metabolic Diseases (Submission deadline: April 30, 2012)

American Journal of Physiology-Lung Cellular and Molecular Physiology

Bioengineering the Lung: Molecules, Materials, Matrix, Morphology, and Mechanics

For a complete list of current Calls for Papers, visit *The Physiologist* website.

Meetings & Congresses

May 13-15

The International Conference on Integrative Medicine, Jerusalem, Israel. Information: Ravit Levy, 19 Hayetzira street, Ramat Gan 52118, Israel. Tel: +972-3-5767750; Fax: +972-3-5767750; Email: rlevy@paragon-conventions.com; Internet: <http://www.mediconvention.com/>.

May 17-20

The 2nd Global Congress for Consensus in Pediatrics and Child Health, Moscow, Russia. Information: Meital Nave Fridenzon, Paragon Conventions, 18 Avenue Louis-Casai, 1209 Geneva, Switzerland. Tel.: +41 22 5330 948; Fax: +41 22 5802 953; Email: cip@cipediatrics.org; Internet: <http://www.cipediatrics.org/>.

May 18-23

2012 American Thoracic Society International Conference, San Francisco, California. Information: ATS International Conference Department. Tel.: 212-315-8652; Email: conference@thoracic.org; Internet: <http://conference.thoracic.org>.

May 19-21

2012 International Conference on Systems and Informatics (ICSAI 2012), Yantai, China. Information: Email: ICSAI2012@ytu.edu.cn; Internet: <http://ICSAI2012.ytu.edu.cn>.

May 19-22, 2012

American Society of Hypertension 2012 Annual Scientific Meeting & Exposition, Hilton New York. Information: Internet: <http://www.ash-us.org/Scientific-Meetings/2012-Annual-Scientific-Meeting.aspx>.

May 29-June 2

59th ACSM Annual Meeting and 3rd World Congress on Exercise in Medicine, San Francisco, CA. Information: <http://acsmannualmeeting.org/educational-highlights/2012-session-submission/>.

June 7-9

Organization of the Study for Sex Differences (OSSD) and International Society for Gender Medicine (IGM) Joint Meeting, Baltimore, MD. Information: Anna Kalbarczyk. Email: ossdwebmaster@swhr.org; Internet: <http://www.ossdweb.org/2012-annual-meeting>.

June 26-29

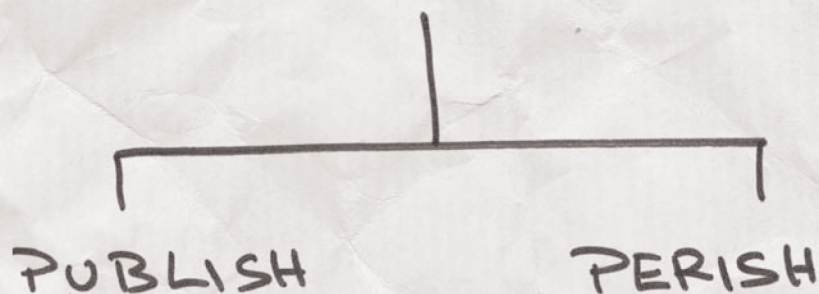
4th International Congress on Cell Membranes and Oxidative Stress Focus on Calcium Signaling and TRP Channels, Isparta, Turkey. Information: Internet: <http://www.emos.org.tr/2012>

July 7-10, 2012, Omaha, NE

2012 APS Conference: Autonomic Regulation of Cardiovascular Function in Health and Disease. Information: <http://www.the-aps.org/mm/Conferences/APS-Conferences/2012-Conferences/Autonomic-Regulation-of-Cardiovascular-Function-in-Health-and-Disease>.

October 10-13, 2012, Westminster, CO

APS Intersociety Meeting: Integrative Biology of Exercise VI. Information: <http://www.the-aps.org/mm/Conferences/APS-Conferences/2012-Conferences/Integrative-Biology-of-Exercise>.

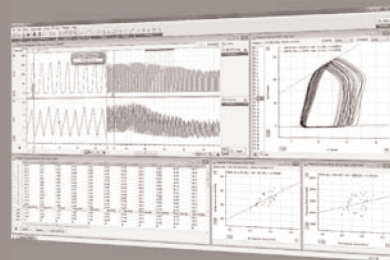


Fast track your research and publishing

Accelerate the pace of your research with the data acquisition systems cited in more published papers*. ADInstruments PowerLab® systems are easy to use, intuitive and powerful, allowing you to start and progress research quickly. The system's flexibility enables you to add specialist instruments and software-controlled amplifiers for your specific experiments. What's more, LabChart® software (included with every system), offers parameters tailored to individual applications and unmatched data integrity for indisputably trustworthy data.

When there's no prize for second place, ADInstruments PowerLab systems help you to publish. First.

To find out more, visit adstruments.com/publish




ADINSTRUMENTS
making science easier

*According to Google Scholar, ADInstruments systems are cited in over 50,000 published papers and other works of scholarly literature.

USA • BRAZIL • CHILE • UK • GERMANY • INDIA • JAPAN • CHINA • MALAYSIA • NEW ZEALAND • AUSTRALIA