



# The Physiologist

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## New President, New Congress.... New Hope for Science?

Carrie D. Wolinetz

Director of Scientific Affairs and Public Relations  
FASEB Office of Public Affairs

*"Ensuring that the US continues to lead the world in science and technology will be a central priority for my administration."*

– President-Elect Barack Obama

For more than a year, our national attention was consumed by the historic election which culminated with the election of Barack Obama. Now that the ballots are counted and the transition to a new administration and a new Congress has begun, scientists want to know: what is the outlook for biomedical research and science policy under our new national leadership? Many high-profile researchers supported President-Elect Obama's campaign, including 61 Nobel Laureates whose public endorsement letter declared that, "Senator Obama understands that Presidential leadership and federal investments in science and technology are crucial elements in successful governance..." (1) Is this true and what does it really mean for medical research? And will the new Congress support this vision?

### Science is Back in Style in Washington

*"I believe that continued investment in fundamental research is essential for ensuring healthier lives, better sources of energy, superior military capacity, and high-wage jobs for our nation's future."*

– President-Elect Barack Obama

In good news, all initial signs are positive, and perhaps speak to a more hopeful time for research after six long

years of flat funding for the National Institutes of Health (NIH) (Figure 1). During his campaign, President-Elect Obama pledged to double the basic research budgets at NIH and the National Science Foundation (NSF) over a 10 year period (11). In making that pledge, the incoming President used rhetoric that resonated throughout the biomedical research community, stating, "[O]ur science agencies are often able to support no more than one in 10 proposals that they receive, arresting the careers of our young scientists." The President-Elect's support for medical research is underpinned by a deeply personal connection, as he often spoke of the need for more investment in the context of his mother's final battle with ovarian cancer (8). Obama is also cognizant of the impairment of osteoporosis: his late grandmother, Madelyn Dunham, suffered terribly from the disease, a fact he referred to frequently on the campaign trail (12). Obama seems to have a deep appreciation for the importance of fundamental research, stating, "Federally supported basic research, aimed at understanding many features of nature— from the size of the universe to subatomic particles, from the chemical reactions that support a living cell to interactions that sustain ecosystems—has been an essential feature of American life for over 50 years. While the outcomes of specific projects are never predictable, basic research has been a reliable source of new knowledge that has fueled important developments..."(11) The President-  
*(continued on page 3)*

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Elect supports expanding the scientific research programs at NASA and the Department of Energy's Office of Science. He has also spoken strongly in favor of improving science education, from kindergarten to graduate school.

The new Congress, too, seems primed to restore a commitment to biomedical research. Democratic leadership has struggled to provide increases for research funding under the strict spending limits set by the Bush administration. Although NIH enjoys broad bipartisan support, last fiscal year the agency became a pawn in the political gamesmanship of overriding a Presidential veto and ultimately remained flat-funded. But the leaders in Congress, including House Speaker Nancy Pelosi (D-CA), Senate Majority Leader Harry Reid (D-NV), and the powerful appropriations chairs, Congressman David Obey (D-WI) and Senator Robert Byrd (D-WV), have all spoken strongly in favor of increased NIH funding. NIH was one of the few agencies to receive money in a supplemental funding bill signed into law in June, (6) and is being considered as part of an economic stimulus bill. Although Senator Byrd has

stepped down as chair, it seems likely his replacement, Senator Daniel Inouye (D-HI), will continue his commitment towards medical research. With a President willing to sign funding bills that invest in domestic priorities, such as science, the chances of seeing a significant increase in NIH funding is greater than it has been at any point since the doubling of the budget ended in 2003.

### Support for Science Versus Fiscal Reality

*"Our country faces its most serious economic crisis since the great depression."  
—President-Elect Barack Obama*

Unfortunately, the landscape is not entirely without obstacles. Campaign promises and pledges of support must be taken in the context of our current economic situation and other national priorities. The national debt is expected to exceed \$10 trillion, a figure that is likely to continue to grow as we spend money on financial rescues, economic stimulus, and the ongoing war in Iraq (2). Congress and the new administra-

tion will be dedicating a large part of their early agenda to trying to revive our economic health. Moreover, research funding is competing against other discretionary programs that have been long-neglected, including education, labor, and social services. President-Elect Obama has outlined ambitious plans for healthcare reform, energy independence, mitigation of climate change, and strengthening of social security programs. Achieving these goals will require money and dedicated attention from Congress; biomedical research may be pushed further back in the queue. What's more, the partisan bickering and lack of consensus that contributed to the previous Congress' ability to make significant legislative progress still remains unresolved, and may only be exacerbated in the absence of election year concerns and the serious problems facing the nation. The economic stimulus legislation which is expected early in the New Year will be Congress and the new President's first opportunity to express their support for science, with both NIH and NSF standing to gain additional funding. Their inclusion

NIH Program Budget in Current and Constant Dollars

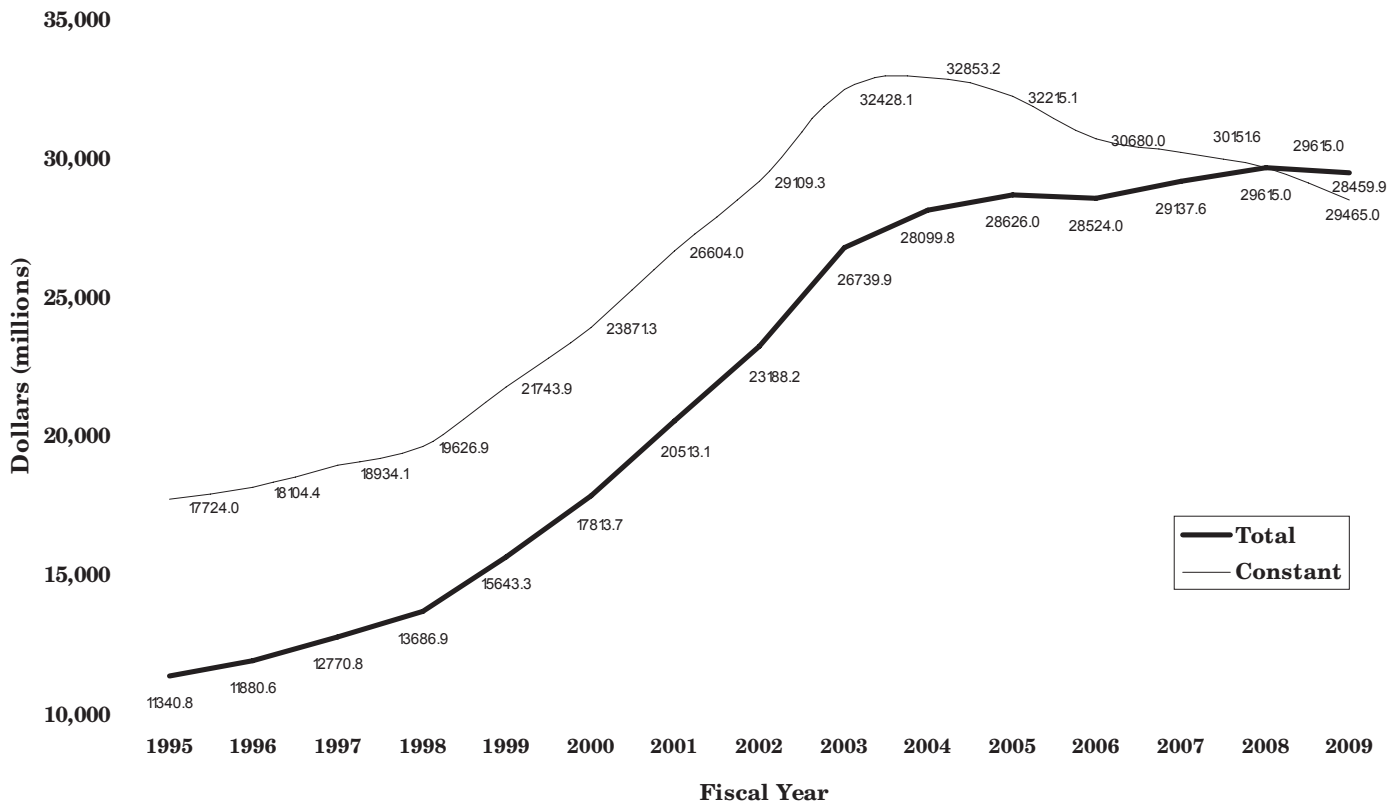


Figure 1: The budget of the National Institutes of Health has eroded since the end of the 1998-2003 growth period due to biomedical research inflation. Source: Garrison and McGuire (2008) NIH Research Funding Trends: FY1995-2009. [http://opa.faseb.org/pdf/NIHresearchfunding2008/NIH\\_Research\\_Funding\\_2009\\_Data.ppt](http://opa.faseb.org/pdf/NIHresearchfunding2008/NIH_Research_Funding_2009_Data.ppt).

or not may be an indication of where research ranks in the priority list of our nation's new leadership.

A lingering question that may affect how science fares in the 111th Congress is the ultimate makeup of committee memberships. The House Energy and Commerce committee, which has authorization (as opposed to funding) oversight of NIH, underwent a dramatic leadership change when Representative Henry Waxman (D-CA) challenged senior chair, Representative John Dingell (D-MI) and won. While Representative Waxman has been generally supportive of biomedical research, he has been critical of NIH's management of conflicts of interest, and his priorities as committee chairman are more likely to be the environment and energy, issues about which he is personally passionate, rather than medical research. Congressman James Walsh (R-NY), the Republican ranking member on the House Labor-Health, Human Services, Education and Related Agencies (Labor-HHS) appropriations subcommittee, which allocates annual funds to NIH, did not run for re-election and it remains to be seen whether the GOP slot is filled by a champion for the agency. New members of Senate committees may not be announced until the ongoing race between incumbent Senator Norm Coleman (R-MN) and Democratic challenger, Al Franken, is resolved in Minnesota.

## Science Policy Landscape: Opportunities and Challenges

*"I will restore the basic principle that government decisions should be based on the best-available, scientifically-valid evidence and not on the ideological predispositions of agency officials or political appointees."*

—President-Elect Barack Obama

Of course, funding is not the only issue of interest to researchers, and the scientific community can look forward to a return to respect for science during the Obama administration. The day after the election, the Obama-Biden campaign released a detailed plan for science and technology, which not only reiterates the funding and policy promises made during the campaign, but vows to "restor[e] integrity to US science policy." (10). We can expect one of the first actions that President-Elect

Obama will take will be the overturning of the Bush policy restricting federal funding for embryonic stem cell research. Furthermore, the incoming administration supports increasing independent, scientific advice as part of the policymaking process, and has pledged to reinstate the Presidential Science Advisor, who also serves as head of the Office of Science and Technology Policy (OSTP), to a cabinet level position. While Obama's reported choice for science advisor, Dr. John Holdren, is a physicist, he has long worked at the intersection of science and policy, and as head of the Woods Hole Research Center, he has undoubtedly gained an appreciation for fundamental biological research from his neighbors at the Marine Biological Laboratories. Former NIH Director, Dr. Harold Varmus, and Founding Director of the Broad Institute, Dr. Eric Lander, have been named co-chairs of the President's Council of Advisors on Science and Technology (PCAST). While PCAST has been ineffective and un-influential during the Bush administration, Obama has pledged to strengthen the group's role in science policy decision making. The appointment of Varmus, who has long been an advocate for government mandated, open access publication policy, may have implications for public access to research results and non-profit society publishers. Furthermore, as a Senator and on the campaign trail, President-Elect Obama showed a strong interest in genomics and personalized medicine, as well as multidisciplinary research and eliminating minority health disparities, all of which may factor into his selection of a Director of NIH.

With new policy opportunities come new challenges and there are a number of issues which biomedical scientists will need to pay attention to under the Obama administration and more Democratic Congress. Questions related to conflict-of-interest in medical research continue to haunt the scientific community and are unlikely to disappear. There will likely be increased scrutiny on human subjects' protection and the welfare of animals used in research. President-Elect Barack Obama was the first Presidential candidate ever endorsed by the Humane Society of the United States (HSUS) (5), a group whose legislative priorities include limiting the use of animal research. Animal activists have built up

a great deal of momentum, having successfully supported a number of Democratic candidates in the election, as well as winning a major ballot initiative in California, and will likely channel that energy into pushing forward legislative and regulatory initiatives, some of which may be aimed at biomedical research, including attempts to eliminate the use of great apes or non-purpose bred dogs in research. In addition, although President-Elect Obama has declared strong support in peer review and scientific decision making, as well as transparency in the earmarking process, based on recent legislative history the vast majority of bills introduced to direct research at NIH towards specific diseases have been introduced by Democrats.(7)

Other areas which could contain potential policy pitfalls for the research community in the upcoming year are biosecurity issues and visas. There was some hope that the change in administration might alleviate some of the focus on biosecurity we have seen since the anthrax attacks of 2001. But the allegations surrounding former government bioweapons scientist, Bruce Ivins' involvement in those attacks, as well as several high-profile biosafety failures at BSL facilities and a recent report by the bipartisan Commission on Prevention of Weapons of Mass Destruction (3) have, if anything, increased government awareness of biosecurity issues. Moreover, the presumptive incoming Secretary of Health and Human Services, former Senator Tom Daschle, although primarily known for his stance on health care reform, also has a strong interest in biosecurity and has co-authored a report titled "Biodefence in the 21st Century," which recommends increased investment in biodefense (4). Early in 2009, a number of legislative and regulatory proposals on biosecurity are anticipated, ranging from increased oversight of Select Agents to registration of BSL labs to potential mandatory training of scientists on biosecurity issues. Advocacy on visa issues of concern to scientists, such as raising the cap on H1-B visas or facilitating entrance of foreign trainees and postdocs, may become more difficult as the economy shines a brighter light on unemployment among American citizens. The new President's attention is likely to be on recruiting more of our own citizens into science to foster competitiveness, rather than on attracting the best scientists from around the world.

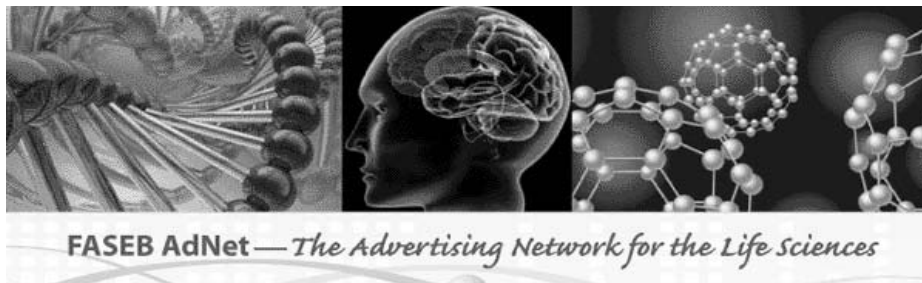
## Scientists Must Be the Change We Believe In

"We are a land of moon shots and miracles of science and technology that have touched the lives of millions across the planet," (9). This quote by President-Elect Obama seems to capture the optimism inherent in science—an optimism echoed by the research community as we look to the near future for biomedical research. Because of the extraordinary opportunities and looming challenges ahead, it is critical that investigators advocate for and convey the importance of medical research, and that we bring this message to our members of Congress, to the new President, and to our neighbors in the public. The research community must not grow complacent in educating policymakers about the need for investment in research and the pathway from basic discovery to medical advancement. Scientists finally have national leadership that is willing to listen: it is up to us to make sure we have something to say.

*Acknowledgements: This article is based on a shorter commentary piece published online in BoneKEy to which the author contributed.*

## References

- 1 "An Open Letter to the American People." (September 25, 2008) <http://sefora.org/wp-content/uploads/2008/09/nobelists-for-obama.pdf>.
2. Associated Press. (November 25, 2008) "Money is gushing out of Washington, and lots more spending is on the way to revive the economy." [http://hosted.ap.org/dynamic/stories/O/OBAMA\\_ECONOMY\\_GLANCE?SITE=NVREN&SECTION=HOME&TEMPLATE=DEFAULT](http://hosted.ap.org/dynamic/stories/O/OBAMA_ECONOMY_GLANCE?SITE=NVREN&SECTION=HOME&TEMPLATE=DEFAULT).
3. Commission on Prevention of Weapons of Mass Destruction. (2008) "World at Risk." <http://www.preventwmd.org/report/>.
4. Daschle, T. and O'Toole, T. (2008) Biodefence in the 21st Century. <http://www.ippr.org.uk/publicationsandreports/publication.asp?id=606>.
5. Markarian, M. (September 22, 2008) Humane Society letter endorsing Barack Obama. [https://community.hsus.org/humane/notice-description.tcl?newsletter\\_id=27497157](https://community.hsus.org/humane/notice-description.tcl?newsletter_id=27497157).
6. National Institutes of Health. (October 2008). FY 2009 Labor, Health and Human Services, Education, and Related Agencies Appropriations. *Office of Legislative Policy and Analysis*. <http://olpa.od.nih.gov/legislation/110/pendinglegislation/FY2009Appropriations.asp>.
7. National Institutes of Health. (November 25, 2008) Bill tracking. <http://olpa.od.nih.gov/tracking/>.
8. Obama, B. (August 27, 2007) Obama praises Armstrong's efforts to raise cancer awareness. [http://www.barackobama.com/2007/08/27/obama\\_praises\\_armstrongs\\_effor.php](http://www.barackobama.com/2007/08/27/obama_praises_armstrongs_effor.php).
9. Obama, B. (October 8, 2007) "Real leadership for a clean energy future." Remarks made in Portsmouth, NH.
10. Obama-Biden for America. (November 5, 2008) "Investing in America's future: Barack Obama and Joe Biden's plan for science and innovation." <http://www.barackobama.com/pdf/issues/FactSheetScience.pdf>.
11. ScienceDebate2008. (August 30, 2008) Candidate Barack Obama's response. <http://www.sciencedebate2008.com/www/index.php?id=40>.
12. Zeleny, J. (October 24, 2008) "Obama makes visit to beloved supporter." *New York Times*, <http://www.nytimes.com/2008/10/25/us/politics/25obama.html>. ❖



## Need to promote open positions, fellowship opportunities, programs, or conferences in physiology?

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## Association of Chairs of Departments of Physiology Meeting Highlights

The Association of Chairs of Departments of Physiology (ACDP) held its annual meeting in Curaçao on December 4-6, 2008.

President Nicola C. Partridge (UMDNJ-RW Johnson Medical School) developed a program based on current cutting-edge research presentations and issues dealing with the independence of departments.

The second Arthur Guyton Lectureship was given by Eric Olson (Univ. of Texas Southwestern Medical Center) on "Micro RNA, Heart Development and Disease." Other research presentations were given by Jianjie Ma (UMDNJ-RW Johnson Medical School) on "Calcium Signaling and Membrane Repair," and new chair Zofia Zukowska (George Washington Univ.) on "Stress, Fat and Neuropeptide Y."



The pros and cons for centers vs. departments were presented by Charles Moldow (administrative centers), Vice Dean at the University of Minnesota (in place of Dean Deborah Powell) and Muthu Periasamy (Ohio State Univ.) on research centers.

In addition, Olaf Sparre Andersen, who is serving on the NBME's Comprehensive Review of the USMLE Task Force (Weill Cornell Medical College) gave an update on the ongoing revision process for the US Medical Licensure Exams (USMLE) and the implications for MD and MD/PhD training by physiology departments. Howard H. Garrison, Deputy Executive Director of Public Affairs for FASEB, gave an update on the recent US election and what that could mean for science in general and biomedical research funding in particular.

Officer elections were held with the following results. R. Clinton Webb (Medical College of Georgia) was elected President-elect, Nicholas A. Delamere (Univ. of Arizona School of Medicine) and Marshall H. Montrose (Univ. of Cincinnati College of Medicine) were elected to three-year terms as Councilor, and L. Gabriel Navar (Tulane Univ. School of Medicine) was re-elected to another three-year term as Council of



**Eric Olson, 2nd Guyton Lecturer congratulated by Nicola Partridge, ACDP President.**

Academic Sciences representative. William S. Spielman (Michigan State Univ.) was thanked for his service as Past President, as were Susan L. Hamilton (Baylor College of Medicine) and R. Clinton Webb for their service as Councilors.

President-elect Meredith Bond (Univ. of Maryland School of Medicine) announced that the 2009 ACDP annual fall meeting will be held in Tucson, AZ, on December 3-5, 2009. ❖

## Zucker Honored at Annual ACDP Meeting

Nicola C. Partridge, President of the Association of Chairs of Departments of Physiology (ACDP), presented the ACDP's highest award, the Distinguished Service Award, to Irving H. Zucker, Univ. of Nebraska Medical Center during the organization's 2008 fall meeting in Curaçao.

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

Zucker was born in New York City. He graduated from City College of New York in 1965, received his Masters Degree in 1967 from the Univ. of Missouri at Kansas City, and his PhD from New York Medical College in 1972. He did a postdoctoral fellowship in the Department of Physiology & Biophysics at the Univ. of Nebraska Medical Center before being hired as an Assistant

Professor in that department.

Zucker moved through the ranks in the department and in 1989 was named Chair of the department. He now holds the Theodore F. Hubbard Chair of Cardiovascular Research in the Department of Cellular and Integrative Physiology.

The research in Zucker's laboratory focuses on the role of central brain mechanisms on neurohormonal adjustments in cardiovascular regulation in the setting of experimental chronic heart



**ACDP President Nicola Partridge presents Irving Zucker with the Distinguished Service Award.**

## Beijing Physiology 2008 - One World One Dream

The motto for the Beijing Olympics rang true for the physiologists who gathered in Beijing from October 19-22, 2008. The meeting represented the efforts of five physiological societies to create a new format for international meetings in which each society contributed to the scientific program and provided financial support for its own participation. The APS provided partial travel support for 25 invited speakers and made 31 travel awards to junior scientists presenting their work at the meeting.

The participating societies in Beijing Physiology 2008 (BP 2008) included the Chinese Association of Physiological Sciences, The Physiological Society (UK), the American Physiological Society, the Canadian Physiological Society, and the Australian Physiological Society. In addition, the meeting was co-sponsored by the International Union of Physiological Sciences (IUPS), the Federation of the Asian and Oceanian Physiological Societies (FAOPS), and the National Natural Science Foundation of China.

The goal of the joint conference was to provide opportunities for scientific and cultural exchanges and collaborative interactions among physiological scientists of various countries. With the rapid progress of modern biological sciences, it has become clear that physiological research should be conducted in ways that address issues of translational medicine and the application of phys-



### Beijing Physiology 2008 Opening Reception.

iological discovery to the treatment of disease. Therefore, the theme of Beijing Physiology 2008 was "Physiology in Medicine: Bridging Bench and Bedside."

Beijing Physiology 2008 was a truly successful endeavor. Held at Xijiao Hotel and Conference Center, the meet-

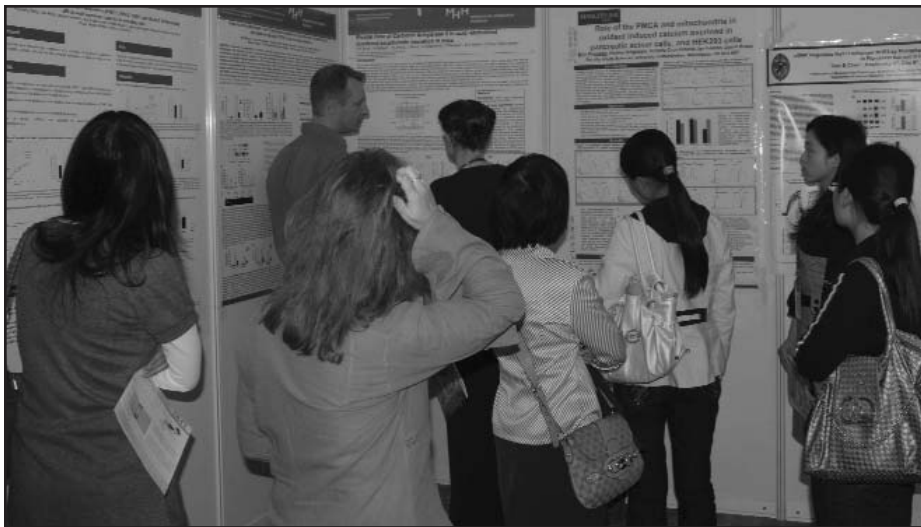
ing attracted 605 delegates (see Table 1). There were 407 full delegates (Mainland China 157; Australia 11; Canada 27; UK 58; US 88; 66 were from other countries and regions) and 198 students (Mainland China 145; Australia 3; Canada 15; UK 11; US 6; 18 were from the other countries and regions). Among the 605 participants, 303 were from the Mainland China, and 302 were from the foreign countries and regions: Australia 14; Canada: 42; UK 69; US 94; 84 were from the other countries and regions. There were representatives at the meet-



Professor Xian Wang, Secretary-General of CAPS, welcomes the international community to Beijing Physiology 2008.



Irving Zucker presents a certificate of appreciation to Keynote Speaker, Denis Noble.



**The Beijing Physiology 2008 Poster Session.**

ing from 35 countries. A total of 592 abstracts were received for the meeting. Among the abstracts, there were three from invited plenary lectures, 80 from invited symposium speakers, 7 from young physiologists' symposium speakers, 21 free oral speakers and 482 posters as determined by the Scientific Organizing Committee of the conference. In addition, there were 27 exhibitions during the conference: 17 were

from companies based in Mainland China and 10 from outside of China.

In advance of the scientific sessions, the APS and The Physiological Society (UK) conducted a workshop on "How to get your work published in English-language biomedical journals and trends in Western biomedical publishing." The workshop was aimed at students, post-doctoral fellows and junior faculty and provided advice on how to tell a compelling scientific story and how to get one's research published. The speakers included Kim Barrett, David Nicholson, David Sheppard, Martin Frank, and Ian McGrath. The speakers addressed current trends in biomedical publishing and ethical practices of major English-language journals. In planning for BP 2008, it was felt that the workshop was



**Face changing performer at Beijing Physiology 2008 Closing Banquet.**



**Martin Frank reviews publishing scenarios with a study group during Publishing Workshop.**

## Welcome Comments from APS President Irving Zucker

Da Jia Hao! (Greetings to all)  
Professor Fan, thank you for the kind introduction. On behalf of the American Physiological Society, I thank the local organizing committee for putting together what I am sure will be an outstanding scientific meeting and a very stimulating and interactive program. We hope that this meeting will foster long term collaborations between our countries. Just as sport and the Olympic games overshadow cultures and political ideologies, so does science. Scientific discovery and the discipline of physiology provides the added potential of contributing to the health and well being of billions of human beings and furthering our understanding of all forms of life.

Xie Xie (Thank you)

Yu Zu Da Hue Chen Gong (We hope for a highly successful meeting).

timely given the rapid acceleration of scientific productivity in China and the desire of many Chinese authors to publish in Western journals. The day included a practical workshop element, providing an opportunity for groups to work with a facilitator on specific exercises related to publishing. A number of US and UK speakers participated in the meeting as facilitators, providing advice to the approximately 120 Chinese scientists and students in attendance.

For Western scientists attending BP 2008, Sunday night was the start of



their orientation to Chinese hospitality. The meeting organizers arranged for a wonderful welcome reception with samplings of Chinese foods. On Monday morning, Professor Xian Wang, Secretary-General of the Chinese Association of Physiological Sciences (CAPS), Peking Univ., opened the session and welcomed the meeting participants. Her greeting was followed by one from Professor Ming Fan, President of the Conference and of CAPS. Representatives of each of the participating societies then followed with their own welcoming comments. The comments of Irving Zucker, APS President, are included in the shaded box on page 9.

Denis Noble, Univ. of Oxford, UK was the opening keynote speaker, presenting a talk titled "Principles of Systems Biology from a Physiologist's Perspec-

tive." The talk was based on an article resulting from the Paton Lecture he delivered to the Life Sciences 2007 meeting in Glasgow in July 2007. As Noble stated, the principles are derived from his book on systems Biology, *The Music of Life* (Noble, 2006) and the article arising from his Paton Lecture (Noble, 2008). Two additional plenary lectures were presented during the meeting. Shu Chien, UCSD, presented a lecture titled, "Mechanotransduction and Vascular Biology," and Ming Fan, Institute of Basic Medical Sciences, Beijing, presented a lecture titled, "Advances in Hypoxic Physiology in China."

The 16 symposia offered at BP 2008 generally included speakers from at least three of the participating societies. In addition, the organizing committee put together three free oral sessions on



**Kim Barrett and Hannah Carey singing New York, New York.**

Cardiovascular and Cellular Physiology, Regulation of Ion Channels, and Metabolism, Renal and Endocrinology. In addition, the meeting included one Young Physiologists' Symposium. These four sessions were designed to encourage the participation of scientists submitting volunteered abstracts to the meeting. In addition, 482 abstracts were presented as posters.

The Banquet for BP 2008 was held on Tuesday evening and was a typical Chinese feast with multiple courses and numerous toasts. In addition, the local organizing committee arranged for entertainment at the banquet. The entertainment included dancers performing the Peacock Dance, a short performance of the Beijing Opera, martial arts dancers called Gongfu, and a performance by a Chinese mask changer. In addition to the formal entertainment, a number of physiologists volunteered or were coerced to sing songs from their home country. While the amateur entertainment started with an offering from Tai Yao, past president of the CAPS, it ended with a duet of New York, New York sung by Kim Barrett, UCSD, and Hannah Carey, Univ. of Wisconsin.

In closing the meeting on Wednesday afternoon, the representatives of the participating societies heaped praise on the Local Organizing Committee and our Chinese hosts for their hospitality and friendship and for offering the international community with a scientifically exciting meeting. ❖

## Summary of The Beijing Joint Conference of Physiological Sciences 2008.

### Regular Registration

Country	Registrants
China	158
Australia	11
Canada	27
United Kingdom	58
USA	88
Five participating societies	341
Afghanistan	1
Belgium	2
Brunei	2
Chile	2
Chinese Taipei	6
Czech Republic	1
Denmark	2
France	1
Germany	3
Hong Kong-SAR	5
Hungary	1
Indonesia	1
Ireland	6
Israel	1
Japan	1
Malaysia	3
Mexico	1
Norway	7
Poland	2
Puerto Rico	1
Qatar	2
Russia	1
Saudi Arabia	2
Singapore	4
South Korea	4
Turkey	1
Ukraine	1
St. Kittz & Nevis	1
Other countries and regions	65
Total	407

### From 35 Countries and Regions

### Student Registration

Country	Registrants
China	145
Australia	3
Canada	15
United Kingdom	11
USA	6
Five participating societies	180
Denmark	1
Germany	1
Japan	1
Mexico	2
Norway	1
Puerto Rico	3
South Korea	6
The Netherlands	3
<b>Exhibitors</b>	
Foreign	10
Mainland China	17
Total	27

## The University of Toledo College of Medicine Hosted “From Form to Function,” the 23rd Annual Meeting of the Ohio Physiological Society

On the evening of November 6, 2008, fall colors in full splendor on the sprawling Health Science Campus of the Univ. of Toledo ushered the delegates, students and guests to the 23rd annual meeting of the Ohio Physiological Society (OPS) to the Dana Center, the venue of the meeting. The meeting was co-sponsored by the OPS, the American Physiological Society (APS), the Office of the Dean of the College of Medicine, Univ. of Toledo and the Department of Physiology and Pharmacology, Univ. of Toledo College of Medicine.

This year's meeting had several interesting features, the first of which was a golf outing on Thursday for all interested meeting attendees. The same evening, the meeting kicked off with a new feature introduced this year, i.e., a panel discussion jointly sponsored by the APS as part of the Physiology Understanding (PhUn) Week program. This event was an extension of the traditional portion of the PhUn week activity, which included a classroom visit to Springfield High School earlier in the week (November 3) by two members of the APS, Eric Morgan and Bina Joe of the Univ. of Toledo. The panel discussion was attended by well over 100 area high school students. The panelists included distinguished members of the OPS, including the founding President, Peter Lauf; a previous OPS president, Norma Adragna from the Wright State Univ.; and the current president, Bina Joe; the two keynote speakers, Joseph



### High school students from northwest Ohio in session with the panelists, including Senior Physiologists.

Nadeau from the Case Western Reserve Univ. and Muthu Periasamy from the Ohio State University; Michael Bisesi, the Associate Dean of the Univ. of Toledo College of Graduate Studies, and Jeremy Nixon, a biology advanced program teacher from Springfield High School. The students were engaged in one-on-one discussions on a variety of topics such as, “What are the different branches of physiology?”; “What do physiologists do everyday?”; “What subjects should I study to become a physiologist?”; to questions on science fiction such as, “Is it possible to create a Hulk-like creature?” It was obvious both during and after this session that the panelists and the youngsters enjoyed the deliberations, the essence of which reverberated in positive comments from faculty and students alike.

The second interesting feature of this meeting was that the theme of the meeting, “From Form to Function,” gave us the opportunity to unite the two themes of “nature” and “nurture” as highlighted by the two keynote lectures delivered by a geneticist, Joseph Nadeau, and a physiologist, Muthu Periasamy, both of whom are distinguished scientists from the state of Ohio. Following a formal welcome address by Michael Bisesi, Joseph Nadeau presented the keynote lecture, “Genetic and Systems Studies of Metabolic Diseases.” This was followed by a dinner reception at the Hilton where all the delegates had a chance to intermingle and exchange pleasantries.

The second day of the meeting commenced with a special lecture by Gale Davy, the Director of Outreach and Advocacy, Americans for Medical Progress. This lecture on “Public Policy-The Critical Role of Scientists,” was well-received by young investigators, who were later seen conversing with the speaker and exchanging information to sign up for this important cause. This was followed by an open poster session where students and faculty alike actively discussed their mutual research interests.

The third interesting feature of this meeting was that it was a student-centered meeting, which meant that oral presentations were exclusively from students. The first of the two oral presentation sessions was moderated by a graduate student from the Univ. of Toledo College of Medicine, Damien Earl. The speakers for this session were Ying Xu from the Ohio State Univ., Ameet Chimote from the Wright State Univ., Edward Toland from the Univ. of Toledo College of Medicine and



Active discussions between researchers from different institutions for biomedical research from all over Ohio.

Patrick Mineo from the Miami Univ. Following lunch, the second session continued with presentations by Patricia Shamhart from the North Eastern Ohio Univ. College of Medicine, Kaylan Haizlip from the Ohio State Univ. and Gargi Roy from the Univ. of Toledo College of Medicine. This session was moderated by Guillermo Vasquez of the Univ. of Toledo College of Medicine. The concluding keynote lecture entitled, "Cardiac SR Ca<sup>2+</sup> ATPase and its role in Heart Disease," was delivered by Muthu Periasamy.

Three awards were presented at this meeting: an early-bird registrant raffle

award, which was won by Alissa D. Delong of the Univ. of Toledo, and two Lauf awards. The latter are travel awards to students supporting attendance at the Experimental Biology Meeting of 2009. This year's award for best oral presentation was won by Patricia Shamhart from the North Eastern Ohio University College of Medicine. Kaylan Haizlip and Ying Xu from the Ohio State Univ. were the runners-up. The Lauf award for best poster presentation went to Michelle Monasky from the Ohio State Univ. Christopher Dearth from the Univ. of Toledo was the runner-up.

The scientific sessions of the meeting, which were attended by more than 90 registered participants, were concluded with appreciative remarks by Peter Lauf. The charge for the 24th annual meeting of the OPS was ceremoniously handed over by the presentation of the new OPS banner with the new OPS logo to the next OPS president-elect, Paul Janssen, from the Ohio State Univ.

*(Pictures Courtesy: Andrew Beavis and Jack Meade, Univ. of Toledo College of Medicine).* ❖

Bina Joe  
OPS President 2008



Kaylan Haizlip from the Ohio State University giving her first oral research presentation.



Michelle Monasky from the Ohio State University receiving the best poster award from Peter Lauf.

## Membership

### New Regular Members

#### \*Transferred from Student Membership

**Wissam Ali Abou Alaiwi**

Univ. of Toledo, OH

**Kyan James Allahdadi\***

Medical College of Georgia

**Kenton Paul Arkill**

Univ. of Exeter, UK

**James R. Austgen\***

Univ. of Missouri, Columbia

**Jan Ernestovitch Azarov**

Inst. of Phys., Komi Sci. Ctr., Russia

**Olga Baker\***

Univ. of Missouri, Columbia

**Umberto Banderali**

Univ. of Calgary, Canada

**Pierre Blier**

Univ. of Quebec, Rimouski, Canada

**Martin Dene Brand**

Buck Inst. Age Research, Novato, CA

**Ian Nathaniel Bratz**

NEOUCOM, Rootstown, OH

**Robert Joseph Brosnan\***

Univ. of California, Davis

**Marcelo A. Catalan\***

Univ. of Rochester Med. Ctr., NY

**Siu Lung Chan**

Univ. of Iowa

**Fangping Chen**

West Virginia Univ.

**Eunhee Chung**

Univ. of Colorado, Boulder

**Dennis R. Claffin**

Univ. of Michigan

**Leslie Ann Consitt**

East Carolina Univ., NC

**Georgina Cope**

Univ. College Cork, Ireland

**Rebecca Lynn Cunningham\***

Univ. of Texas HSC, San Antonio

**Shekhar Hari Deo\***

Univ. of Missouri, Columbia

**Kelly Ann Dougherty\***

Childrens Hosp., Philadelphia, PA

**Sean Eoin Egan**

Hosp. for Sick Children, Toronto, Canada

**Thomas Michael Egan**

Univ. of North Carolina, Chapel Hill

**Carie S. Facemire\***

Duke Univ. Med. Ctr., NC

**Xian Fan**

VA Med. Ctr., Emory Univ., GA

**Heinz Fehrenbach**

Research Ctr., Borstel, Germany

**Brad Geddes**

Elixir Pharm. Inc., Cambridge, MA

**Morteza Gharib**

California Inst. of Tech., Pasadena

**Mallikarjuna R. Guruju**

Weill Cornell Med. Coll., New York

**Todd Alan Hagobian\***

Univ. of Massachusetts, Amherst

**Espen Hartveit**

Univ. of Bergen, Norway

**Brian Patrick Head**

VA, Univ. of California, San Diego

**Tyson L. Hedrick\***

Univ. of North Carolina, Chapel Hill

**Youliang Huang**

Indiana Univ. Sch. of Med.

**Nikki L. Jernigan\***

Univ. of New Mexico, Albuquerque

**Neil Michael Johannsen**

Pennington Bio. Res. Ctr., LA

**David A. Johnson**

Pinnacle Tech. Inc., Lawrence, KS

**Alan Kacin\***

Univ. of Ljubljana, Slovenia

**Arulmozhi Kandasamy**

Univ. of Alberta, Canada

**Yoshitaka Kawaraguchi**

Univ. of California, San Diego

**Munish Kumar**

Univ. of Louisville, KY

**Ian R. Lanza\***

Mayo Clinic, Rochester, MN

**Dorothy Susan Lee**

Wayne State Univ., MI

**Jeong-Hwa Lee**

Catholic Univ., South Korea

**Kun-Ze Lee\***

Univ. of Florida, Gainesville

**Mathieu Lemaire**

Hosp. for Sick Children, Toronto, Canada

**David A. Long**

Univ. Coll. of London, UK

**Uri Maoz**

Weizmann Inst. of Sci., Rehovot, Israel

**Fernando Luis Martin\***

Mayo Clinic, Rochester, MN

**Roberto Martuzzi**

Yale Univ., CT

**Ricard Masia\***

Massachusetts General Hosp., Boston

**Daniel Eugene Michele**

Univ. of Michigan, Ann Arbor

**Stanislav Micuda**

Charles Univ., Prague, Czech Republic

**Penny F. Moody-Corbett**

Mem. Univ., Newfoundland, Canada

**Richard E. Moon**

Duke Univ. Med. Ctr., NC

**Daniel K. Mulkey**

Univ. of Connecticut

**Sonia Najjar**

Univ. of Toledo, HSC, OH

**Bernardo Ortega**

Univ. of Maryland Sch. of Med.

**David Ostry**

McGill Univ., Montreal, Canada

**Ronald Otterstetter\***

Univ. of Akron, OH

**Hsiu-Chung Ou**

China Med. Univ., Taiwan

**Michael L. Paffett\***

Univ. of New Mexico

**Muriel S. Palmgren**

Louisiana State Univ., HSC

**Amy Martha Pastva\***

Duke Univ., NC

**Anatoli P. Petridou\***

Univ. of Thessaloniki, Greece

**Nalini Rajamannan**

Northwestern Univ., IL

**Kieran F. Reid**

USDA Human Nutrition Res. Ctr., MA

**Julie Annette Reynolds\***

Ohio State Univ.

**Christopher J. Rivard**

Univ. of Colorado HSC, Aurora

**Ryousuke Satou**

Tulane Univ., New Orleans, LA

**Hagit Schwimmer\***

Univ. of Haifa, Israel

**Eiji Shigetomi**

Univ. of CA, Los Angeles

**Venkataramana Sidhaye**

Johns Hopkins Univ., MD

**Neerupma Silswal**

Univ. of Missouri, Kansas City

**Jonathan Anthony William Stecyk\***

Univ. of Oslo, Norway

**Adam C. Straub**

Univ. of Virginia

**Charles A. Stuart**

East Tennessee State Univ.

**Kelly J. Suter**

Univ. of Texas, San Antonio

**Katerine Janet Teerds**

Wageningen Univ., Netherlands

**Ravikumar Thangappan**

Univ. of California, Sacramento

**Nivaldo Villela**

St. Univ. of Rio De Janeiro, Brazil

**Matt Wachowiak**

Boston Univ., MA

**Erica Ariece Wehrwein\***

Mayo Clinic, Rochester, MN

**Marilee J. Wick**

Univ. of Colorado HSC, Aurora

**Chadwick Lewis Wright\***

Ohio State Univ., Coll. of Med.

**Laura C. Yeates**

Univ. of California, Santa Cruz

**Ming Zhang\***

Temple Univ., PA

**Suhua Zhang**

New York Med. Coll., Valhalla

**Huizhen Zheng**

Guangdong Med. Coll., China

**Natalya S. Zinkevich**

Med. Coll. of Wisconsin, Milwaukee

## New Student Members

**Abiola Mahroof Adekilekun**

Univ. of Ilorin, Nigeria

**Stephanie Aileen Anaya**

Louisiana State Univ.

**Sasi Kumar Arumugam**

Saveetha Univ., India

**Miri Assayag**

The Hebrew Univ., Israel

**Daniel William Baker**

Univ. of British Columbia, Canada

**Stephen R. Bakos**

Virginia Commonwealth Univ.

**Matthew David Barberio**

Auburn Univ., AL

**Michelle Ellen Bartman**

Univ. of Wisconsin, Madison

**Jonathan Guy Bensley**

Monash Univ., Australia

**Krystal N. Brinson**

Medical College of Georgia

**Jeannine Marie Brown**

Tai Sophia Inst., Laurel, MD

**Kathryn M. Campbell**

Univ. of Maryland

**Luciano S.A. Capettini**

Federal Univ., Brazil

**Laura Michele Carney**

Wayne State Univ., MI

**Andres Ernesto Carrillo**

Purdue Univ., IN

**Amy Elizabeth Cayemberg**

Medical College of Wisconsin

**Naomi Cermak**

McMaster Univ., Canada

**Alfred E. Chappell**

Univ. of California, San Diego

**Hye-hun Choi**

Medical College of Georgia

**Ava Kalyca Chow**

Univ. of Alberta, Canada

**Hyun Hye Chun**

SUNY, Stony Brook

**Scott A. Conger**

Georgia Inst. of Tech.

**Heidy Lorena Contreras**

Univ. of California, Irvine

**Erinne Rose Dabkowski**

West Virginia Univ.

**Kyle James Diehl**

Univ. of Colorado

**Patricia A. Dunsha**

Northcentral Univ., AZ

**Marina De Toledo Durand**

Univ. De Sao Paulo, Brazil

**Jon E. Elliott**

Univ. of Oregon

**Farnoosh Fazlollahi**

Univ. of Southern California

**Tristan William Fowler**

Univ. of Arkansas Med. Sci.

**Jimmy Jeannot Fraigne**

Texas Tech Univ., HSC

**Katsuhiko Funai**

Univ. of Michigan

**John Michael Garlich**

St. Louis Univ., Sch. of Med., MO

- David Gregory Gerst**  
Wayne State Univ., MI
- Carly S. Gordon**  
York Univ., Canada
- Jessica Delores Gumerson**  
Univ. of Michigan
- Kristin M. Hardy**  
Univ. of North Carolina, Wilmington
- Wenjuan He**  
Vanderbilt Univ., TN
- Zhongmei He**  
Shanxi Med. Univ., China
- Katherine Rose Heberlein**  
Univ. of Virginia
- Jennifer Kate Heffron**  
Florida State Univ.
- Carlos Eduardo Herrera**  
Colorado State Univ.
- Christine Marie Horvat**  
Univ. of Toledo, OH
- Time Yu-Tiem Hou**  
Univ. of Notre Dame, Canada
- Robert Acton Jacobs**  
Colorado State Univ.
- Joo Yun Jun**  
Univ. of Florida
- Wararat Kittikuluth**  
Medical College of Georgia
- Paulina M. Kowalewska**  
McMasters Univ., Canada
- Lin Lejian**  
Fourth Military Med. Univ., China
- Yuan Li**  
Shanxi Med. Univ., China
- Xiao Yu Li**  
Shanxi Med. Univ., China
- Jingyi Liu**  
Shanxi Med. Univ., China
- Nai Hong Liu**  
Shanxi Med. Univ., China
- Sender Lkhagvadorj**  
Iowa State Univ.
- Frederico S.M. Machado**  
Fed. Univ. of Minas Gerais, Brazil
- Alexander R. Mackie**  
Loyola Univ., IL
- James G. MacKrell**  
Univ. of Michigan
- Michael P. Matott**  
Univ. of South Florida, Coll. of Med.
- Bryon R. McKay**  
McMaster Univ., Canada
- Ryan P. McMillan**  
Virginia Tech Inst. & State Univ.
- Lucas William Meuchel**  
Mayo Clinic, MN
- Christopher K. Migliore**  
Loyola Univ., Chicago, IL
- Ardalan Minokadeth**  
Tulane Univ., LA
- Susan Marie Motch**  
Pennsylvania State Univ.
- Scott R. Murgatroyd**  
Univ. of Leeds, UK
- Matthew J. Nelson**  
Vanderbilt Univ., TN
- Susannah E. Nicholson**  
Univ. of Texas HSC, San Antonio
- Paula Nunes**  
Massachusetts General Hosp.
- Kristen L. Osterlund**  
Univ. of Arizona
- Panisse M. Padilla**  
Univ. of Med. & Health Sci., St Kitts
- Glenda Parra-Bonilla**  
Univ. of South Alabama
- Christopher J. Pelham**  
Univ. of Iowa
- Thales N. Primola-Gomes**  
Fed. Univ. of Minas Gerais, Brazil
- Eric Rullman**  
Karolinska Univ. Hosp., Sweden
- Jacob Rullo**  
Univ. of Toronto Gen. Hosp., Canada
- E. Aaron Runkle**  
Penn State Univ., Coll. of Med.
- Valter J. Santana-Filho**  
Univ. of Sao Paulo, Brazil
- Donel Angelo Sequea**  
Univ. of Michigan
- Yasin Baris Seven**  
Mayo Clinic, MN
- Karin E. Shortreed**  
York Univ., Canada
- Ashley Ann Smith**  
Northern Ontario Sch. of Med., Canada
- Ashley J. Smuder**  
Univ. of Florida
- Linda Elias Sousse**  
Univ. of Texas Med. Branch
- Alyson Korry Speakman**  
Cornell Univ., Med. Ctr., NY
- Audrey Jon Stone**  
Univ. of Arkansas
- Luther M. Swift**  
George Washington Univ., DC
- Erin E. Talbert**  
Univ. of Florida
- Kevin B. Tate**  
Univ. of North Dakota
- Anna Tetievsky**  
The Hebrew Univ. of Jerusalem, Israel
- Kalidasan Thambiayya**  
Univ. of Pittsburgh, PA
- Anne Tonson**  
Ctr. for Mag. Resonance In Biol., France
- Anh Hong Tran**  
Pharmacy Univ., Viet Nam
- Ke Wang**  
Shanxi Med. Univ., China
- Yan Wang**  
West Virginia Univ., Sch. of Med.
- Yehong Wang**  
Crownbio Science Inc., China
- Moran Weinberger**  
Univ. of Toronto, Canada
- Nathan M. Weir**  
Wright State Univ., OH
- Leslie Dullas White**  
Univ. of Florida, Coll. of Med.
- Ye Wu**  
Shanxi Med. Univ., China
- Haiyan Xiong**  
Capitol Med. Univ., China
- Li Yan**  
Shanxi Med. Univ., China
- Guang Zhao Yang**  
Shanxi Med. Univ., China
- Sanar S. Yokhana**  
Wayne State Univ., MI
- Thomas J. Younts**  
Albert Einstein Coll. of Med., NY
- Suli Zhang**  
Shanxi Med. Univ., China
- Xi Zhang**  
Capital Med. Univ., China
- Huan Xin Zhao**  
Shanxi Med. Univ., China
- Yi Zhao**  
Northern Ontario Sch. of Med.
- Ronghua Zheng**  
Shanxi Med. Univ., China

## New Affiliate Member

**Wayne Gearheart**  
Pikesville College, KY

## Recently Deceased Members

- Robert S. Alexander**  
Troy, NY
- Maris L. Bade**  
Concord, MA
- Marvin Cornblath**  
Baltimore, MD
- Franklin H. Epstein**  
Boston, MA
- James G. Hilton**  
Austin, TX
- Maurice L. Kelley**  
Hanover, NH
- James L. Lords**  
Salt Lake City, UT
- Luigi Mastroianni**  
Philadelphia, PA
- Nicholas A. Mortillaro**  
Mobile, AL
- Benet J. Pardini**  
Iowa City, IA
- Charles E. Stevens**  
Raleigh, NC

## APS Presents Awards at Annual ABRCMS Conference

The APS presented awards to minority undergraduate researchers and was a major conference sponsor at the Annual Biomedical Research Conference for Minority Students (ABRCMS) at Disney's Coronado Springs Resort, Lake Buena Vista, FL from November 5-9, 2008. ABRCMS is a national conference designed to facilitate increased minority involvement in biomedical and behavioral science careers. This four-day conference encompassed scientific presentations, professional development workshops, poster and oral presentations, and numerous networking opportunities with faculty and administrators from graduate schools, government agencies, scientific societies and foundations.

ABRCMS has grown to one of the largest professional conferences for biomedical and behavioral students since its inception in 2001. More than 2,800 participants attended the 2008 ABRCMS including nearly 1,500 undergraduate students, 300 graduate students, 400+ exhibitors, and 500+ Program Directors/Faculty.

The APS, represented by APS Staff Member, Brooke Bruthers, and one of the two 2008-2009 APS K-12 Minority Outreach Fellows, Keisa Mathis, was pleased to present \$2,000 in total awards to seven undergraduate students for the best oral and poster presentations in the physiological sciences. Students also receive a complimentary one-year print subscription to the APS journal, *Physiology*, and an APS denim shirt. Awardees were added to the Minority Physiologists Listserv. Fifteen judges, including APS members, Vernon Bond, Jr., Howard Univ., Latanya Hammonds-Odie, Dillard Univ., and Shyamal Premaratne, Virginia Union Univ., selected the winners:

### Oral

**Dana Dominguez** (Undergraduate Senior), Univ. of California, San Diego

Abstract: "Induction of Apoptosis in Peripheral Blood Mononuclear Cells (PBMC) by Non-nucleoside Reverse Transcriptase Inhibitors"

**Kavita Balkaran** (Undergraduate Junior), Univ. of the Virgin Islands

Abstract: "Newly Restored Eelgrass Has Similar Species Diversity as Eelgrass from a Self-established Eelgrass Bed"

### Poster

**Anupama Divakaruni** (Undergraduate Sophomore), Univ. of Maryland, Baltimore County

Abstract: "Elucidating Mechanisms of Potassium Balance"

**Carlo Mejia** (Undergraduate Sophomore), Univ. of California, Riverside

Abstract: "Segmental Differences in Colonic Transporter Expression"

**Howard Forbes** (Undergraduate Junior), Univ. of the Virgin Islands

Abstract: "The Influence of Red Mud and Stabilized Red Mud on Seed Germination and Plant Growth"

**Citadel Cabasag** (Undergraduate Senior), Washington State Univ.

Abstract: "Evaluating Morphological Defects and Oxidative Stress in an Experimental Model of Fetal Alcohol Syndrome"

**David Durazo** (Undergraduate Senior), Univ. of Arizona

Abstract: "The Effect of Oxidative Stress on Insulin Signaling in Isolated Rat Skeletal Muscle"

The APS congratulates the students on a job well done and wishes them the best in their academic pursuits.

Finally, the APS Education Office staffed an exhibit booth, highlighting the following awards, programs and resources for minority groups underrepresented in science:

APS/NIDDK Minority Travel Fellowship which provides funds to attend Experimental Biology and the fall APS conferences;

Undergraduate Summer Research Fellowship support full-time undergraduate students to work in the laboratory of an APS member;

Porter Physiology Fellowship Program which supports minority students pursuing full-time studies toward a PhD in the physiological sciences;

APS Minority Listserv which provides information on APS events, awards, grants, fellowships, science news, positions available and more.

For more information on these programs, go to [www.the-aps.org/education/minority\\_prog/](http://www.the-aps.org/education/minority_prog/). The APS career brochure, career web site, Archive of Teaching Resources, Timeline of Physiology, membership for students, and Experimental Biology 2009 also were highlighted at the exhibit.

The ABRCMS meeting is sponsored by a grant from the National Institute of General Medical Sciences (NIGMS) Minority Opportunities for Research Programs (MORE), which includes the MARC, MBRS:RISE, MBRS: SCORE, MBRS:IMSD, MBRS, and BRIDGES programs and is coordinated by the American Society for Microbiology. For more information see [www.abrcms.org](http://www.abrcms.org). For more information regarding the awards, programs and fellowships administered by the APS Education Office, please visit <http://www.the-aps.org/education/index.htm> or contact the office at [education@the-aps.org](mailto:education@the-aps.org) or 301-634-7132. ❖

*Brooke Bruthers*

*APS Minority Programs Coordinator*



**Brooke Bruthers and Keisa Mathis presented awards at the Annual Biomedical Research Conference for Minority Students.**

## APS/NIDDK Minority Travel Fellows Attend the 2008 APS Intersociety Meeting: The Integrative Biology of Exercise V

The APS regularly awards Travel Fellowships for underrepresented minority scientists and students to attend APS scientific meetings with funds provided by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). These fellowships provide funds for registration, transportation, meals, and lodging. Seven fellows attended the APS Intersociety Meeting, "The Biology of Exercise V" in Hilton Head, SC from September 24-27, 2008.

Fellows in the NIDDK Minority Travel program not only receive financial support to attend this meeting, but will also be provided professional guidance through pairings with APS members who serve as mentors to the fellows for the duration of the meeting. Thanks to the time and expertise offered by mentor volunteers, fellows will be able to maximize their time and more fully experience the many aspects of this meeting.

### Fellows at the Biology of Exercise Meeting were:

Jorge Gamboa, Univ. of Kentucky;  
Kirsten Granados, Univ. of Massachusetts Amherst;  
Rebecca Hasson, Univ. of Massachusetts;  
Anna Leal, Univ. of Texas, Southwestern;  
Christopher Mendias, Univ. of Michigan;  
Trudy Moore-Harrison, Univ. of North Carolina, Charlotte; and  
Farah Ramirez-Marrero, Mayo Clinic, MN.

### APS Meeting Mentors at the Biology of Exercise Meeting were:

John P. Thyfault, VA Med. Center/Univ. of Missouri;  
George A. Brooks, Univ. of California, Berkeley;  
Esther E. Dupont-Versteegden, Univ. of Kentucky;

Timothy P. Gavin, East Carolina Univ.;  
Timothy Griffin, Oklahoma Med. Research Foundation;  
Susan A. Bloomfield, Texas A&M Univ.; and  
Gary W. Mack, Brigham Young Univ.

The travel awards are open to graduate students, postdoctoral students, and advanced undergraduate students from minority groups underrepresented in science (i.e., African Americans, Hispanics, Native Americans, and Pacific Islanders). The specific intent of this award is to increase participation of pre- and postdoctoral minority students in the physiological sciences. For more information, contact Brooke Bruthers in the APS Education Office at 301-634-7132 or [bbruthers@the-aps.org](mailto:bbruthers@the-aps.org), or visit [http://www.the-aps.org/education/minority\\_prog/index.htm](http://www.the-aps.org/education/minority_prog/index.htm) on the APS website. ❖

Brooke Bruthers  
APS Minority Programs Coordinator



Ronald L. Terjung presents award certificates to APS/NIDDK Minority Travel Fellows.

## Education Special Sessions at EB 2009

### Refresher Course in Renal Physiology

(Sponsored by the APS Education Committee)  
Saturday, April 18  
8:00 AM–12:00 NOON  
Convention Center, Rm. 243

#### Organizers:

**Robert W. Brock,**  
**Robert L. Hester**

#### Speakers:

**L. Gabriel Navar**, Renal Hemodynamics;  
**Bruce M. Koeppe**n, The Kidney and Acid-Base Regulation;  
**Lisa Harrison-Bernard**, The Renin-Angiotensin System;  
**Michael W. Brands**, Active Learning Strategies to Teach Renal-Cardiovascular Integration.

### Trainee Symposium—Mentoring Strategies: Beyond the Bench

(Sponsored by the APS Trainee Advisory Committee)  
Monday, April 20  
8:00–10:00 AM  
Convention Center, Rm. 242

#### Organizers:

**Karen Sweazea,**  
**My Helms**

#### Speakers:

**L. Gabriel Navar**, Mentoring Trainees;  
**Virginia M. Miller**, Supervising Employees in the Academic, Government, or Industrial Setting;  
**Cathy Quinones**, Capitalizing on Diverse Personalities;  
**Eldon J. Braun**, Creative Approaches to Conflict Resolution.

### Careers Symposium—Rising and Surviving: Elucidating Tenure and Promotion in Multiple Career Paths

(Sponsored by the APS Career Opportunities in Physiology Committee)  
Monday, April 20  
5:30–7:30 PM  
Convention Center, Rm. 239

#### Organizers:

**Caroline R. Sussman,**  
**Kamal Rahmouni**

#### Speakers:

**Richard Klabunde**, Overview of promotion in academia and industry: Surprising and not so surprising similarities and differences;  
**Marian R. Walters**, Tenure and Promotion in Universities;  
**Paul Rothman**, Tenure and Promotion at Medical Schools;  
**Magdalena Alonso-Galicia**, Promotion in Management and Research Tracks in Industry.

### Mentoring Symposium - Pathways to Leadership: Developing Critical Skills

(Jointly sponsored by the APS Women in Physiology and ASPET Women in Pharmacology Committees)  
Tuesday, April 21  
8:00–10:00 AM  
Convention Center, Room 346

Organizers: **Holly Brevig,**  
**Andrea del Tredici,**  
**Barbara Alexander**

#### Speakers:

**Kim Vanover**, Opportunity Knocks... (Should I Answer?);  
**Patricia Molina**, Surviving Hurricane Katrina and Embracing New Challenges;  
**Lois Lehman-McKeeman**, The Long and Winding Road of Career Development;  
**Alice Young**, Pleasures and Perils of Joint Appointments.

## Launching the Successful Academic Job Search From First-Year Graduate Student to Senior Postdoctorate

Colleen Cosgrove Hegg  
Michigan State University

Acquiring an academic faculty position will be a difficult endeavor in today's job market, but certainly not impossible. Often, newly hired faculty attribute success in a job search to luck and serendipity. However, luck comes easier to those that are hardworking and prepared. This column will describe the preparation required for submitting the job application. One good all encompassing resource you should consider obtaining is *The Academic Job Search Handbook* (1).

Succeeding in the job search requires: 1) knowledge of yourself, including your strengths, weaknesses, and priorities; 2) knowledge of the search committee, department, and institute that will employ you; as well as 3) knowledge of the process and mechanics of a job search.

### Knowledge of Self

Ideally, the job search should start the moment you enter graduate school with a self assessment. You should begin to think about the following:

What are your long-term career goals?

What motivates you? What do you need for personal and professional satisfaction?

In what environment do you work best?

What are your skills? Do you possess the skills required to be successful?

How competitive are you?

Do you like teaching?

For *early graduate students* it is important to start networking, gain teaching experience, and to think strate-



Colleen Cosgrove Hegg

gically about dissertation topics. For instance, if you know that your ideal job would be at a small liberal arts school, then you should consider using a model system that would be conducive to research by multiple undergraduate students. If an industrial position is what you desire, you should consider joining a lab that has a history of placing students in industry. Start developing relationships with people who could be good references.

Midway through your graduate career, begin to ask yourself questions such as:

What do you want in your career?

What's out there? What options do I have?

What jobs fit my skills? What skills are required for your desired job?

Strive to obtain experience that will set you apart from others. If teaching experience is expected, ask to participate in the planning of coursework or try innovative teaching methods of which you may have heard. Service and leadership are expected from faculty

members, and it would behoove you to volunteer to be on committees. Many departments and societies have student representatives on committees. Participation in these activities is a good opportunity to widen your network. Browse the ads to find a posting that excites you; then make sure that you have or will obtain the requisite skills.

Finally in your *postdoctorate*, you should begin focusing your questions:

Which organizations are a good fit?

What is the size and type of institution at which you would like to be?

What topics do you feel comfortable teaching?

What do I need to do to be competitive?

Are there lifestyle and personal issues that will influence your search?

Do you have dual-career considerations?

If a dual career search is in your future there is an additional set of questions you should be asking with your partner. Julia Vick Miller and Jennifer S. Furlong (1) suggest:

If you are in very similar fields, will you both apply for the same jobs?

How are you going to feel if you end up competing against each other?

How far apart are you willing to live? Can you afford to maintain two households?

What will you do if you receive jobs on opposite sides of the country?

In addition, Ellen Ostrow recommends knowing the answers to:

Should one of you give up [an] offer for the sake of staying together?

And if you want to stay together, which offer is better?

Whose career should take precedence?

Ideally, you'll have the answers to these questions long before you begin your job search.

These types of questions should be revisited throughout your career because the answers may change with time. The bottom line is that you should know what you want and what you need to do to get it.

### Additional Resources

Academic job search

<http://career.berkeley.edu/PhDs/PhDAcademic.stm>

Dual-career job search

<http://people.mills.edu/spertus/job-search/job.html>

<http://www.physics.wm.edu/~sher/survey.html>

<http://physics.wm.edu/dualcareer.html>

[http://sciencecareers.sciencemag.org/career\\_development/](http://sciencecareers.sciencemag.org/career_development/)

[previous\\_issues/articles/2240/solving\\_the\\_two\\_body\\_problem](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/2240/solving_the_two_body_problem)

<http://www.cis.upenn.edu/~sweirich/resources.htm>

Other career resources

MentorNet: [www.mentornet.net/](http://www.mentornet.net/)

[http://www.the-aps.org/education/grad/car\\_res.html](http://www.the-aps.org/education/grad/car_res.html)

Your institution's career center, other institutions career centers

Conference workshops



## Knowledge of the Search Committee, Department and Institute

The ability to hire a tenure-track faculty member can be a hard-won prize, especially in this financial climate. Once a department has the authority to hire a new faculty member the job advertisement is made. A job posting may describe a need or desire to build up a particular specialty area or possibly fill a gap in the department's range of expertise. Sometimes it can be a "fishing expedition" where applications from both junior and senior levels in an unspecified area are requested. In this case, the search committee is looking for the best possible candidate. Junior candidates should not be discouraged from applying because you will not be directly compared with people more senior to you. Oftentimes, although a department is advertising for a specific area of interest, a strong candidate in another specialty area will still be considered.

Next, a search committee will be formed with the main purpose of identifying potential candidates from the hundreds of applications.

## Knowledge of the Process and Mechanics of a Job Search

### *The actual application*

Many things can be requested in a job advertisement. Based on a survey of 30 life science-related faculty postings from *Science* magazine and the *Chronicles of Higher Education*, all advertisements requested a curriculum vitae (CV) and a letter of application/cover letter. A description of future research plans/interests was requested by 70% of the advertisements, and letters of reference were requested by 57%. This number is probably low, however, because some search committees will only request references from their short list of applicants. Other items requested less frequently were a teaching philosophy, reprints, transcripts, and descriptions of possible courses you could teach.

As the search committee is leafing through hundreds of applications, the first two items that will be read are the cover letter and CV. The cover letter should be one page and should be tailored for each position and department. It is a synopsis of why you are applying for the position, your research experi-

ences, your future research goals and plans, and how you fit into the department. It is important to provide specific examples of how your research interests would complement that of the department. For example, if you think there are faculty members with whom collaborations could occur, name them.

The CV is one of the first documents that will be read, so it is important that it gives a good first impression. You can format and order the CV to highlight your strengths. For instance, if the position is primarily for teaching undergraduates, you'd want to format the CV so that your teaching experience is first; likewise, if the position is in a research institution, you'll want your grant support up front on the first page.

The research statement should be a persuasive agenda of your research that clearly and succinctly describes why your research *must* be done. It should provide a description of the problems you seek to answer and the context and importance of these problems to the field. It should have your short-term goals and possible outcomes. If you are planning on submitting to a funding agency, list your timeline for expected submission and a brief outline of your proposal. If possible, the research plan should be tailored to each institution (for instance, indicating possible collaborations).

Finally, it is important to keep your references informed of where you are applying and whether they need to provide letters. One strategy to stay organized is to create a spreadsheet with details about the institution, department, research interests of the job posting, address to send the letters, due date of the application, and items to send.

There are many resources and workshops that can help you create these documents. It might be helpful to attend workshops prior to when you begin the application process, so that you have plenty of time to obtain feedback. As

many job advertisements are posted in the fall, you should begin gathering your application materials in the early summer at the latest. Again, it is important to have your network of mentors read your application materials to provide insight.

### *Typical Job Search Timeline*

In September, about one year from the anticipated start date, you should begin to look for postings and to send in applications. There are many sources for job postings depending on your field. Conferences, publications, and the good old-fashioned networking are also good resources for jobs. You should apply to all jobs that are in your specialty area or close to your specialty area, taking into consideration your preferences in geography, department, and type of institute. The only job you are guaranteed not to get is the one to which you do not apply.

Once you have applied, the work doesn't stop. You should prepare for the possible phone interviews and get your job talk together. Interviews usually occur between late October and May. There are many resources available for preparation for the interview and negotiation stages of the job search (see accompanying box).

## Final Thoughts

In addition to being a hard working scientist with good ideas and the ability to communicate those ideas, early planning and careful preparation are the keys to a successful job search. As Louis Pasteur said, "... Chance favors the prepared ..."

## References

1. *The Academic Job Search Handbook*. Julia Miller Vick and Jennifer S. Furlong. Univ. Pennsylvania Press. 4th edition.

2. <http://chronicle.com/jobs/news/2003/02/2003021701c.htm>.

To comment on this article, go to: <http://www.the-aps.org/careers/careers1/mentor/jobsearch.htm>.

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She received her BA in Chemistry from Kalamazoo College and a PhD in Environmental Toxicology from the University of Wisconsin-Madison in

1996. She received postdoctoral training at both the University of Minnesota and the University of Utah and was appointed research faculty in the Department of Physiology at the University of Utah in 2003. In 2006 she joined the faculty at Michigan State University as an assistant professor.

## Interactive Wiki Workshop at EB 2009

Grab your lap top and come to the hands-on Communications Symposium at the Experimental Biology conference, where you can try out the APS wiki now under construction.

The wiki will have a variety of functions, but one is to develop reliable physiological content that the general public can access on the internet. Our members will work together to develop this content,

with the Communications Department and Communications Committee providing the roadmap for how that will be done. At the workshop, attendees will have an opportunity to add content to the new wiki, seeing firsthand how it works.

The symposium, "Wiki Wiki Workshop: Your Fast Track to the New APS Website," will take place 1-3 p.m., Saturday April 18, 2009 in Room 239.

We will have a limited number of lap tops available for attendees to use, but if you have one, bring it along.

"Wiki" is a Hawaiian word for "quick," an apt name for wikis, which make collaborative work much more efficient. To see a good tutorial on how wikis can be used, watch "Wikis in Plain English," at: <http://www.youtube.com/watch?v=dnL00TdmLY>. ❖

## Science Policy

### Science and the 2009 Political Landscape

The November 2008 elections brought many new faces to Washington, DC, both in the Administration and in Congress. Understanding how these changes will affect the scientific enterprise is essential to maximizing our advocacy efforts.

Throughout the campaign, the scientific community supported President Obama. Obama's ambitious platform on science and innovation includes doubling the federal investment in basic research over the next ten years, including at NIH and NSF, and encouraging multidisciplinary research and education. Specific biomedical research goals include encouraging rapid translation of medical research into public health benefits and focusing on prevention and health promotion to improve the well-being of Americans (1).

President Obama's agenda will be carried out by Administration officials including the President's science adviser, the Secretary of Health and Human Services (HHS) and the Directors of federal research agencies. President Obama has already nominated several individuals to fill those posts, including former Senator Tom Daschle as Secretary of HHS and Harvard physicist John Holdren as science adviser to the President and head of the Office of Science and Technology Policy (OSTP). Dr. Holdren will also co-chair the President's Council of Advisers on Science and Technology (PCAST), along with Harold Varmus and Eric Lander, both familiar figures in the biological sciences community.

#### *The 111th Congress*

There were also significant changes in the makeup of Congress. In the Senate, the Democrats gained seven seats for a total of 58 (including two Independent Senators who caucus with the Democrats), and Republicans retained

41 seats. Republican incumbents Senators John Sununu (NH), Gordon Smith (OR), Ted Stevens (AK) and Elizabeth Dole (NC) were all defeated by Democrats in high profile races. Finally, with the election of Senators Barack Obama and Joe Biden, and the cabinet appointments of Senators Hillary Clinton (Secretary of State) and Ken Salazar (Secretary of the Interior), at least four new Senators will be headed to Washington. Despite the gains for the Democrats, they have so far failed to reach the 60 vote threshold needed for a filibuster-proof majority.

In the House of Representatives, it appears that Democrats picked up 21 seats for a total of 256. Republicans lost 21 seats and currently hold 175. Notably, moderate Republican Christopher Shays (R-CT 4th) was defeated in his bid for reelection to a twelfth term. Congressman Shays was the last Republican Representative from New England. As was the case in 2006, many moderate Republicans have lost their seats to Democratic challengers, a trend that threatens to further polarize the two parties.

That the Democrats will be in a position to advance their agenda in the next Congress is a given. Because of the increased number of Democrats in both the House and the Senate, the number of seats allocated to each party on the committees will also change to reflect the new balance. We will know much more when committee appointments are made in the late winter or early spring.

1. <http://www.barackobama.com/pdf/issues/FactSheetScience.pdf>.

### Peer Review Changes Taking Shape at NIH

As an agency-wide assessment of its peer review system draws to a close,

NIH has issued a series of notices outlining its plans for implementing the suggested changes.

In early December, NIH announced an updated timeline for implementation (NOT-OD-09-023) calling for the early stage investigator (ESI) and new investigator policy (NOT-OD-09-013) to go into effect for grants reviewed in January 2009. The new ESI designation will provide special consideration for grant applicants who are within ten years of receiving their terminal research degree and have never received a major research award from NIH. The goal of this policy is to for ESI applications to achieve a success rate equivalent that of established investigators seeking new grants.

The revised policy on resubmissions (NOT-OD-09-003) will also take effect in January, 2009. Starting with the January 25, 2009 due date, incoming grant applications will be permitted only one amended resubmission (A1).

The May 2009 review meetings will see implementation of the 9 point scoring system, new enhanced review criteria (NOT-OD-09-025), formatted reviewer critiques, scoring of individual review criteria (NOT-OD-09-024) and clustered consideration of new investigator applications during review. The NIH has made available a side-by-side chart that compares the former and enhanced review criteria. [http://grants.nih.gov/grants/peer/side\\_by\\_side\\_comparison.doc](http://grants.nih.gov/grants/peer/side_by_side_comparison.doc).

Perhaps the biggest change will be implemented in January 2010 with shorter grant applications. The new 12-page application will be restructured to align with the review criteria instituted in May 2009.

More information on all of these changes is available on the NIH website for peer review: <http://enhancing-peer-review.nih.gov/>. ❖

Saturday, April 18, 2009

La Nouvelle C	5:45 PM: Physiology in Perspective? The Walter B. Cannon Award Lecture Opening Reception
Room 252-254	1:00-3:00 PM Workshop: Chronic Instrumentation in Conscious Small Animals <b>Haywood, Mulroney</b>
Room 255-257	9:00-11:30 AM Microcirculatory Society President's Symposium: Live Cell Imaging of the Microcirculation: New Frontiers for Intravital Microscopy <b>Segal</b> 2:00-4:30 PM MCS Workshop: Live Cell Imaging of Microcirculation: Experimental Approaches <b>Segal</b>
Room 243	8:00-10:00 AM Refresher Course in Renal Physiology <b>Brock, Hester</b>
Room 244	3:15-5:15 PM Workshop: Multi-Photon Imaging of Renal Regulatory Mechanisms in vivo <b>Levi</b>
Room 240/241	3:15-5:15 PM Public Affairs Symp: Scientists and Regulatory Burden: Navigating the Rugged Landscape <b>Haywood, Portman</b>
Room 238	4:15-5:15 PM WEH Special Session: APS Water and Electrolyte Homeostasis Section Trainee Finalist Awards Symposium <b>TBA</b>
Room 239	1:00-3:00 PM Communications Symp: The Wiki Wiki Workshop: Your Fast Track to the New APS Web Site <b>Belloni</b>

## Bowditch Award Lecture

The Bowditch Lectureship is awarded to a regular member, under 42 years of age, for original and outstanding accomplishments in the field of physiology. Selected by the APS President, the recipient presents a lecture at the Experimental Biology meeting, which is considered for publication in the Society journal of their choosing. The recipient receives an honorarium of \$2,500, reimbursement of expenses incurred while participating in the Experimental Biology meeting, and a plaque. The membership is invited to submit nominations for the Bowditch Lecturer. A nomination shall be accompanied by a candidate's curriculum vitae and one letter detailing the individual's status, contributions, and potential.

More information on the award and nomination procedures are available at <http://www.the-aps.org>. Nominations should be submitted online at <http://www.the-aps.org/awardapps>.

## Physiology in Perspective Walter B. Cannon Memorial Lecture

The Cannon Memorial Lecture, sponsored by the Grass Foundation, honors Walter B. Cannon, President of the Society from 1913-1916, and is presented annually at the spring meeting to an outstanding physiological scientist, domestic or foreign, as selected by the President-Elect with the consent of Council. The recipient presents a lecture on "Physiology in Perspective," addressing Cannon's concepts of "The Wisdom of the Body." The lecture is considered for publication in the Society journal of their choosing. The recipient receives an honorarium of \$4,000, a plaque, and reimbursement of expenses incurred in association with delivery of the lecture. The membership is invited to submit nominations for this lecture. A nomination shall be accompanied by a candidate's curriculum vitae and one letter detailing the individual's status and contributions.

More information on the award and nomination procedures are available at <http://www.the-aps.org>. Nominations should be submitted online at <http://www.the-aps.org/awardapps>.

## Sunday, April 19, 2009

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
La Nouvelle AB			5:45-6:45 PM Henry Pickering Bowditch Award <b>Schreihofner</b>
Room 252-254	Symp: Direct Assessment of Organ Specific Sympathetic Nervous System Activity in Normal and Cardiovascular Disease States <b>Knuepfer, Osborn, Jr.</b>	EEP Section Adolph Lecture <b>Pedersen</b>	Microcirculatory Society Landis Award Lecture <b>Popel</b>
Room 255-257	CAMPS Symp: Pathogens Hijacking the Host <b>Stanton, O'Toole</b>	CV Symp: Obesity, Diabetes and Cardiovascular Disease <b>Unger, Calvert</b>	3:15-6:00 PM: Integrative and Systems Physiology: An Approach to Understanding Organ System and Disease: A Systems Approach to Disease Mechanisms <b>Zucker</b>
Room 243	Symp: Lung Injury and Treatment with Stem Cells <b>Malik, Wary</b>	Cross Sectional: Breaking the Diffraction Barrier in Imaging of Molecules in Living Cells <b>Levi</b>	History FT: Select History of Exercise Thermoregulation <b>Ryan, Crandall</b>
Room 244	FT: Hypertension <b>Reckelhoff, Maric</b>	Symp: Insights into Oxygen Signaling from Non-mammalian Animals <b>Rees, Terwilliger</b>	3:15-4:15 PM: WEH Section Starling Lecture <b>McDonough</b>
			WEH Young Investigator Award Lecture TBA
Room 245	Symp: Microelectromechanical Systems in Cell Biology <b>Lee, Desai</b>	FT: Emerging Signaling Mechanisms in CNS Transmission and Plasticity <b>Stern, Tasker</b>	Symp: The Co-morbidity of Stress and Disease: Effects of Chronic Stress on Metabolism, Cardiovascular Disease and Behavior <b>Mulroney, Tache</b>
Room 235/236	Resp Symp: Ventilatory Control Disorders <b>Mitchell, Baker-Herman</b>	PG Symp: Approaches to Bridge the Gap between -Omics and Physiology <b>de Graaf, Jamshidi</b>	NCAR FT: The Ganglionic Synapse: Passive Relay or Locus of Autonomic Control? <b>McAllen, Chapleau</b>
Room 242	FT: Cellular Mechanisms that Initiate and Coordinate Changes in Vascular Tone <b>Braun, Davis</b>	Symp: Erythrocytes and Endocrine Signaling in the Microcirculation <b>Sprague, Ellsworth</b>	FT: Stem Cells for Injury and Repair in the Lung <b>Matthay</b>
Room 240/241	FT: Pre-conditioning and Acquired Tolerance for Protection from Exertional, Environmental, and Traumatic Injury <b>Leon</b>	Symp: New Functions of the Dorsomedial Hypothalamus: Thermoregulation and Beyond <b>Romanovsky, Morrison</b>	2:00-3:00 PM: Teaching Section Bernard Lecture <b>DiCarlo</b>
			Teach FT: Teaching with Technology <b>Silverthorn</b>
Room 238	FT: Ion Channels in Vascular Control: Health and Disease <b>Dick, Gutterman</b>	FT: Renal Ion Transport <b>Mironova, Denton</b>	FT: Molecular Mechanisms and Genetics of Hypertension <b>Touyz, Liang</b>
Room 239	FT: Muscle Fatigue <b>Renaud</b>	Publications: Publishing 101: Dos and Don'ts of Publishing in APS Journals <b>Barrett, Scheman</b>	FT: Lipid Phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2) Signaling in Nerve and Muscle <b>Nosek</b>

## Monday, April 20, 2009

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
La Nouvelle AB		10:30-11:30 AM: CV Section Berne Lecture <b>Granger</b>	
Room 252-254	8:00-9:00 NCAR Section Ludwig Lecture <b>Esler</b>  9:00-10:00 AM: Minisymposium: Neural Mechanisms of Hypertension: Reversal of Pathophysiology and Blood Pressure Lowering with Therapeutic Devices <b>Esler</b>	Symp: Fibrosis: Signaling, Physiology, and Therapies <b>Pitts, Plato</b>	2:00-3:00 PM: CNS Section Erlanger Lecture <b>Friedman</b>  3:15-5:15 PM: CAMPS Section Davson Lecture <b>Stowe</b>
Room 255-257	Symp: Assessment of Dynamic Renal Autoregulation: Principles and Applications <b>Ryan, Braam</b>	Symp: Leptin: From Bench to Clinical Applications <b>Mantzoros</b>	2:00-3:00 PM: Respiration Section Lecture <b>Matthay</b>  Physiology InFocus: Integrative and Systems Physiology: An Approach to Understanding Organ System and Disease Cardiac Ion Transport and Arrhythmias <b>Jalife</b>  5:45-7:15 PM: Improving NIH peer review. Maintaining the National Strategic Value of Peer Review <b>Miller</b>
Room 243	Symp: Angiotensin II Type 2 Receptor: Role in Renal/Cardiovascular Function and Blood Pressure <b>Hussain, Siragy</b>	FT: Genetics of the Adaptation to Exercise <b>Bouchard, Olfert</b>	Symp: The World within--Impact of the Intestinal Microbiota on Whole Body Physiology and Pathophysiology <b>Barrett</b>
Room 244	Symp: Rapid Effect of Steroid Hormones <b>Lightman, Hager</b>	FT: Structure/Function of SLC4A Bicarbonate Transporters <b>Choi, Casey</b>	Symp: Cardiorespiratory Afferent Processing in the Nucleus of the Solitary Tract: Not Just a Relay <b>McCrimmon, Sunderram</b>  5:45-7:45 PM: Trainee Highlights in Respiration Physiology <b>Solomon, Kuebler</b>
Room 245	Symp: Microcirculatory Society Young Investigators Symposium <b>Ritter, Looft-Wilson</b>	FT: Control of Breathing in Chronic Diseases <b>DeRuisseau, Golder</b>	Symp: Modulation of Endothelial Function by NADPH Oxidase <b>Ushio-Fukai, Frey</b>
Room 235/236	FT: Translational Research: Innovative Approaches to Physiological Investigations <b>Wold</b>	FT: Role of Sex Steroids in Cardiovascular Physiology and Pathophysiology <b>Ryan</b>	Symp: Novel Approaches to Elucidate Claudin Function and Paracellular Permeability <b>Yu, Wang</b>
Room 242	A. Clifford Barger Memorial Symp: Mentoring Strategies: Beyond the Bench <b>Sweazea, Helms</b>	FT: Novel Mechanisms in Alcoholic and Nonalcoholic Fatty Liver Diseases <b>Schrum, McKillop</b>	Symp: Fragile X-Associated Tremor/Ataxia Syndrome: Genotype, Animal Models, Phenotype and Intervention <b>Hagerman</b>
Room 240/241	FT: Oxygen Signaling during Development <b>Pelster</b>	FT: Regulation of Epithelial Transporters and Signaling Processes <b>Klein, Weiner</b>	FT: Metabolic Signaling <b>Samson</b>
Room 238	Symp: Writing the Test Question Isn't Enough! <b>McCleary, Sukalski</b>	FT: Renal Section YIA: Novel Mechanisms of Vasopressin Regulation of Renal Function <b>Brooks, Rieg</b>	FT: Novel cAMP Signaling: Role of Epac <b>Murray</b>
Room 239	CAMPS FT: Lymphatic Endothelial Cells: Passive or Active Participants in Lymphatic Function? <b>Breslin, Murfee</b>	FT: Thermoregulation in Extreme Environments <b>Noren</b>	Symp: Engineering a Functional Vasculature <b>Li, Niklason</b>  5:45-7:45 PM: Symp: Rising and Surviving: Elucidating Tenure and Promotion in Multiple Career Paths <b>Sussman, Rahmouni</b>  5:00-6:30 PM: <i>La Louisiane Ballroom</i> The Evolution of Creationism <b>Petsko</b>

## Tuesday, April 21, 2009

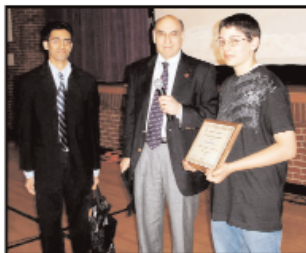
	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
La Nouvelle AB			5:45-7:45 PM APS Business Meeting
Room 252-254	CEP Section Krogh Lecture <b>Milsom</b>	10:30-11:30 AM: Renal Section Gottschalk Lecture <b>Bindels</b>	Cross Sectional: Adrenal Corticosteroid Effects in the Central Nervous System on the Long-Term Control of Blood Pressure <b>Scheuer</b>
Room 255-257	Symp: Hypoxia and Stem Cells <b>Chandel, Simon</b>	Symp: High Throughput Discovery of Novel Ion Channel Probes: Small Molecules, Big Impact <b>Denton, Colvis</b>	Physiology InFocus: Integrative and Systems Physiology: An Approach to Understanding Organ System and Disease An Integrative and Systems Analysis of Membrane Transport <b>Jakobsson</b>
Room 243	FT: Pulmonary Ion Channels <b>Koval, Kuebler</b>	Symp: Cardiovascular and Metabolic Actions of Leptin: Consequences in Obesity <b>Rahmouni, Cassis</b>	2:00-3:00 PM: GI&L Section Davenport Lecture <b>Henning</b>  FT: Wiggers Award Featured Topic <b>Harder</b>
Room 244	Symp: The Contributions of ROMK and BK Channels to Renal K Secretion <b>Pluznick, Welling</b>	Symp: Molecular Imaging of Physiological Processes in Drug Discovery <b>Plato, Finley</b>	Symp: Cellular Recruitment in Lung Vascular Remodeling and Pulmonary Hypertension <b>Kuebler, Stenmark</b>
Room 245	FT: NCAR Trainee Topic Category <b>Kleiber, Gu</b>	Symp: Exercise-Induced Signaling to Phenotypic Adaptations in Skeletal Muscle <b>Gordon</b>	2:00-3:00 PM: Walter C. Randall Lecture on Biomedical Ethics <b>Schwartz</b>  Symp: Environmental Factors in Heart Disease <b>Bhatnagar, Brook</b>
Room 235/236	FT:Aging, Reactive Oxygen Species, and Regulation of Arteriogenesis <b>Miller</b>	Symp: Cytoprotective Mechanisms and the Regulation of Mitochondrial Permeability Transition <b>Cammarata, Baines</b>	Symp: Ca <sup>2+</sup> -Independent Regulation of Smooth Muscle Contractility <b>Paul</b>
Room 242	FT: Insulin from Regulated Expression to Regulated Secretion <b>Corbett</b>	Symp: ENaC/ASIC Proteins as Cardiovascular Sensors <b>Drummond</b>	3:15-4:15 PM: E&M Section Berson Lecture <b>Davis</b>  4:15-5:15 PM: E&M Trainee Awards Session <b>TBA</b>
Room 240/241	FT: Organization, Current Progress, and Challenges in International Physiome Projects <b>Beard</b>	FT: ATP, Astrocytes and Central Respiratory Control <b>Funk</b>	Symp: From Genome to Epigenome: Implications of the Epigenomic Mechanisms to Physiology and Disease <b>Michalkiewicz, Lillycrop</b>
Room 238	FT: Imaging in Renal Physiology and Pathophysiology <b>Chade, Ilescu</b>	FT: Metabolic Defects in Diabetes, Obesity, and Heart Failure <b>Jones</b>	Wkshp: Translating Your Ideas: Drug Development, Intellectual Property and the State of Academic-Univ. Relations <b>Zucker</b>
Room 239	FT: Intestinal Luminal Antigens and Mucosal Defense Mechanisms <b>McCole, Berin</b>	FT: Breach of Epithelial Homeostasis in Gastrointestinal Cancer and Metastasis <b>Rao</b>	FT: Renal Hemodynamics <b>Brindeiro, Harrison-Bernard</b>
	Room 346 Pathways to Leadership: Developing Critical Skills <b>Brevig, del Tredici, Alexander</b>	Room 350-351: Life Science Education in the 21st Century: Making the Science We Teach Reflect the Science We Practice <b>Silverthorn</b>	

## Wednesday, April 22, 2009

	8:00-10:00 AM	10:30 AM-12:30 PM
Room 255-257	Late-breaking FT: Oxidative Stress in Tissue Damage <b>Welch, Davisson</b>	Symp: Systems Biology Investigations of Glucocorticoid Efficacy in Tissue Remodeling <b>Freishtat, Hoffman</b>
Room 243	Symp: Adhesion Complex Related to Proteins in Myocardial Rhythm and Function <b>Ross</b>	Physiology InFocus: Integrative and Systems Physiology: An Approach to Understanding Organ System and Disease Omics; The Changing Face of Integrative Physiology <b>Kolker</b>
Room 244	Symp: Proteomics Techniques in Physiology and Cell Biology <b>Levi, Knepper</b>	Symp: Novel Insights into Nitric Oxide Signaling <b>Stamler, Calvert</b>
Room 245	Symp: Development of AMPA Receptor-Containing Synapses in the CNS <b>Ali, Wang</b>	Symp: Role of Electromechanical Intercellular Coupling in Cardiac Tissue: Development, Disease and Tissue Engineering Applications <b>Sarvazyan, Vunjak-Novakovic</b>
Room 235/236	Symp: Understand the Cross- talk Between Skeletal Muscle and Adipocyte in Obesity: From in vitro to in vivo Analysis <b>Keslacy, Nosek</b>	Symp: Natriuretic Peptides in the Gastrointestinal System <b>Gower, Jr, Dietz</b>
Room 242	Late-breaking FT: Graduate Student Highlights in Physiological Genomics <b>Liu</b>	Symp: The Emerging Role of MicroRNAs in Skeletal Muscle Biology <b>Andrade, McCarthy</b>
Room 240/241	FT: Time Domains of the Hypoxic Ventilatory Response <b>Powell, Milson</b>	FT: Environmental Stress Responses: Cellular, Molecular, and Genetic Mechanisms <b>Choe</b>
Room 238	Symp: Shear Stress, Mechanosignal Transduction and Vascular Inflammatory Responses <b>Simon, Passerini</b>	FT: The Impact of Intermittent Hypoxia on Metabolism, Vascular Dysfunction, and Atherosclerosis <b>O'Donnell, Polotsky</b>
Room 239	FT: Neuroplasticity of auton- omic behavior in health and disease <b>Machado, Prabhakar</b>	FT: Regulation of Epithelial Ion and Water Channels and Regulatory Proteins <b>Breton, Stanton</b>

### Give an award at your local school science fair!

The APS sponsors awards at local and regional science fairs on a first come, first served basis. Any APS member who participates as a judge in a local or regional science fair at an elementary, middle, or high school is eligible to apply and receive APS support. Award package includes an APS pin, t-shirt, and Certificate of Achievement for the student with the best physiology project, and a *Women Life Scientists* book for the student's teacher.



To request an award package, visit the website below. If you have questions, contact Scarlettta Whitsett ([swhitsett@the-aps.org](mailto:swhitsett@the-aps.org)) in the APS Education Department.

[www.the-aps.org/education/sciencefair](http://www.the-aps.org/education/sciencefair)

### National Science Foundation

Permanent Program Director in the Division of Integrative Organismal Systems. The Division of Integrative Organismal Systems invites applications for a permanent program directors in two clusters: Neural Systems and Physiological & Structural Systems. NSF Program Directors bear the primary responsibility for carrying out the agency's overall mission to support innovative and merit-reviewed activities in basic research and education. Closing date is February 4, 2009; <http://jobsearch.usajobs.opm.gov/getjob.asp?JobId=78369043&AVSDM=2009-01-05+00%3A03%3A00&org=BIO>

## Postdoctoral Positions

**Postdoctoral:** A postdoctoral position is available in the laboratory of DF Moffett at Washington State University. The successful applicant will apply molecular biology and/or electrophysiological methods to identify transport proteins involved in extreme alkalinization by the gut of larval mosquitoes. The position is tenable for up to two years based on current NIH funding. Washington State University is located in Pullman, WA, a small town with good quality of life and ready access to outdoor recreation. Submit a letter of application with vita and names of two references to horst.onken@wagner.edu or to dmoffett@wsu.edu, or contact Dr. Moffett by email or telephone (509-335-8122) for more information.

**Postdoctoral Fellowships:** Two postdoctoral positions in cardiovascular and/or cardiopulmonary physiology are available at the University of Wisconsin-Madison. Studies are directed at the regulation of pulmonary or skeletal muscle blood flow, especially during exercise and/or hypoxia. Current projects in two collaborating laboratories include: intrapulmonary shunting during hypoxic exercise, pulmonary vascular development across the lifespan, neural and vascular mechanisms controlling exercising skeletal muscle blood flow in health and disease, and diving physiology. Experiments will involve both non-invasive and invasive human studies, as well as acute and chronically instrumented animals. Techniques span from nuclear medicine imaging in humans and animals, MRI, Doppler ultrasound, whole body and single limb exercise, intra-arterial drug infusions, muscle biopsies, and immunoblots on muscle and lung tissue. Applicants should hold a doctoral degree (MD, DVM, or PhD in physiology or closely related field-e.g., kinesiology) and be a US citizen or permanent resident eligible for NIH training grant support. Some experience with human subjects is desirable, but not necessary. The successful applicants will have exceptional resources to facilitate their research including access to the Respiratory Neurobiology Training Program (Physi-

ology, Kinesiology, Comparative Biomedical Science, Neuroscience) <http://www.vetmed.wisc.edu/cbs/mitchell/rntp/index.htm>, the UW Cardiovascular Research Center <http://www.cardiovascres.wisc.edu/index.html>, hyperbaric and hypobaric chambers, and other opportunities in a rich collaborative environment. In addition to the NIH Training Grant, we are funded by NIH, AFAR, and Navy Research grants. Fellows will be involved in experimental design; collection, analysis and interpretation of data; preparation of oral and written scientific reports, composition of scientific manuscripts for submission to journals and writing personal and lab grant applications. Review of applications will begin immediately and continue until the positions are filled. Two to three year commitment required. Salary and benefits will be commensurate with experience and in accordance with NIH guidelines. Send letter of application indicating research interests, career goals, and your US resident status, along with a curriculum vitae and the names and contact information of two references to: Marlowe W. Eldridge, MD, [meldridge@pediatrics.wisc.edu](mailto:meldridge@pediatrics.wisc.edu) or William G. Schrage, PhD, [wschrage@education.wisc.edu](mailto:wschrage@education.wisc.edu). Minorities and women are encouraged to apply. [AA/EOE].

**Postdoctoral Positions:** Two are available in the Division of Nephrology at University of Utah to conduct projects funded by multiple federal grants. The central goal of the research program is to understand the role of lipid-derived mediators, including prostaglandins and nuclear receptors, in the long-term control of fluid metabolism and blood pressure, particularly in the setting of metabolic syndrome. The current emphasis is placed on the function of prostaglandin E synthase and PPARgamma in the kidney and vasculature. Experimental approaches involve gene knockout, cell biology, whole organ physiology, etc. Highly motivated individuals with strong background in molecular biology and renal physiology are seriously considered. Please email CV, names of three references, and a brief summary of research interest, to: Dr. Tianxin Yang, MD, PhD, Associate Professor of Medicine and Physiology and Margaret A. Amundsen Professor of Medicine,

Division of Nephrology, University of Utah, Salt Lake City, Email: Tianxin.Yang@hsc.utah.edu

## Research Positions

**Science & Engineering Technical Assistant: Staff Scientist:** Job Code:# 081202, Location: Arlington, VA. *Summary:* Strategic Analysis is seeking a well-rounded individual to satisfy a requirement for a Science & Engineering Technical Assistant (SETA) to support our government clients. Applicants will support Department of Defense sponsored basic research efforts and should possess excellent technical capabilities, work well in a cross disciplinary research environment, and be a team player. In addition, candidates must meet the following requirements: *Requirements:* 1) Master's with two to three years experience plus (preferably PhD with 0-2 years' experience plus) degree in physiology; 2) research experience in one or more the following areas: medicine, physiology, HAPE, HACE, AMS, high altitude illness, hyperbaric medicine, exercise medicine, clinical trials, and/or toxicology; 3) strong organizational and communication skills (strong MS Office knowledge); 4) motivated, a self-starter; able to work productively with minimal guidance; 5) US citizenship is required; ability to obtain and maintain a DoD SECRET clearance. *Responsibilities:* As a SETA you will provide technical support to a government program manager in the form of technical expertise and technical management capabilities. Responsibilities include: research support, preparation of briefing materials, identification of technology gaps, technical risk management, technology transfer efforts, as well as programmatic assistance, such as attending program reviews/site visits/field tests, organizing files and documents into a historical timeline, and coordinating workshops for staff as needed. This position includes overall technical monitoring of research programs to: 1) ensure Statement of Work tasks are completed as negotiated; 2) milestones are met; and 3) fiscal commitments/obligations/expenditures are appropriate.



## Faculty Positions

### Assistant and Associate Professor:

The Department of Cell Biology & Anatomy is in a position to develop a research focus on the cardiovascular system. Thus, the Department invites applications for tenure track positions at the level of Assistant and Associate Professor. Successful applicants will be expected to develop and maintain an independent, nationally funded research program. The research environment is excellent and teaching commitments will be kept at a minimum. Research areas are open, but preference will be given to individuals with an interest and record of achievement in inflammatory pathologies, microcirculatory function, and/or endothelial/smooth muscle cell biology. The faculty member selected will be provided with a competitive salary (with a Faculty Salary Supplement Plan), generous start-up package, and appropriate space. Applicants should have a Doctoral degree and relevant postdoctoral experience. Applications will be reviewed as they are received until the positions are filled. Send Curriculum vitae and names of three references to: Peter R. Kvietys, PhD, Professor and Head, Department of Cell Biology & Anatomy, LSU Health Sciences Center, 1501 Kings Highway, Shreveport, Louisiana 71130-3932, Fax: 318 675 5889, Email: pkviet@lsuhsc.edu. [AA/EOE]

### Animal Physiology, Tenure-Track Assistant Professor:

The Department of Biology, University of Wisconsin-Stevens Point, offers a tenure-track, nine-month faculty position in Animal Physiology at the Assistant Professor level, beginning August 2009. Teaching obligations include animal physiology to biology and natural resource majors, a senior seminar, and an upper level course in a specialty. Research involving undergraduates, department service and student advising are part of this position. A PhD in animal/comparative physiology or equivalent, and teaching and research experience are required. Broad training in zoology is required. Experience is exemplified by publications, grants, evidence of teaching excellence, and/or postdoctoral work. The

department encourages applicants from underrepresented groups, and those with experience teaching underrepresented students. Application materials must include a letter of application, curriculum vita, statements of teaching philosophy and research interests, three letters of recommendation, and undergraduate and graduate transcripts. Send application materials to: Dr. C. Yahnke, Chair; Biology Dept., University of Wisconsin-Stevens Point; Stevens Point, WI 54481. Review begins 16 February 09 and continues until filled. For more information, Tel: 715-346-2455; Fax: 715-346-3624; cyahnke@uwsp.edu. [AA/EOE]

### Associate/Full Professor:

The Department of Physiology in the School of Medicine at LSU Health Sciences Center in New Orleans, LA invites established investigators with PhD, MD or equivalent degrees, and active research programs to apply for faculty positions. Highly qualified investigators will be considered for tenure-track positions at the rank of Associate or Full Professor commensurate with experience. Successful candidates will have a strong record of research accomplishments, lead a productive, nationally funded research program, and have the vision and commitment to build a collaborative research program involving multiple investigators. Expertise in all areas of physiology will be considered, but special consideration will be given to those that compliment the existing research strengths of the department which include pathophysiology of the host defense response to inflammation, trauma & infection, renal physiology, cardiovascular physiology, traumatic injury, and obesity & diabetes. Candidates with international distinction in cardiovascular research will be considered for the Pfizer-Ardoin Superchair in Cardiovascular Research. LSUHSC-NO School of Medicine has a collaborative research environment to include core laboratory support for research involving genomics, proteomics, imaging, and flow cytometry. Opportunities are available for interaction with the Centers of Excellence in Alcohol and Drug Abuse, Cancer, Cardiovascular Biology, Neuroscience and Oral Biology as well as the Program in Gene Therapy. Faculty are expected to

sustain an externally funded research program in a collaborative environment, to mentor graduate students/postdoctoral fellows, and to participate in the department's graduate and undergraduate teaching programs. An excellent start-up package and competitive salary are available for each position. Applicants should send their curriculum vitae that includes previous and current research funding, teaching experience, a statement of research plans, and the names of at least three references to: physiologyrecruit@lsuhsc.edu or ATTN: Physiology Faculty Recruitment, LSU Health Sciences Center, 1901 Perdido Street, Box P7-3, New Orleans, Louisiana 70112-1393. [AA/EOE]

**Faculty Position:** The Faculty of the Department of Physical Therapy at the University of Toledo is pleased to announce the opening of a tenure-track faculty position, which will begin June 2009. This 12-month full-time tenure track position will include responsibilities for research, teaching, mentoring DPT/PhD students, and service to the University. Applicants are required to hold a PhD or an equivalent degree with research and teaching experiences. Applicants who also hold a PT degree (not required but preferred) must be eligible for PT licensure in the state of Ohio. Rank and salary are commensurate with qualifications and experience. Preference will be given to individuals who demonstrate a record of an on-going established research program with extramural funding and a sustained track record of publications in peer-reviewed journals. Responsibilities include teaching courses in the research-track in the DPT curriculum and in the individual's area of expertise. Additional responsibilities include mentoring DPT or DPT/PhD students for scholarly projects or dissertations. To apply for this position, submit a cover letter of application and curriculum vitae with three professional references to Abraham D. Lee, PhD, PT, Department of Physical Therapy, Mail Stop #1027, University of Toledo, Health Science Campus, 3000 Arlington Avenue, Toledo, OH 43614-2598. For questions, contact Dr. Lee at 419-383-3437 or via Abraham.lee2@utoledo.edu.

Review of applications begins December 1, 2008, and continues until a suitable candidate is hired. [AA/EOE].

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### **Assistant Professor of Biology:**

Alfred University's College of Liberal Arts & Sciences invites applications for a tenure-track assistant professor in Biology, with a specialty in Animal Physiology, beginning August 2009. Responsibilities include courses in human and comparative anatomy, physiology, and nutrition; an active research program; and supervision of student research. Preferred areas of interest: animal behavior, ecophysiology, and reproduction and development especially in non-human systems. PhD and postdoctoral experience preferred; ABD considered (for Instructor rank). We seek someone who demonstrates a strong commitment to undergraduate teaching and has research interests that can be expanded to include undergraduates. This position provides opportunities to shape an initiative in science and the arts and for interdisciplinary collaboration with other scientists and scholars, including colleagues in engineering and art & design. Alfred University, located 75 miles south of Rochester, NY, is a selective, comprehensive university. An AA/EOE employer, Alfred values diversity, high-quality teaching, creativity, global awareness and inquiry-based learning. Review of applications will begin January 5, 2009. Send application letter, vita, statements on teaching philosophy and research plans, and three reference letters. Official transcripts will be required for employment. Contact: Search Committee, Division of Biology and Chemistry, Alfred University, 1 Saxon Drive, Alfred, NY 14802 or email [emmonsc@alfred.edu](mailto:emmonsc@alfred.edu). More information at <http://www.alfred.edu/hr/>.

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### **Multiple Faculty positions in Cardiovascular Disease (Assistant/Associate Professor):**

Towards the goal of substantially expanding and enriching ongoing research programs, the University of Minnesota Medical School-Duluth (<http://www.med.umn.edu/duluth/>) invites applications for three school-wide, full-time tenured or tenure-track faculty positions with a

research emphasis in cardiovascular diseases. This is a School-wide search and spans all biomedical science disciplines. Applicants are required to have earned a PhD or equivalent degree and to demonstrate research productivity in the area of cardiovascular disease with special emphasis on diseases endemic to rural and/or Native American populations. Examples include but are not limited to heart disease, hypertension, and atherosclerosis, cerebrovascular disease including stroke and dementia, as well as contributing risk factors for cardiovascular disease such as diabetes, obesity and addiction. Candidates for assistant professor must have postdoctoral experience leading to peer-reviewed publications and demonstrate high potential for establishing an independent and productive funded research program. Candidates for associate professor must have a well-established research program as reflected by a record of publication, a proven ability to obtain extramural research funding and the qualifications to satisfy the tenure criteria of the University of Minnesota Medical School-Duluth. All applicants are required to possess essential verbal and written communication skills. Applicants will be evaluated on the basis of demonstrated research productivity as evidenced by quality of publication record and grant support. Preferential consideration will be given to applicants with research expertise that is complementary to ongoing research programs in the Duluth medical community with strong potential for collaboration. The successful candidate will also contribute to the Medical School's educational programs and provide service to the School and the profession. Review of applications will begin November 1, 2008 and continue until all positions are filled. To ensure consideration, a cover letter, curriculum vitae, research plan (two page maximum) and the names and addresses of three references who have agreed to write letters of recommendation should be submitted online at: <https://employment.umn.edu/> (requisition #158309). The three letters of recommendation should be sent directly and under separate cover to: Lurinda Isaacson, 1035 University Drive, 113 SMed, Duluth, MN 55812-3031 or [lisaacso@d.umn.edu](mailto:lisaacso@d.umn.edu). The Medical School-Duluth is a national leader in

educating physicians dedicated to family medicine. Its mission is to serve the health care needs of rural Minnesota and American Indian communities and to provide nationally recognized basic and translational research programs in the biomedical sciences. The Medical School Duluth campus (<http://www.med.umn.edu/duluth/>) is a critical element of the University of Minnesota Medical School, which is one of six schools in the University of Minnesota's Academic Health Center (<http://www.ahc.umn.edu>). The Medical School-Duluth is located on the University of Minnesota Duluth campus overlooking the western end of Lake Superior. The high quality of life in Duluth is a reflection of the combination of a dynamic and growing University environment, a scenic and vital city, and numerous summer and winter outdoor recreational opportunities (<http://www.visitduluth.com>). [EOE]

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**Faculty Position:** The Department of Physiology and Developmental Biology at Brigham Young University announces the availability of a permanent (continuing faculty status track) faculty position. Review of applications will begin February 17, 2009 and continue until the position is filled. Applicants should have a doctorate degree and postdoctoral experience, with expertise and teaching capability in developmental biology, physiology, pharmacology, cell biology, anatomy, neuroscience, or histology. Candidates must demonstrate a high potential for establishment of an externally funded research program. Send a curriculum vitae and one-page statement of research and teaching interests/goals to Dr. Allan Judd, Chair Search Committee, Department of Physiology and Developmental Biology, Brigham Young University, Provo, UT 84602. (Tel. 801-422-3179, Fax: 801-422-0700, E-mail: [Allan\\_Judd@byu.edu](mailto:Allan_Judd@byu.edu)). Additional information is available at [http://pdbio.byu.edu/home/Department\\_Information/Faculty\\_Position\\_Announcement.aspx](http://pdbio.byu.edu/home/Department_Information/Faculty_Position_Announcement.aspx) BYU is an equal employment opportunity employer. Preference is given to qualified candidates who are members in good standing of the affiliated church, The Church of Jesus Christ of Latter-day Saints. ❖

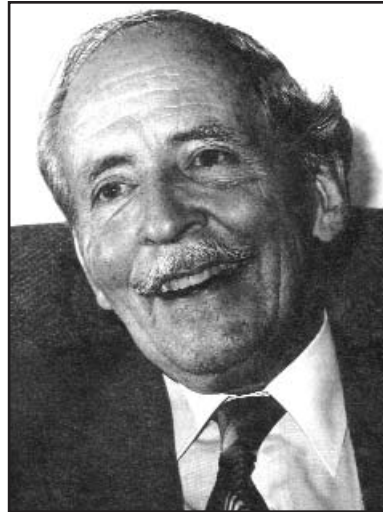
## David F. Bohr 1915-2008

David F. Bohr, professor of physiology at the University of Michigan, died Tuesday, November 4, 2008. He was 93 years old and lived in Ann Arbor, MI.

Bohr was born in Zurich, Switzerland, lived for five years as a boy in Cuba, and received most of his childhood education in southern California. In 1933, he entered the Univ. of Michigan, matriculated in 1936 in its medical school and graduated in 1942. Bohr interned at Henry Ford Hospital for one year before being assigned by the US Army to a Dutch hospital ship for three years of duty as a laboratory officer and detachment commander (1943-46). Bohr trained for two years as a research fellow at the Univ. of California in San Francisco (1946-48). Following this fellowship, he returned to the Univ. of Michigan, and in 1957 was promoted to the rank of professor.

Bohr's rich career touched on many aspects of cardiovascular research, ranging from ion transport in red blood cells from hypertensive animals to the central actions of mineralocorticoids to elevate arterial blood pressure. However, it was his work on the role played by the vasculature in the development of hypertension that was his fundamental contribution to the field. Two of his favorite publications were published in *Science*. In the first, he demonstrated that calcium not only causes contraction of vascular smooth muscle, but also in higher concentrations decreases excitability to cause relaxation or inhibition of contraction. In the second, he quantified the calcium requirement for contractile activity of vascular smooth muscle and skeletal muscle and showed that the calcium dependency for the contractile apparatus of the two machines was identical.

Over the years, Bohr was the recipient of many awards, including the 1984 Ciba Award for Hypertension Research and the Gold Heart Award from the American Heart Association. In 1977, he gave the Wiggers Lecture for the American Physiological Society. Bohr received the Ray Daggs Award from the American Physiological Society in 2005. In 2007, Bohr received the



David F. Bohr

Lifetime Achievement Award from the Univ. of Michigan.

Bohr was a dedicated educator who inspired and mentored numerous scientists and students, and many remember him as an important role model. He was as kind, fair and generous as he was brilliant. Bohr's legacy is one to be remembered.

Bohr served many scientific societies, including the Council for High Blood Pressure Research of the American Heart Association and the American Physiological Society. He served on the Hypertension Task Force for the National Institutes of Health from 1978-79. From 1965-68 he was a member of the Committee on Physiology of the National Board of Medical Examiners (1965-68) and he also served on the Cardiovascular Review Panel for the Space Science Board of the National Academy of Sciences (1968-72).

Bohr joined APS in 1949. His earliest committee responsibility was with the Membership Committee (1966-69; chairman, 1967-69). For a year (1969-70) he was chairman of the Subcommittee on Undergraduate Education in Physiology and then joined the Education Committee (1970-73). In 1970-73 he was a member of the Steering Committee of the Circulation Group of the Society. From 1974-1977 he served with the Perkins Memorial Fund Committee, after his election to

Council in 1973. He became president elect in 1977.

As president of the American Physiological Society (APS) (1978-79), Bohr visited Cuban medical schools and observed Cuban health care, and promoted exchange of information between Cuban and American physiologists. He instituted a Standing Committee on Career Opportunities in Physiology to try to help young people during their early careers. He also initiated a meeting between the APS Animal Care Committee and representatives of animal welfare groups.

Bohr served on the Editorial Boards of *Hypertension*, *Circulation Research*, *American Journal of Physiology* and the *Journal of Applied Physiology*. He was a co-editor of the circulation section of the *American Journal of Physiology*, and as Associate Editor of the *American Journal of Physiology: Heart and Circulatory Physiology*. He also served as editor of the *Handbook of Physiology, Vascular Smooth Muscle*.

Bohr, preceded in death by his wife Kathleen, is survived by a son, John Nicholas Bohr, two daughters, Ann (Barbara) Bohr Benner, and Louise Ann Bohr, and 2 grandchildren Thomas Bohr Benner, and Jack Allen Benner.

David Bohr took great pleasure in the game of tennis throughout his life. Family, friends and students enjoyed his ready sense of humor, his compassion, optimism and love of learning.

Contributions can be made to the David F. Bohr Quasi Endowment, Department of Molecular and Integrative Physiology, Univ. of Michigan, 1301 E. Catherine, Ann Arbor, MI 48109 (<http://www.physiology.med.umich.edu>). ❖

### References

1. Bohr, D F. Vascular smooth muscle: dual effect of calcium. *Science* 139: 597-599, 1963.
2. Filo, RS, DF Bohr, and JC Ruegg. Glycerinated skeletal and smooth muscle: calcium and magnesium dependence. *Science* 147: 1581-1583, 1965.

## Molina Appointed Department Chair

Patricia Molina, the Richard Ashman professor of physiology at Louisiana State University Health Sciences Center, has been appointed Chair of the Physiology Department and Director of the Center's Alcohol and Drug Abuse Center. It is believed that Molina is the first female Hispanic chair of a Department of Physiology in the United States. She was born in El Salvador.

## Hamilton Named Senior Vice President and Dean of Research

The Baylor College of Medicine (BCM) Board of Trustees has named Susan Hamilton as senior vice president and dean of research. Hamilton has been serving as the chair of molecular physiology and biophysics. As dean of research, Hamilton will work with the chairs and center directors to create a continuing strategic plan for research at BCM, establish standards of research, oversee the solicitation of research funding and implement research policies and priorities. She will have responsibility and authority for the budgets of the basic science departments and centers. Hamilton received her doctorate in biophysics from the University of Colorado Health Science Center in Denver and did her postdoctoral work in the Department of Neurology at the College of Physicians and Surgeons at Columbia University in New York City. Hamilton's research at BCM is focused on skeletal muscle excitation-contraction coupling and human diseases associated with alterations in this process. She helped to found the BCM Translation Biology and Molecular Medicine Graduate Program and the new Mouse Phenotyping Core.

## Chalupa Named First Vice President for Research

George Washington University has appointed Leo Chalupa its first Vice President for Research, effective in April. Chalupa is currently the chair of Neurobiology, Physiology and Behavior in the College of Biological Sciences at UC, Davis.

## Ambrus Couple Receive Laureate Award

APS members and husband and wife, Julian L. and Clara M. Ambrus both received the Laureate Award at the last annual meeting of the American College of Physicians in New York. In addition, Julian was also made President-Elect of the Catholic Academy of Sciences in Washington, DC, to start presidency in 2009.

Jason M. Blank is an Assistant Professor in the CSM Biological Sciences at the California Polytechnic State Univ., San Luis Obispo, CA. Previously, Blank was a Postdoctoral Scholar in the Department of Ecology & Evolutionary Biology at the Univ. of California, Irvine.

Hollis Tremaine Cline is currently a Professor at The Scripps Research Institute, Department of Cell Biology, La Jolla, CA. Previously, Tremaine was the Director of Research, Department of Neuroscience, at the Cold Spring Harbor Lab, Cold Spring Harbor, NY.

Kim Andrea Dora is a British Heart Foundation Senior Basic Research Fellow, Univ. of Oxford, UK. Prior to this position, Dora was a Senior Lecturer in the Department of Pharmacy, Univ. of Bath, UK.

Meredith Hay is the Executive Vice President and Provost at the Univ. of Arizona, Tucson, AZ. Prior to this position, Hay was Vice President for Research at the Univ. of Iowa, Iowa City.

Randall L. Hudson is now a Professor in the Department of Physiology and Biophysics at the Univ. at Buffalo, NY. Previously, Hudson was an Associate Professor at the Univ. of Illinois, Department of Physiology and Biophysics, Chicago.

Martin Jastroch is a Postdoctoral Fellow at the Buck Institute of Aging Research, Novato, CA. Prior to this position, Jastroch was in the Department of Animal Physiology, Philipps University, Marburg, Germany.

Susan A. Marsh is an Assistant Professor in the Nutrition & Exercise Metabolism department at the Washington State University, Spokane. Prior to this position, Marsh was a Postdoctoral Fellow in the Department of Medicine at the University of Alabama, Birmingham, AL.

Ryan M. McAdams is presently an Assistant Professor at the University of Washington in the Department of Pediatrics, Division of Neonatology, Seattle, WA. Prior to this position McAdams was a Neonatologist at the US Naval Hospital, Okinawa, Japan.

Patrick J. Pagano is currently an Associate Professor at the University of Pittsburgh, Department of Vascular Research, Pittsburgh, PA. Pagano was formerly a Senior Staff Investigator at the Henry Ford Hospital, Division of Hypertension, Detroit MI.

Kaushik Parthasarathi has taken a position as an Assistant Professor in the Department of Physiology at the University of Tennessee Health Science Center, Memphis, TN. Prior to this position, Parthasarathi was an Associate Research Scientist at Columbia University, New York, NY.

Ursula Wesselmann is a Professor in the Department of Anesthesiology, Univ. of Alabama at Birmingham. Prior to this position, Wesselmann was an Associate Professor in the Department of Neurology and Biomedical Engineering, Johns Hopkins Hospital, Baltimore, MD. ❖

## Letter to Julio Cruz

**David Ianuzzo** writes: "Thank you for your letter and the welcome to the senior physiologist club. I just retired from Wheaton College as Professor and Chair of Applied Health Science in June of 2008. The years at Wheaton College were great years but I soon found that retirement wasn't for me at age 70. I have just accepted a position at the University of Medicine and Health Sciences in St. Kitts to teach physiology in a relatively new medical school. My wife, Sigrid, and I flew to St. Kitts January 3, 2009. A major positive about the academic world it is not boring and, in fact, the ongoing learning is fun and exciting, even though I only have one neuron that is functioning. "The best to all my colleagues."

## Letters to Harvey Sparks

**Oscar Scremin** writes: "I turned 70 years old on September 27 this year and I received an invitation from you to tell my story for the APS Seniors Committee. I delayed it a bit because it is always painful to talk about why I left my native country, but here it is.

"The year was 1976, and Argentina was sinking into the worst human rights catastrophe of its history. I was a physiologist, a member of the faculty at the Department of Physiology in the University of Rosario Medical School, and an established investigator within the Argentine National Research Council (CONICET). During a brief democratic interlude that lasted from 1973 to 1976, there was a period of intense activity between university faculty and students in the interest of redirecting both the curricula and purpose of the public higher education system in order to better serve the national interest. During this process, I was appointed Dean of the Medical School in Rosario. This didn't last long. As the civilian government disintegrated, reactionary elements initiated the persecution of anyone that would try to defend democratic principles and soon after, a military coup installed a bloody dictatorship. Dissent was punished with kidnapping, disappearance, and death. Like many others, I was fired from all my positions and had to go into exile to escape a death squad. Many of the bravest that stayed on or could not leave were less fortunate. An estimated 30,000 perished at the hands of the horrible dictatorship that persisted until 1983. As we left the country, friends offered their home in Los Angeles for our family of five. This included my wife Erika, who had just

graduated as an MD, and our children Luciano (5), Tristan (2) and Maria Aurelia (6 months old). Soon after, I was offered a job at the Physiology department of UCLA Medical School where I still teach today. We had the support of many people within and outside of the university in this country, to whom we are eternally grateful. While in Los Angeles my wife Erika completed her medical specialty training in the VA-UCLA Physical Medicine and Rehabilitation Service which she now chairs, and our children grew and became successful citizens. Luciano is a pilot with United Airlines, Tristan is a law student at the People's College of Law in Los Angeles, and Maria Aurelia is a DO currently training in internal medicine at the VA/Cedars-Sinai residency program. Erika and I both work at the Greater Los Angeles VA Hospital that generously supports our research. This country is home to our family now, but the old country is still in our hearts. After many years of struggles, democracy is now flourishing in Argentina, human rights have been restored, and many of the assassins and kidnappers in the former dictatorship are being tried for their crimes. It is a democracy that has lasted for 25 years, indeed the longest uninterrupted democratic period without a military coup ever. Last year, on November 15th, the authorities of the University of Rosario restored my faculty position and returned my former laboratory to me. It was an intensely emotional ceremony that reunited many of the people that left the country during those years as well as some of the families of the disappeared. If you can handle Spanish, here is a link with some of the details: [http://www.portal.unr.edu.ar/periodico/secciones/2007/noviembre/\\_\\_\\_actodesagravio.htm..](http://www.portal.unr.edu.ar/periodico/secciones/2007/noviembre/___actodesagravio.htm..)

"Going back to the laboratory that day was like walking into a time machine. We found an empty room, with paint peeling and a leaky roof. What was once a bustling place with many research projects was now completely deserted. The biggest surprise was when we opened the doors under the counters. Some of our old equipment was still there, and had not been used in decades. Our exit from the lab had been very hurried, so we even found postcards addressed to friends abroad we had written and didn't have time to mail. Dante Chialvo (now at Northwestern University in Chicago), Hugo Besedovsky (now at Marburg University in Germany), and myself discovered a Tektronix pulse generator we had used more than 30 years ago and still ticks! It was at that moment when the three of

us decided to start an effort to change this morose state of affairs. Previously, we had all helped faculty and students of our alma mater with equipment, advice and also had hosted students and faculty of that Department in our labs in the US and Germany over the years, but we are now embarking on a journey to restore the present research environment so that Physiology can again shine in Rosario. We are volunteering time to train students and faculty and also are raising and providing funds to remodel the building, procure equipment, chemicals, glassware; everything needed for a standard physiology laboratory. As of today, new research projects are already underway. We founded a non-profit organization to receive donations of funds and equipment and the flow of resources has already begun. So much to do but, hey, we are so young! We have a life (a second one) ahead of us and considering the statistics on physiologists in the senior division at the APS, it is going to be a long one! Thanks for the time and space given to our musings and we may be contacting you soon to see if you still have some old but good working physiology instruments on our wish list that you might be able to part with."

**Bodil Schmidt-Nielsen** writes: "I received your letter some time ago and I am sorry to have waited so long to answer it. When you are retired, it is easy to wait a while when there is work to be done. However, in spite of my laziness, I shall be happy to give you any information you desire.

"I retired in 1987 and gave up my beloved laboratory at Mount Desert Island Biological Laboratory in order to be able to concentrate on writing a biography of my parents, August and Marie Krogh. My husband, Roger Chagnon, and I moved to Gainesville, FL where we were well-received. Dr. Ian Phillips made me a guest Professor in the Department of Physiology with the title of University Professor. I took advantage of a very nice association with the division of Nephrology, which was chaired by the dynamic Craig Tisher.

"My close associations with the excellent medical school of the University of Florida was of great help to me while I was writing my book. I continued my interest in comparative kidney physiology. However, I became increasingly hampered in my scientific endeavors with the onset of a disease: *normal pressure hydrocephalus*. With the increasing fluid accumulation in my brain, I gradually lost my balance and sense of the position of my body in space. I also lost my judgment and the ability to write in a coher-

ent fashion. My good friend and colleague, Dr. Lise Bankir, kindly helped me write one paper. I also received help getting some of my ideas about the roles of hydrostatic pressure, elasticity and peristaltic flow on the function of the mammalian renal concentrating mechanism. I am now working on writing a review of the experiments and results leading up to the conclusion.

"By chance, I happened to get involved in a conversation with a fellow passenger on a flight from Atlanta to Gainesville. It turned out that the lady I was talking to was a member of a surgi-

cal team that operated on patients suffering from hydrocephalus. I learned that the surgery was done rather frequently and that it could be very successful. That convinced me that I should talk to my doctor into performing the brain surgery on me. In 2005, I succeeded in convincing a neurosurgeon to perform the operation. The results of the surgery were spectacular. All of my bad symptoms disappeared. Best of all, I could use my brain again and I also regained my balance.

"I am still working on the review, and I gave a talk at the medical school last

April. I hope to be able to complete the review on the data and insights leading up to this concept.

"I am living independently at a unique retirement home called Oak Hammock at the University of Florida. My husband, Roger Chagnon, to whom I was married for 35 years, passed away three months before we were to move into Oak Hammock. It was sad to move in alone, but living here is a blessing, mostly because of the marvelous people who live here at Oak Hammock and the many opportunities for keeping mind and body active." ❖

## Book Review

*Physiology at a Glance* 2<sup>nd</sup> edition  
Jeremy Ward, Roger Linden  
Massachusetts, USA: Wiley Publishers,  
2008, 158pp. illus, index,  
\$35.00  
ISBN: 1405177233

As part of the prolific "At a Glance" series designed to review topics in biomedical sciences, human systems, and clinical specialties for medical students, the second edition of *Physiology at a Glance* (2008) by Jeremy Ward and Roger Linden presents a fundamental yet succinct physiological review of the major systems. Roger Linden is Professor of Craniofacial Biology in the School of Biomedical and Health Sciences and past Head of the Department of Physiology at King's College in London. Jeremy Ward is the current Head of the Department of Physiology and Professor of Respiratory Cell Physiology in the Schools of Medicine and Biomedical and Health Sciences at King's College and has previously contributed his expertise to the "At a Glance" series by co-authoring volumes on cardiovascular and respiratory physiology. Although a full review of basic cellular and system physiology in 129 pages is a challenging task, Ward and Linden do a wonderful job discussing the basic physiological models for junior medical students and students of physiology. New to this edition are full-color figures for each of the topics discussed.

Consistent with the "At a Glance" series format, this volume has been organized to cover 60 topics in two pages each. After an introductory review of basic cellular processes, the book divides each of the major systems into separate chapters; muscular, cardiovascular, respiratory, renal, gut and metabolism, endocrinology and reproduction, and sensory and motor. Each chapter presents the system as a whole to introduce its structure and basic

function and is then followed by a more detailed review of specific mechanisms and regulation important to that system. Surprisingly, the topics are discussed with sufficient specificity and using the critical terminology to get more than a superficial review of the topic, although advanced students of metabolism and biochemistry will miss the chemistry. Terminology is rarely left undefined and definitions are concise, plain, and relevant or else cited to another chapter in the book where it is explained in more detail. Given the space limitations, the equations and physiological values presented are given context to increase understanding and briefly explained to clarify the relationship of the variables involved.

The authors make very good use of figures and references to other chapters in the book in their explanations of the models, which allow the student to quickly locate and clarify any concept and help stress the interdependence of the systems. Bolding of key terms and an extensive index also adds to the rapid review usability, as do the tables of normal physiological values embedded in figures and in the brief appendix. With some topics and in varying degrees of detail, the authors touch on potential pathologies that can occur within a system, although due to the nature of this review, a student will need to search elsewhere for significant physiological descriptions of these conditions. With the student in mind, Ward and Linden also provide a brief self-assessment as a final chapter to the book. Four multiple choice questions per chapter help the student review terminology, mechanisms, and regulation of the systems covered in this book.

On a pedagogical note, in the next edition I would like to see more frequent use of examples of pathology in descriptions of system mechanisms. There are

excellent examples of metabolic and genetic disorders that demonstrate how a defect in one crucial component of a system can have a considerable effect on health. Addition of these examples, however briefly described, may do much for student retention and understanding of such complex information by providing context with which students can easily associate (especially medical students). I would also like to see updated information on gene expression dedicated to the topic "Physiology and the Genome." Granted, this topic alone could constitute an "At a Glance" volume, but our current residence in the "post-genomic era" implies that we must acknowledge the significance of our genomic advances beyond description of basic structure, transcription and translation of DNA. Much of our research, both in physiology and in medicine, involves the understanding of gene expression and regulation. I would like to see this section updated to include current models in gene expression.

Overall, this ambitious review does an excellent job at presenting all the major systems in a concise, yet detailed format. Instructors of a survey course in mammalian physiology, organismal biology, bioscience or introductory courses in health professions may find this useful as a reference for review, lesson planning, or assessment. Advanced students in these areas will find the depth of descriptions adequate as a review, provided that it is not intended to act as a review for a system of their specialty. Introductory students in these areas should find this an easy read due to clear language and figures and this book would be an excellent addition to their reference library. ❖

Cassandra Delgado-Reyes  
University of Texas at Austin

## The Wine Wizard

Peter Wagner

Here are some very tasty efforts:

2007 Nobile Sauvignon Blanc \$9. This is standard New Zealand Sauvignon Blanc – fresh, clean, herbal-grassy nose with gooseberry fruit, and a palate that follows in kind. Why then this wine in the column? A) Price is \$4 or so less than the mainstream NZ SB range. B) Quality is still excellent C) Acidity is quite moderate – I have said before that perhaps the major distinguishing feature among NZ SB's is their various levels of acidity. On average, these wines are really quite tart, and perhaps too much so for many people. Nobile is less tart than most. The only downside is that there are richer NZ SB's out there, but that said, there is still plenty of fruit. Great everyday wine.

2005 Kirkland Meritage, Napa valley, \$11. Most of you will know that "Meritage" in California = Claret in Bordeaux (ie, a blend of main Bordeaux varietals). Most of you will also know that Kirkland is the Costco brand. So Costco had this wine made for them to sell under their own label. This wine is 69% Merlot, 29% Cabernet and 2% Cabernet Franc. The nose is a bit subdued, with dark cherry and some stem-

my green aspects, but the palate is really very good. The fruit is quite intense with red and dark cherry. Its main feature other than excellent fruit is the silky smooth mouthfeel that is elegant, and not at all heavy, with excellent acid, and lighter tannins, some herbal elements, light oak and spice. Very easy to drink, and the 13.5% alcohol is quite modest. There is some stemminess that stops well short of bitterness, and a hint of earth. The finish is medium long – wish it were longer – but for this price, it is a wine I would serve at a formal dinner without



worry. Will it age? It could be interesting to check it yearly, but I don't think it is a real keeper. It compares with one of my perennial favorites, Estancia Meritage, which is twice the price.

Thought a review of several current release ~\$6 Australian budget Shiraz listings might be interesting. There now so many since Rosemount invented this niche some years back. Here are six examples of wines that should be readily available. None are over the top in



Peter Wagner

concentration or alcohol. I am reporting on all six, but feel comfortable recommending only the first five (actually, surprised that five of six are quite drinkable). You may well rank them differently according to your taste, so enjoy any of these top five:

2007 Yellowtail Shiraz \$6. The best of this bunch, this wine is not just a berry juice fruit bomb with no structure, as several such cheapo offerings tend to be. Slight mint and a touch of gamey leather on the nose with some dark plums. The palate is lush with dark fruit

and hints of earth, black pepper and spice to give some complexity. It has a rich mouthfeel, soft tannins, and good acidity to provide good balance and length. It's no \$30 pretender, but is much better than \$6. This might actually last a year or two in the cellar and be interesting then.

2007 Black Swan Shiraz \$6. Close second place, this wine took a while to open (an observation that often correlates with goodness). Slight mint and red/dark berries on the nose. The palate has ripe sweet red/dark berry fruit (but no residual sugar), vanilla, slight black pepper, light oak char, slightly higher than average acidity, soft tannins, and it really improved with time in the glass open to air.

2006 Little Penguin Shiraz \$6.50. Next tier down from the two above, but still excellent value. Mint and dark fruit on the nose and palate. Quite lush and soft, but not as complex and structured as the above two. Very easy to drink.

2007 Alice White Shiraz \$5.50. This wine did not have forward aromas, even with time. There was pleasant dark fruit, mint, good acidity and sweet ripe vanilla and dark berries on the palate, but it came across as very simple. I realize these words don't really convey why it ranked fourth, just not as interesting as the above.

2006 Lindemans Bin 50 Shiraz \$5.00 very much like the Alice white, very easy to approach, decent dark berry fruit, but very simple. There was some spice but no mint, and while pleasant, came across as just OK. It would make a good BBQ party wine for a crowd. Can't beat the price.

2006 Jacob's Creek Shiraz \$6.00. This one I did not like, simply because it had far too much tannin for the fruit and came across as harsh and hard. It was also a little tart and bitter. All symptoms of an insufficient fruit component. ❖

## 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>. ❖

*March 9-11*

**Genomic Disorders 2009 - Genomic Variation in Health and Disease, Cambridge, UK.** *Information:* Internet: <http://www.stconfernece.org.uk>.

*March 10-14*

**16th International Hypoxia Symposium: Hypoxia and Exercise, Alberta, Canada.** *Information:* PO Box 6508, F524, c/o Altitude Research Center, Aurora, CO 80045. Fax: 720-293-7722; Email: [info@hypoxia.net](mailto:info@hypoxia.net); Internet: <http://www.hypoxia.net>.

*March 13-16*

**5th world Congress World Institute of Pain - WIP, New York, NY.** *Information:* Kenes International, 1-3, Rue de Chantepoulet, PO Box 1726, CH-1211 Geneva 1, Switzerland. Tel.: +41 22 908 0488; Fax: +41 22 732 2850; Email: [wip@kenes.com](mailto:wip@kenes.com); Internet: <http://www2.kenes.com/wip/Pages/home.aspx>.

*March 27*

**Skeletal Endocrinology, Brescia, Italy.** *Information:* Internet: <http://www.skeletal-endocrinology.org/presentazione.asp>.

*April 1-3*

**Human & Exercise Physiology Themed Meeting (The Physiological Society), London, UK.** *Information:* Tel.: +44 (0) 207269 5715; Email: [meetings@physoc.org](mailto:meetings@physoc.org); Internet: <http://www.physoc.org/site/cms/contentEventViewEvent.asp?chapter=109&e=2448>.

*April 20-21*

**3rd Focused Meeting Cell Signalling, Leicester, UK.** *Information:* Internet: <http://www.bps.ac.uk/site/cms/contentCategoryView.asp?category=258>.

*April 25-May 2*

**American Academy of Neurology 61st Annual Meeting, Seattle WA.** *Information:* Internet: <http://www.aan.com/am>.

*May 7-9*

**Focused Meeting: New Drugs in Cardiovascular Research, Dresden, Germany.** *Information:* Internet: <http://www.bps.ac.uk/site/cms/contentCategoryView.asp?category=258>.

*May 12-15*

**The North American Research Conference on Complementary & Integrative Medicine, Minneapolis, MN.** *Information:* Internet: <http://www.imconsortium-conference.org/>.

*May 14-16*

**3rd International IVI Congress, Madrid, Spain.** *Information:* Internet: <http://www.comtecmed.com/ivi/2009/>.

*May 15-17*

**Human Integrative Physiology: The Legacy of the Copenhagen School; in the Footsteps of Lindhard and Krogh, Copenhagen, Denmark.** *Information:* Bengt Saltin,

Copenhagen Muscle research Centre, Rigshospitalet, 7652, Blegdamsvej 9, DK-2100 Copenhagen. Tel. +45 35457582; Email: [bengt.saltin@rh.regionh.dk](mailto:bengt.saltin@rh.regionh.dk).

*May 15-20*

**2009 American Thoracic Society International Conference, San Diego, CA.** *Information:* ATS International Conference Department, 61 Broadway, 4th Floor, New York, NY 10006. Tel.: (212) 315-8652; Fax: (212) 315-6471; Email: [ats2009@thoracic.org](mailto:ats2009@thoracic.org); Internet: <http://www.thoracic.org>.

*May 24-27*

**3rd Annual Canadian Neuroscience Meeting (CAN), Vancouver, Canada.** *Information:* Katherine Jolin, Sponsorship & Exhibit Manager, Felicissimo, Rossie & Associates International, Conference Organizers, Edifice Place du Quartier, 1111 St. Urbain, Suite 116, Montreal H2Z 1Y6, Quebec, Canada. Tel.: (514) 874-1998; Fax: (514) 874-1580; Email: [katherine@fa-events.com](mailto:katherine@fa-events.com); Internet: <http://www.fa-events.com>.

*June 1-4*

**Muscle as Molecular and Metabolic Machines, 14th International Conference on the Biochemistry of Exercise, Ontario, Canada.** *Information:* Internet: <http://www.uoguelph.ca/~ibec09/>.

*June 4-6*

**The Organization for the Study of Sex Differences (OSSD) 3rd Annual Meeting, Toronto, Ontario, Canada.** *Information:* Viviana Simon, 1025 Connecticut Avenue, NW, Suite 701, Washington, DC 20036. Email: [viviana@ossdweb.org](mailto:viviana@ossdweb.org); Internet: <http://www.ossdweb.org>.

*June 26-28*

**The First International Conference of Hydrogen Sulfide in Biology and Medicine (H2S Biology 2009), Shanghai, China.** *Information:* Internet: <http://www.h2sbiology2009.org>.

*June 28-July 1*

**SEB at Glasgow 2009 (SEB Annual Main Meeting 2009), Glasgow, UK.** *Information:* Kate Steel, Conference and Web Officer, The Society for Experimental Biology, 3 The Carronades, New Road, Southampton, SO14 0AA. Tel.: +44(0)2380224824; Fax: +44(0)2380226312; Email: [k.steel@sebiology.org](mailto:k.steel@sebiology.org); Internet: <http://www.sebiology.org/meetings>.

*July 11-16*

**XXII Congress of the International Society on Thrombosis and Haemostasis (ISTH 2009), Boston, MA.** *Information:* MCI Suisse SA, Rue de Lyon 75, 1211 Geneva 13 - Switzerland. Tel.: +41 22 33 99 587; Fax: +41 22 33 99 621; Email: [isth2009@mci-group.com](mailto:isth2009@mci-group.com); Internet: <http://www.isth2009.com/welcome.html>.

*August 3-7*

**11th International Congress on Amino Acids, Peptides and Proteins, Vienna.** *Information:* Internet: <http://www.meduniwien.ac.at/ICAAP09/index.html>.





# 2009

## American Physiological Society Conferences

### Sex Steroids and Gender in Cardiovascular-Renal Physiology and Pathophysiology



**Date & Location:** July 15-18, 2009  
Omni Interlocken Resort,  
Broomfield, Colorado

**Abstracts Due:** April 3, 2009

**Advance Registration:** June 12, 2009

#### **Preliminary Program:**

- Sex and Sex Steroids in Renal Function
- Role of Sex Chromosomes in CV-Renal Physiology and Pathophysiology
- Sex Differences in Neural Interactions with Cardiovascular-Renal Systems
- Controversies in the Vascular Actions of Estradiol
- Exercise and Cardiovascular-Renal Health in Men and Women
- Sex Steroids in Stroke
- Sex Steroids and Inflammation

### ET-11: APS International Conference on Endothelin



**Date & Location:** September 9-12, 2009  
Marriott Chateau Champlain,  
Montréal, Canada

**Abstracts Due:** May 22, 2009

**Advance Registration:** August 7, 2009

#### **Preliminary Program:**

- Cellular Regulation of the Endothelin Pathway
- Pharmacology of Endothelins
- Endothelin in Development and Aging
- Pulmonary Function and Disease
- Career Symposium
- Panel Discussion: The marriage between academia and the pharmaceutical industry - ET shows us the way
- Roles of Endothelin-1 on Cardiac Function and Diseases
- Roles of Endothelin-1 on Vascular Function and Diseases
- Endothelin-1 Renal, Fluid and Electrolyte Physiology and Disease
- Clinical Trials with ET Antagonists: An Update
- Roles of Endothelin-1 in Neurophysiology, Stroke and Related Diseases
- Endothelin-1 in Cancer and Blood Diseases
- Endothelin-1 in Inflammatory Diseases and Pain

For more information or to register, visit: [www.the-aps.org](http://www.the-aps.org)



# MEMBERSHIP APPLICATION FORM

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Last Name or Family Name / First Name / Middle Name
3. Date of Birth \_\_\_\_\_ Optional: Male  Female   
Month / Day / Year
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(Please do not abbreviate Institution Name)
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10. **EDUCATIONAL STATUS:** ► **IMPORTANT for STUDENTS: \*\*If you are enrolled as a student for an advanced degree (Ph.D., M.D., D.V.M.) please include the month and year you expect to receive your degree.**

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

- |                                                                |                                                                |                                                          |
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| <input type="checkbox"/> Cell & Molecular Physiology           | <input type="checkbox"/> Environmental & Exercise Physiology   | <input type="checkbox"/> Respiration Physiology          |
| <input type="checkbox"/> Central Nervous System                | <input type="checkbox"/> Gastrointestinal & Liver Physiology   | <input type="checkbox"/> Teaching of Physiology          |
| <input type="checkbox"/> Comparative & Evolutionary Physiology | <input type="checkbox"/> Neural Control & Autonomic Regulation | <input type="checkbox"/> Water & Electrolyte Homeostasis |

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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.)

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**Membership Application** (Continued...) **Applicant Last Name** (please print) \_\_\_\_\_

**14. OCCUPATIONAL HISTORY** [Check if student ]

**Current Position:**

Dates	Title	Institution	Department	Supervisor
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**Prior Positions:**

Dates	Title	Institution	Department	Supervisor
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**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<sup>+</sup>-nutrient contransport in isolated mammalian villus enterocytes. Am J Physiol Gastrointest Liver Physiol 280: G26-G33, 1991.

**16. DOCTORAL DISSERTATION TITLE** (if applicable):

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**17. POSTDOCTORAL RESEARCH TOPIC** (if applicable):

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**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](http://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](mailto:members@the-aps.org), Web: [www.the-aps.org](http://www.the-aps.org)