



# The Physiologist

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## The Walter C. Randall Lecture Facing the Dark Side: Research Misconduct and Strategies to Improve Self Regulation

**Sandra L. Titus, Director of Intramural Research,  
Office of Research Integrity,  
US Department of Health and Human Services**

*The views expressed herein are those of the author and do not necessarily reflect the position of ORI, the Department of Health and Human Services, or any component thereof.*

We know from major scandals in the recent past that many professions have been severely and adversely affected when our society recognized large lapses in ethical standards. Unfortunately, each profession has suffered from members who knew about fraudulent or other highly problematic behaviors, but who contributed to cover-ups such that the public remained unaware of the problem. They hoped that a pretense of normality and denial could be successfully sustained. When the dam has burst on various occasions, the public has learned not only about an ethical lapse in question at the time, but also that the professions' leaders had foreknowledge and awareness, yet had not taken appropriate and needed action. It is small wonder that the public in these instances is outraged in the face of what appears to



**Sandra L. Titus**

be a total and complete failure in self-regulation.

The purpose of this paper is first to examine available data on research misconduct, and second to explore whether there is reason to suspect that scientists might be operating with pretense and denial. Do these indicators reflect an early harbinger as we have seen in other professions? Thus, throughout this abbreviated review of social sci-

ence research on research misconduct, I will raise questions about the effectiveness of self regulation. I also will discuss two essential strategies that can be applied to prevent misconduct, promote integrity and build professional self-regulation, supervision, and whistleblower protection.

The Office of Research Integrity (ORI) has collected data for the last 18 years on research misconduct cases that are reported to the Department of Health and Human Services (DHHS) by universities. ORI does not seek and discover cases, but rather provides oversight and

*(continued on page 4)*

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## A Role for Scientists in Evolution Education

The theory of evolution is a critical, unifying concept in science that describes how living things adapt to changing environments over time. It is a tested and testable theory supported by evidence from many fields, including geology, paleontology, biochemistry, anatomy, and physiology.

Despite the fact that the scientific community has long accepted evolution as a central tenet, the inclusion of evolutionary science in public school science curricula continues to be challenged. In recent years a number of states and school districts have attempted to label evolution as a “theory, not a fact” implying that it could be easily disproved, or foster “critical analysis” by including non-scientific explanations for the origin of life such as creationism/intelligent design when teaching evolution in science classes. Proponents of creationism and intelligent design (ID) appeal to Americans’ sense of fairness with simple messages about presenting a diversity of views, while down-playing the implications of introducing faith and religious-based views into the science classroom. Over the years, scientists and teachers have worked hard to counter these assaults on evolutionary science by presenting scientific evidence. These efforts have met with success in many cases, but a wider scale effort is needed to reaffirm the importance of teaching sound science, including evolution.

Recognizing that challenges to the teaching of evolution also represent a threat to science and science education, 17 scientific societies representing the physical, chemical, biological, social sciences as well as teachers of science came together in an unprecedented effort to understand how the scientific community might best address this threat. The American Physiological Society participated in this Coalition of Scientific Societies, along with FASEB, the National Academy of Sciences, and

the National Science Teachers Association, among others.

The Coalition of Scientific Societies engaged a professional research firm to conduct a national survey examining voters’ attitudes on evolutionary science in the context of education. The survey also took into account respondents’ views on science and scientists. Because the wording of questions in many previous surveys forced respondents to choose between acceptance of evolution and religious beliefs, this survey was carefully constructed to avoid such a dichotomy. Importantly, the survey also

Regardless of whether they accept evolution, most Americans value the role that science plays in health, education and competitiveness. 63% of respondents ranked developing medicine and curing disease as the most important contribution of science to society.

Americans recognize and value the contributions that evolutionary science makes to modern medicine, with 61% of respondents indicating that understanding how evolution contributes to modern medicine is a compelling reason to teach it.

*“Regardless of whether they accept evolution, most Americans value the role that science plays in health, education and competitiveness.”*

explored how the scientific community might bolster support for teaching evolution and related topics.

The data and results of the study have been published in several society journals and are available online at <http://evolution.faseb.org/sciencecoalition>.

Among the highlights:

There is considerable uncertainty about what is appropriate to teach in public school science classrooms, particularly with regard to the inclusion of religious perspectives. A majority of respondents (53%) favored teaching evolution in public school science classes, compared to creationism (36%) and ID (27%).

There is a positive correlation between acceptance of evolution and science knowledge. Respondents were asked three questions to assess their level of basic scientific knowledge. Of the respondents who answered all three correctly, 78% believe that humans and other living things evolved over time, as compared to 36% of those who answered two or fewer of the science knowledge questions correctly.

Most respondents reported having favorable opinions of doctors (76%), scientists (69%), medical researchers (72%), and public school science teachers (59%).

When it comes to the debate over evolution, intelligent design and creationism, the public is interested in hearing from scientists (77%), science teachers (76%) and the clergy (62%).

Taken together, these results indicate that scientists and science teachers are welcome messengers and in fact have a very important role when it comes to conveying information about evolutionary science and science education. Further, the results show that the most effective messages should emphasize the connections between evolutionary science and advancing medicine and health.

This study highlights the critical need for scientists from all disciplines, including physiology, to become involved as advocates for science education. For more information on what you can do, please explore the resources available at: <http://evolution.faseb.org>. ❖

guidance to institutions that conduct the required investigation when someone reports a possible case of misconduct involving DHHS supported research. Over a 10-year period, ORI made an average 13 findings of misconduct per year (approximately the same number of investigations result in no finding of misconduct) (9). This does not seem to be a very large number of cases of misconduct per year. Thus, many people question whether this number reflects the actual rate of misconduct among scientists, or more accurately represents the tip of an iceberg of pervasively more serious patterns and incidents.

Since there are over 325,000 National Institutes of Health (NIH) supported scientists, one could argue that 13 findings per year indicate that scientists do not resort to fabricating and falsifying

news reports of the scandals of Hwang, Sudbø, Poehlman, and others have aptly demonstrated this problem. This analysis by *JCB* clearly has indicated that journal reviews cannot easily review source data and they cannot be expected to be the primary gate keeper. The old mantra that journal peer review is a mainstay of self regulation appears to be unreliable. We need to identify other ways to assure the quality and validity of published articles. One such way would be for institutions to develop a robust peer review process that would be required before an article could be submitted.

The second source that describes researchers' behaviors comes from the 2005 study on research misconduct reported by Martinson, Anderson, and DeVries, who described behaviors of

investigator (PI)? Lack of sound record keeping practices for one in every four researchers means everyone must start to be much more suspicious about the data and findings that are presented and published.

A third source of information on how scientists are faring in avoiding the dark side comes from inspections of the Food and Drug Administration (FDA) clinical data. In 2004, Bramstedt reviewed the warning letters that the Centers for Drugs and for Devices issued in a two-year period. In the 58 warning letters, she found that 8% were for fabrication and falsification (n=3) (2). In this same time period FDA made 1,738 field inspections; thus, 1.7/1,000 investigators or their subordinates had committed research misconduct in the two-year period (annualized to .9/1000) (6). This finding is noteworthy because it has occurred in a field that requires following Good Clinical Practice Standards (GCP) and investigators are aware of the possibility that their data will be inspected. When FDA discovers falsified data, the entire trial may be rejected; the sponsor will not obtain FDA approval to market the drug if their data are found to have been fabricated or falsified. Thus, most sponsors closely monitor their data sets to ensure compliance with FDA requirements for data integrity. In non-FDA-regulated science, we rely almost exclusively on the belief that researchers are honest. Very few studies are validated by others before publication.

Research misconduct is occurring. It is not a myth. If we ignore this fact we are burying our heads in sand. While we do not know the exact rate, it appears that using 1:1,000 is a reasonable assumption to make at this time. It could be substantially higher than this because the two data sources (Martinson and FDA analysis) are conservative estimates. It is not unreasonable to assume the self report data is conservative because people will under-report negative behaviors about themselves. The FDA data is a conservative finding because the regulated drug industry knows that FDA can inspect their data, and, therefore, they do not want missing source data and flawed data sets. Most other research does not have this level of scrutiny on source data. In short, this means we need major interventions that force us to develop new ways to assure data integrity. In addition to educational approaches, termed responsible conduct

*“There are three compelling recent reports that provide evidence that under-reporting is pervasive and that the scientific culture has many behaviors that are eroding our confidence in the findings that researchers report.”*

research, because this is a very small proportion (1 per 25,000 researchers). However, there are many unanswered questions. Does everyone who sees misconduct report it? How many incidents go undetected? If an allegation is made at the institution, what proportion has a thorough investigation?

There are three compelling recent reports that provide evidence that under-reporting is pervasive and that the scientific culture has many behaviors that are eroding our confidence in the findings that researchers report.

One source of information on how scientists are behaving comes from Michael Rossner, Editor, *Journal of Cell Biology* (*JCB*). In a report by Garath Cook, who interviewed Rossner, we learn that for the past three years *JCB* has had to reject 1/100 of the accepted papers because of serious improper digital image manipulations that were misleading, images that either added or subtracted elements that changed the experimental results (1). *JCB* has been vigilant. The editors have taken steps at the production level to detect fraudulent data. But as we have seen in 2005 and 2006, few journals attempt to catch fraudulent data at either the peer review stage or during production. The

3,247 NIH scientists who self-reported how they handled research issues (3). They found that 3/1,000 principal investigators self-reported in the past three years that they were falsifying or engaging in that practice known more colloquially as “cooking” data. Hence, we then have 1 per 1,000 scientists per year who have confessed to research behaviors that would be judged to be misconduct. A quick extrapolation to the 325,000 investigators who are supported by NIH funds would suggest that there would be approximately 325 incidents of falsified or “cooked” research data each year. This is 12-fold more than the ORI case load and 25-fold higher than ORI's determination of misconduct. This suggests that possible research misconduct is being ignored and underreported.

Perhaps even more worrisome is the finding by Martinson that 15% of the researchers report that they drop observation points and 27.5% report they have inadequate record keeping. Without accurate data records, a researcher can appear to have fabricated or falsified data. How can we trust scientific findings when the data supporting them are not carefully collected? What message does this send to those who are being trained by the principal



of research (RCR), there are two critical and essential strategies that scientists can use to thwart research misconduct: effective supervision and professional transparency through whistleblower protections.

### Supervisory Role of Mentor: Attention to Data and to Opportunities for Misconduct

The first way that research misconduct can be thwarted is to have much clearer faculty understanding of what they are expected to do if they have a research group. The PI, who is responsible for advising and mentoring PhD trainees and others, needs to understand the scope of this responsibility. Specifically, the PI must be willing to spend time supervising their trainees and to focus on reviewing and interpreting the source research data with the trainee. Failure to examine trainee source data and have clear research standards is present in a large proportion of the trainee misconduct cases reviewed by ORI (8). Adequate supervision prevents trainees from having the “opportunity” to fabricate or falsify data. Adams and Pimple point out that when there is the absence of capable supervision and also a lack of informal social interaction, there is a much greater likelihood that one can and will engage in problematic and irresponsible behaviors, such as research misconduct (7). They point out that all people have the ability and capacity to carry out inappropriate, unethical, and even criminal acts. However, research has shown that when “opportunities” to engage in inappropriate behavior are minimized, there is always a reduction in crime. A scientist that works alone might easily be able to hide unacceptable practices. If one knows how to use sophisticated equipment that few others use, then one can quite easily falsify data. A supervisor who attends carefully to the appropriate acquisition of data will reduce the opportunity for engaging in questionable research behaviors, as well as serious research misconduct. This is not to suggest that the PI become a policeman, but rather to identify how attention to “opportunity” can be easily incorporated as a component of supervision. Howard Hughes Medical Institute’s educational offering, “Making the Right Moves,” discusses many other practical methods that faculty can learn to manage and supervise the work of others (5). However, one of

the most critical parts of supervision in preventing research misconduct is setting clear standards and being physically present and observing how trainees are performing. Mentors can define and enforce standards of integrity or they can be lax and not be involved. We must alter the position that “absentee mentoring” is acceptable. The justification that

We need to think seriously about what must be done to protect those who do seek to report misconduct honestly, forthrightly, and for the right motivations. A lab chief must make it clear that s/he has zero tolerance for research misbehaviors and research misconduct. Those in the lab should be told that if they observe behaviors by others that

*“In the words of the National Academy, ‘Misconduct can harm individuals outside of science (as when falsified results become the basis of a medical treatment), it squanders public funds, and it attracts the attention of those who would seek to criticize science.’ (12).”*

a PI must focus primarily on securing money rather than on supervising their group is very detrimental to science. Both faculty and students need to change their behaviors in order for the public and fellow scientists to trust the research findings.

### Promoting Professional Transparency: Whistleblower Protections

Supervision alone does not address the observation that many conscientious and trustworthy scientists know about misconduct but do not want to report misconduct (4). There is a widely held belief and an experienced fear among any number of professionals that a whistleblower, termed a complainant in misconduct cases, will suffer retribution. People who want to report are often caught in a proverbial Catch 22. If one reports, one may well be considered as breaking rank or being disloyal. Retribution can follow. But in the wider scheme of things, failure to report is itself a collusion, condones the wrong already done, and contributes significantly to the view that science has no mechanism to prevent dishonest behavior. Having such blinders on contributes greatly to the corruption of any profession.

appear suspicious or not quite right, then they should and must report it to the lab director, who will take responsibility to look into it. Institutional policies need to be strengthened so that they define the obligation to report misconduct. In a study done in 2000, only 29% of institutional misconduct policies had an explicit statement about the obligation to report (10). Institutions need to specify this obligation to report misconduct. And institutions need to spell out possible mechanisms that they will use to protect whistleblowers. Institutional commitment via policy changes would be a first step in creating the necessary institutional dialogue that needs to take place.

When someone makes a good faith allegation of possible misconduct, there must be better ways to protect them. In research done on ORI cases, Lublin found that 70% of whistleblowers involved in a research misconduct case reported one or more negative outcomes (11). Nineteen percent were fired, 25% reported being ostracized, 43% were urged to drop their concerns, 51% reported mental health problem, 25% reported marital problems, 33% report-

**Table 1. Adjusting Bramstedt Annual Analysis with FDA Fiscal Analysis to Determine Denominator Related to Finding Three Misconduct Cases.**

Inspections	FY 2002	Adj%	2002 Cases	FY 2003	Adj %	2003 Cases	FY 2004	Adj. %	2004 Cases
Drugs	288	.66	192	674	0	674	655	.42	275
Devices	153	.66	102	356	0	356	333	.42	140
Total			294			1,030			415

Thus the three findings of misconduct occurred while doing approximately 1739 inspections. Hence,  $3/1739 = .001725$  in clinical investigators during a two year time period. This would annualize to  $.9/1000$  /year.

ed negative impact on finances, and so on. This should not be happening! Attitudes and behaviors by research administrators and faculty members that lead to ostracizing and marginalizing those who report possible research misconduct are unacceptable behaviors and need to be treated as such. Would you be willing to report a case of research misconduct? If you answer no, then look at whether you too feel a high degree of vulnerability that seems to go hand in hand with being a whistleblower. And then ask yourself what your institution would need to do so that you would feel safer.

### Conclusion: Changing How We Self Regulate

This paper has not been about "Science" but rather about the "Behavior of Scientists." Supervising trainees and protecting whistleblowers are not the only issues that scientists need to address to assure data integrity and demonstrate that they are self monitoring their own behavior, but these are two areas where the payoffs can be large. We need to focus our attention on the ethical conduct of science and how research misconduct is monitored, reported, and corrected. There is sound evidence in all fields of science of careless record keeping, poor standards for data interpretation, questionable research practices, and some level of data fabrication and falsification. People fear reporting it because the bearer of bad news can often be considered the bad news itself. However, the price of not reporting research misconduct is extremely high. In the words of the National Academy, "Misconduct can harm individuals outside of science (as when falsified results become the basis of a medical treatment), it squanders public funds, and it attracts the attention of those who would seek to criticize science." (12)

If we do not attend to faulty data keeping and careless analysis, then we inevitably promote at the very least a climate that breeds cutting corners, something closely approaching actually committing misconduct. If falsified data is used in grant applications, then we fund unworthy proposals and obstruct scientific proposals with real integrity from being sponsored. If we do not attend to behaviors that lack integrity, then we as a scientific community promote and allow a waste of time and resources trying to replicate and repeat experiments. No person of professional

integrity wants to learn that her or his name is associated with a publication discredited because of data fraudulence. Who wants to discover that a relative is receiving treatment based on fraudulent research? The stakes are very high-for investigators, for their institutions, and most of all for the public whose benefit is the purpose of research itself.

We need to attend to this hidden crisis before it leads to further undesirable outcomes or further erosion of the good name of academic and scientific inquiry. Institutions need to help bring about this change by setting and enforcing standards, such as directing PIs to discuss and publicly post the rules that will be used for record keeping in their lab. It is well recognized in organizational research that individual behavior is more likely to be modified and changed when the entire culture adopts and adheres to the new standards. Thus, we must focus energy on the system, as well as on the individual. But individuals change systems! We need change agents to step forward who want to protect their institution's name and reputation and are capable of insisting that scientists change their behavior. How can we say we are self-regulating if institutions and scientists do not develop better ways to promote research integrity? Shame on us if we fail to face the dark side of science and respond to the many indicators that point out that research integrity is being compromised.

### References

1. Adams, D., Pimple, K. "Research Misconduct and Crime Lessons From Criminal Science on Preventing Misconduct and Promoting Integrity," *Accountability in Research*, 12: July 2005, 225-240.
2. Bramstedt, K.A., "A Study of Warning Letters Issued to Clinical Investigators by the United States Food and Drug Administration," *Clinical Invest Med* 27: (3) June 2004, 129-134.
3. Cook, G., "Technology Seen Abetting Manipulation of Research" *Boston Globe*. [http://www.boston.com/news/science/articles/2006/01/11/technology\\_see\\_n\\_abetting\\_manipulation\\_of\\_research/](http://www.boston.com/news/science/articles/2006/01/11/technology_see_n_abetting_manipulation_of_research/), January 11, 2006.
4. Gallup Study, "Reporting Suspected Research Misconduct in Biomedical and Behavioral Research" Description posted on ORI web site, [http://ori.dhhs.gov/publications/reporting\\_suspected\\_research\\_misconduct.shtml](http://ori.dhhs.gov/publications/reporting_suspected_research_misconduct.shtml)

This study, conducted by The Gallup Organization, provides a description of the frequency and types of suspected misconduct which 2212 scientists observed in three academic years (2003-2005). The study indicates that a substantial amount of suspected research misconduct is not being reported. Twenty percent of the scientists wrote that the most important way to promote reporting research misconduct is the degree of protection offered to whistleblowers. An article has been submitted to a peer reviewed journal. "

5. Howard Hughes Medical Institute and Burroughs Wellcome Fund. "Making the Right Moves," course available at <http://www.hhmi.org/labmanagement>, 2004.

6. Lublin, James. Consequence of Whistleblowing for the Whistleblower in Misconduct in Science Cases, October 30, 1995. <http://ori.hhs.gov/documents/consequences.pdf>

7. Martinson B., Anderson M., DeVries R., "Scientists Behaving Badly" *Nature* 435: June 9, 2005, 737-738.

8. National Academy of Science, *On Being a Scientist*, National Academy Press, Washington DC, 1995

9. Report submitted to ORI, "Analysis of Institutional Policies for Responding to Allegations of Scientific Misconduct," September 29, 2000 [http://ori.dhhs.gov/documents/institutional\\_policies.pdf](http://ori.dhhs.gov/documents/institutional_policies.pdf)

10. Rhoades, L. "ORI Closed Investigations into Misconduct Allegations Involving Research Supported by the Public Health Service: 1994-2003" [http://ori.hhs.gov/research/intra/studies\\_completed.shtml](http://ori.hhs.gov/research/intra/studies_completed.shtml), 2005.

11. Titus, Sandra, Personal communication with C. Hommel, OS, FDA, on April 23, 2007, who provided information which led to the calculation in Table 1.

12. Wright, D., Titus, S.L., Cornelison, J., "Mentoring and Research Misconduct: An Analysis of Research Mentoring in Closed ORI Cases," An article has been submitted to a peer reviewed journal.

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## APS Council Holds Fall Council Meeting in Scottsdale, AZ

The APS Council held their fall meeting at the Scottsdale Marriott at McDowell Mountains, Scottsdale, AZ, November 8-9, 2007. Council received reports from the Publications, Finance, Membership, Education, and other Committees. APS staff members Marsha Matyas, Robert Price, Alice Ra'anan, and Margaret Reich joined the meeting to assist with the committee report presentations.

The Publications Committee reported that the Journal Impact Factors made a strong showing in 2006 as they had in previous years, and that *Physiological Reviews'* impact factor was up to 31.441 from 28.721 in 2005. The Committee reported that the time to publication for manuscripts has decreased from 3.5-4.0 months to 2.5 months. The Committee also reported that the APS *AuthorChoice* program, which was developed to allow authors the ability to provide immediate free access to their work, was opened to all APS research journals in July 2007.

The Publications Committee reported that Paul Insel, USCD, has been appointed Editor of *AJP-Cell Physiology* and David Linden, Johns Hopkins, has been appointed as Editor of the *Journal of Neurophysiology*. Their respective terms will begin in July 2008.

The Finance Committee presented Council with the projected final 2007 budget and the proposed 2008 budget, both of which were accepted and approved by Council.

The Education Department reported that in January 2008 there will be two Professional Skills Training Courses for Minority Students. The courses will be repeated in 2009 and 2010. One course is on writing and reviewing manuscripts and the other course is on presentation skills. The courses will be held each year in January in Orlando, FL.

Matyas reported that the 2007 Physiology Understanding (PhUn) Week that was held in November was very successful, and, in fact, exceeded the target goals. She said that there were two special events held during PhUn Week. The first was the Boston Children's Museum KidPower Exhibit, coordinated by APS member Andrea Gwosdow. The second was the ADInstruments PowerLab equipment collaboration in South Dakota, coordinated by APS members Barbara Goodman and Jessica Clark. Matyas said that ADInstruments would also be providing financial sponsorship for the PhUn Week Training Session at EB08.

The Women in Physiology Committee reported that Joey P. Granger, Billy S.

Guyton Distinguished Professor, Professor of Physiology and Medicine, and Dean of the School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center, has been selected as the 2008 Bodil Schmidt-Nielsen Distinguished Mentor Awardee. Granger will receive his award at the EB08 meeting in San Diego, CA.

Based on a recommendation from the Dagg's Award Committee, Council approved the selection of APS member L. Gabriel Navar as the 2008 Dagg's Awardee. He will receive his award at the 2008 APS Business Meeting.

The Council had an extensive discussion of the National Board of Medical Examiners' (NBME) proposed change to the US Medical Licensure Exam (USMLE). Council expressed concern about how moving the Step 1 Exam from the second to the third year would impact upon basic science teaching and the ability of MD-PhD programs to evaluate students. Tom Pressley and Joey Granger drafted a letter for Council to submit to the NBME.

APS Executive Director Martin Frank reported that APS would be hosting an opening reception at EB08. The reception will immediately follow the Cannon Lecture on Saturday, April 5, 2008 on the Center Terrace in the San Diego Convention Center at 7:00 pm.

Additional details of the Council's 2007 fall meeting will be presented to the membership at the 2008 APS Business Meeting. The Business Meeting will be held at EB08 on Tuesday, April 8, at 5:45 pm in the San Diego Convention Center. All APS members are encouraged to attend.

### Council Action Items

Council approved the recommendations of the Finance Committee accepting the 2007 estimated budget and approved the 2008 proposed budget.

Council unanimously approved a motion to transfer 22 regular members to emeritus membership status.

Council unanimously approved the requests of 105 regular members, three student members, and one affiliate member for reinstatement.

Council unanimously approved the selection of L. Gabriel Navar as the 2008 Dagg's Awardee. ❖



**Back Row: Peter Wagner, William Talman, J. Michael Wyss; Fourth Row: Ken Baldwin, Curt Sigmund, Ron Lynch; Third Row: Irving Joshua, James Hicks, Gary Sieck, Joey Granger; Second Row: Barbara Goodman, Michael Portman, Thomas Pressley, David Pollock; First Row: Kim Barrett, Dee Silverthorn, Dale Benos, Hannah Carey, Irving Zucker, Susan Barman.**



## APS Attends Reception for Nobel Laureates

Hannah Carey and Martin Frank represented the Society at the reception in honor of the 2007 US Nobel Laureates hosted by Dr. John Marburger, the President's Science Advisor. Held on November 26, 2007 in the Indian Treaty Room of the Eisenhower Executive Office Building, the reception honored Mario Capecchi and Oliver Smithies, recipients of the Nobel Prize for Physiology or Medicine; Leo Hurwicz, Roger Myerson, and Eric Maskin, recipients of the Nobel Prize for Economics; and former Vice President Al Gore and representatives of the US Delegation to the Intergovernmental Panel on Climate Change, recipients of the Nobel Prize for Peace. ❖



**APS President Hannah Carey and Former US Vice President Al Gore at the Nobel Prize presentation.**



**APS President Hannah Carey and Oliver Smithies at the Nobel Prize presentation.**

## APS Living History Project Continues to Grow

The APS Living History Project continues to gain traction as members invite senior members at their institutions to reminisce about their careers. Our members' efforts are consistent with Council's goal when it initiated the program — to chronicle the exploits and experiences of senior members of the Society. Over the last several years, we have lost a number of eminent physiologists who made significant contributions to the discipline of physiology and to the Society. The Living History Project is one way to capture the images, experiences and wisdom of our senior members for the benefit of future generations of physiologists.

It is anticipated that individuals identified for inclusion in the Living History Project will be interviewed at facilities at their academic institution. Since the institution will also be interested in posting the video on its web site, it is hoped that the cost of videotaping will be borne by the institution. The inter-

view should be conducted by a faculty colleague or a former student familiar with the individual's career. It is anticipated that the interview will last approximately 60 minute and included the following: 1) a brief introduction; 2) a discussion on how and why he/she became a physiologist; 3) list individuals that were influential in the development of his/her career; 4) a discussion of the origin and significance of their accomplishments; and 5) advice for beginning physiologists.

At present, six APS members have been chronicled as part of the Living History Project. The videotapes for Clark Blatteis, Maurice Burg G. Edgar Folk, John Greenleaf, Samuel Leonard, and Bodil Schmidt-Nielsen can be viewed at <http://www.the-aps.org/livinghistory/index.htm>. If you are interested in coordinating the interview of a senior physiologist, suggested names can be submitted by you or through your disciplinary section. However, all sug-

gestions are to be submitted to Martin Frank ([mfrank@the-aps.org](mailto:mfrank@the-aps.org)) so various aspects of the process can be properly coordinated.

The archival component of the Living History Project, which originally included a published biographical profile in *Advances in Physiology Education*, will be retained but "uncoupled" from the video component in that yearly recommendations will be originated from the Sections. It is envisioned that each year at the Experimental Biology Meeting, Sections will nominate a deserving senior member and forward his/her name to Charles Tipton ([tipton@email.arizona.edu](mailto:tipton@email.arizona.edu)), Historical Perspective Editor, *Advances in Physiology Education*. You can help facilitate this sectional function by forwarding your recommendation and rationale to the sectional chair well in advance of the Experimental Biology Meeting. ❖



## Nebraska and Iowa Chapters of the American Physiological Society Celebrate Their 10th and 11th Year Anniversaries

The Nebraska and Iowa Chapters of the American Physiological Society celebrated their 10th and 11th year anniversaries, respectively, in a combined meeting held September 8, 2007, in the Lied Conference Center, Nebraska City, NE. The meeting included participants from South Dakota. Attendance at the meeting totaled 120 and 67 research posters were presented by undergraduate and graduate students, postdoctoral fellows, and faculty members representing 11 institutions. A major goal of the combined meeting was to attract and highlight students and young investigators in the region, and provide them with an opportunity to become acquainted with highly regarded senior investigators throughout our region. An emphasis was placed on attracting undergraduate student participation by adding a poster award category for best undergraduate student poster, and by advertising the meeting at undergraduate and community colleges throughout the bi-state region. A record number of 18 undergraduate and 23 graduate students attended the meeting, creating a student/faculty ratio of nearly 1:1. Sixteen postdoctoral fellows were also in attendance.

The meeting was called into session by Harold D. Schultz, NPS President and Professor, Department of Cellular and Integrative Physiology, Univ. of Nebraska Medical Center (UNMC), and Robert L. Dunbar, IPS President and Assistant Professor, Department of Biology, Buena Vista University. The scientific portion of the meeting began with the NPS keynote address by Peter Wagner, Univ. of California, San Diego. The title of Wagner's presentation was, "Angiogenesis in Exercising Muscle."

Wagner's address was followed by Young Investigator Presentations by Sean P. Didion, Univ. of Iowa, J. David Holtzclaw, UNMC, Jessica R. Meendering, Univ. of Nebraska at Omaha, and Julia A. Moffitt, Drake Univ. The speakers were selected to present their research projects based on the quality of their submitted abstracts.

Following the Young Investigator Presentations, Marsha Lake Matyas, Director of Education Programs for APS, presented an overview of APS Resources for Education. Matyas' discussion was followed by a luncheon and State of the APS address by Irving H. Zucker, President-Elect of APS and Chairman of the Department of Cellular and Integrative Physiology, UNMC.

The afternoon portion of the meeting began with the IPS keynote address by Paul G. Mermelstein, Department of Neuroscience, Univ. of Minnesota, Minneapolis. The title of Mermelstein's presentation was, "Emerging Mechanisms of Estrogen Action."

Poster viewing and judging followed Mermelstein's address, and a concurrent educational software workshop was conducted by Kurtis Cornish, Professor, Department of C & I Physiology, UNMC, and AD Instruments. Poster judging was done in the undergraduate, graduate and postdoctoral categories from institutions that included: Buena Vista Univ., Drake Univ., Univ. of Iowa, Univ. of Nebraska at Kearney, Univ. of Nebraska at Lincoln, and UNMC. Posters were also presented by faculty and other professionals representing Creighton Univ., Univ. of Iowa, UNMC, Univ. of South Dakota, and Wayne State College.

After compiling scores from poster

judges, Schultz and Dunbar presented awards to individuals in the judged categories. In the undergraduate category, award recipients were: 1st place, Sumit Kar, UNMC; 2nd place, Stephanie Brady, UNMC; 3rd place (tie), Amanda Dorale, Buena Vista Univ., and Kyle Glienke, Buena Vista Univ. Award recipients in the graduate category were: 1st place, Sarah Clayton, UNMC; 2nd place (tie), Carmen Troncoso-Brindeiro, UNMC, and Allison Kleiber, UNMC. In the postdoctoral category, award recipients were: 1st place (tie), Cheng Wang, UNMC, and Wei-Zhong Wang, UNMC; 2nd place, Rasna Sabharwal, Univ. of Iowa; 3rd place, Aparajita Chowdjury, UNMC. Recipients received certificates and monetary awards of \$250 (1st place), \$100 (2nd place), or \$50 (3rd place).

The IPS and NPS business meetings were conducted at the conclusion of the poster awards. Schultz and Dunbar thanked the staff for their essential contributions to the organization and coordination of the combined meeting: Cindy Norton, Dorothy Burgin, Pearl Sorensen, Linda Tegeder, and Marie Maruca.

Schultz and Dunbar also thanked this year's sponsors for their support. Sponsors included: the American Physiological Society (APS); the Department of Cellular and Integrative Physiology, UNMC; the Dean's Office of the College of Medicine, UNMC; and The Nebraska Medical Center. Corporate sponsors were: AD Instruments, Data Sciences International, EMD Chemicals, Inc., North Central Instruments, World Precision Instruments, and VisualSonics.



Guest Speakers at the Joint Meeting.



Postdoctoral Students at the Joint Meeting.



**Graduate Students at the Joint Meeting.**



**Undergraduate Students at the Joint Meeting.**

After the meeting, a consensus of organizers and participants felt that the regional meeting accomplished several important goals. The meeting attracted students from diverse institutions throughout the region and promoted interdisciplinary contacts among research workers and students interested in the physiological sciences at the local level. It also highlighted goals on

education of future physiologists the general public.

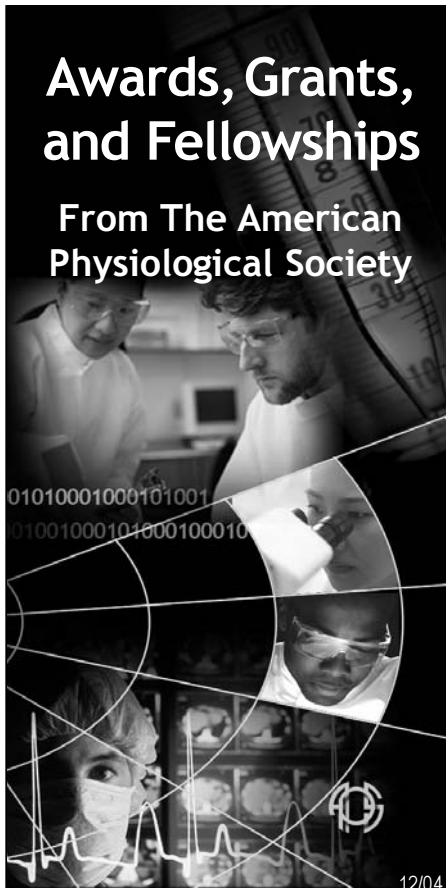
Officers for NPS the coming year are: **President:** Thomas E. Pisarri, Creighton Univ.; **President-Elect:** Kaushik P. Patel, UNMC; **Secretary/Treasurer:** George J. Rozanski, UNMC; **Councilor:** Jessica Meendering, Univ. of Nebraska at Omaha; **Councilor:** Robert A. Cushman, USDA Meat

Animal Research Center; and **Councilor:** Janet E. Steele, Univ. of Nebraska at Kearney.

Officers for IPS the coming year are: **President:** Gina Shatteman, Univ. of Iowa; **Past President:** Robert L. Dunbar, Buena Vista Univ.; **Secretary/Treasurer:** Harald M. Stauss, Univ. of Iowa. ❖

## Awards, Grants, and Fellowships

From The American  
Physiological Society



**T**he American Physiological Society (APS) provides leadership in the life sciences by promoting excellence and innovation in physiological research and education and by providing information to the scientific community and to the public.

The Awards, Grants, and Fellowships programs are designed to strengthen and shape the discipline through awards that support, recognize, and publicize the scholarly and research activities of APS Members.

### For Full Details or Questions

...on all awards, grants and fellowships,  
visit the APS web site at:

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

## New Regular Members

\*Transferred from Student Membership

**Adebowale Adebisi**

Univ. of Tennessee, Memphis

**Francisco Javier Alvarez-Leefmans**

Wright State Univ., OH

**Jon Andresen\***

Univ. of Missouri, Kansas City

**Alli Martina Antar**

Baylor Coll. of Med, TX

**Evangelos Antzoulatos\***

Massachusetts Inst. Tech.

**Seung Joon Baek**

Univ. of Tennessee, Knoxville

**James C. Baldi**

Northern Arizona Univ., Flagstaff

**Kristen A. Baltgalvis\***

Univ. of Minnesota

**Troy A. Baudino**

Univ. of South Carolina, Columbia

**Beth A. Beidleman**

US Army Res. Inst. of Envir. Med., MA

**Eric J. Belin De Chantemele**

Med. Coll. of Georgia, Augusta

**M. Cecilia Berin**

Mount Sinai Sch. Med., New York

**Yuriy V. Bobkov**

Univ. of Florida, St. Augustine

**Julien Vincent Brugniaux**

Univ. of Calgary, Canada

**Vladislav V. Bugaj**

Univ. of Texas, San Antonio

**Melissa A. Burmeister**

Cornell Univ., Ithaca, NY

**Christopher D. Cain**

Phytoanalytics, Riverside, CA

**Ruth B. Caldwell**

Medical Coll. of Georgia, Augusta

**Darren Patrick Casey**

Mayo Clinic, MN

**Melissa Ann Cavallin**

Florida State Univ., Tallahassee

**Tansu Celikel**

Univ. of Southern CA, Los Angeles

**Alejandro Roberto Chade**

Univ. of Mississippi Med. Ctr., Jackson

**Jeannie Marie Chapman**

Univ. of South Carolina, Spartanburg

**ChungSik Choi**

Univ. of South Alabama, Mobile

**Timothy D. Clark**

Univ. of British Columbia, Vancouver

**Hugh Clements-Jewery**

West Virginia Sch. Osteopathic Med.

**Beth Marie Cleveland**

USDA, ARS, NCCCWA, WV

**Valery Combes**

Univ. of Sydney, Australia

**Judy R. Creighton**

Univ. of South Alabama, Mobile

**Joseph Thomas Crossno**

Univ. of Colorado, Denver

**Robinson Jhalabhai Damor**

Maulana Azad Med. Coll., India

**Subhankar Das**

Tulane Univ., LA

**Michael E. Davis**

Emory Univ., GA

**Robert C. De Lisle**

Univ. of Kansas, Kansas City

**Sanjiv Dhingra**

Univ. of Manitoba, Canada

**Anke Di**

Univ. of Illinois, Chicago

**Micah John Drummond\***

Univ. of Texas Med. Branch, Galveston

**Shengzhong Duan**

Univ. of Michigan

**John Robert Economides**

Univ. of California, San Francisco

**Manuel Estrada**

Univ. De Chile, Santiago, Chile

**Amy Leanne Firth**

Univ. of California, San Diego

**Joseph Thachil Francis**

SUNY Downstate Med. Sch., Brooklyn

**Ferruccio Galbiati**

Univ. of Pittsburgh, PA

**Feng Gao**

Fourth Military Med. Univ., China

**Sean Michael Garvey**

Univ. of Virginia

**Christopher Louis Gentile**

Colorado State Univ., Fort Collins

**Shannon Stroud Glaser\***

Texas A&M Univ., Temple

**Tan Ya M. Gwathmey**

Wake Forest Univ., NC

**Amir Reza Hajrasouliha**

Univ. of Southern CA, Los Angeles

**Chad Randall Hancock**

Washington Univ., MO

**Judith Hellman**

Massachusetts General Hosp., Boston

**Fritjof Helmchen**

Univ. of Zurich, Switzerland

**Brian P. Helmke**

Univ. of Virginia

**Alastair N.H. Hodges\***

Dalhousie Univ., Canada

**Robert S. Hoover**

Univ. of Chicago, IL

**Osamu Hori**

Kanazawa Univ., Japan

**Heli Hu**

Ohio State Univ.

**Can Ince**

Univ. of Amsterdam, The Netherlands

**Cristina Jaen**

Monell Chemical Senses Ctr., PA

**Martin Jastroch**

Philipps Univ., Marburg, Germany

**Akira Kato**

Tokyo Inst. of Tech., Japan

**Kumar E. Kesavarao**

Univ. of Calgary, Canada

**Baljit Singh Khakh**

Univ. of California, Los Angeles

**Miyuki Kobara**

Kyoto Pharmaceutical Univ., Japan

**Amit S. Korde**

Albany Medical Center, NY

**Candace Yan Wah Lee**

Mayo Clinic, MN

**Weiguo Li**

Medical College of Georgia

**Weihong Lin**

Univ. of Maryland, Baltimore

**Sarah Hoffman Lindsey**

Wake Forest Univ., NC

**Diomedes E. Logothetis**

Mount Sinai Sch. Med., NY

**Anosorn Lungkaphin**

Chiang Mai Univ., Thailand

**Chad David Markert\***

Wake Forest Univ., NC

**Miguel Martin-Caraballo**

Univ. of Vermont

**Kei Masani**

Toronto Rehab, Canada

**Jeffrey Bernard Mason\***

Univ. of Pennsylvania Sch. Vet. Med.

**Khalid Matrougui**

Tulane Univ., LA

**John P. Mattson**

Gustavus Adolphus Coll., MN

**T. D. Maze**

Lander Univ., SC

**Karen R. McKenzie**

CSA Medical Inc., MD

**William D. Merryman\***

Univ. of Alabama, Birmingham

**Kevin J. Milne**

Univ. of Western Ontario, Canada

**Valerie L. Mitchell**

Univ. of California, Davis

**Masaki Mizuno**

Natl. Cardio. Res. Inst., Suita, Japan

**Aliyu Mohammed**

Ahmadu Bello Univ., Nigeria

**N. Nanda Nanthakumar**

Harvard Med. Sch., MA

**Aniko Naray-Fejes-Toth**

Dartmouth College, NH

**Amanda Jean Nelson**

Univ. of Wisconsin

**Wei Ni\***

Univ. of California, San Francisco

**Jeffrey Scott Otis\***

Emory Univ. & VA Med. Ctr., GA

**Tomasz Owerkowicz**

Univ. of California, Irvine



**Ganni Parise**

McMaster Univ., Hamilton, Canada

**Ho-Jin Park**

Tufts New England Med. Ctr., MA

**Kwon Moo Park**

Kyungpook Natl. Univ., South Korea

**Teodor G. Paunescu**

Massachusetts Gen. Hosp., Boston

**Abigail T. Peairs**

Virginia Coll. Osteopathic Med.

**Rebecca Lynn Persinger**

Sepracor Inc., Maple Falls, WA

**Jerome Petit-Jacques**

New York Univ.

**Vincent Pialoux**

Univ. of Calgary, Canada

**Rohit Ramchandra\***

Howard Florey Inst., Australia

**Brian B. Ratliff**

New York Med. Coll., Somers

**William Anthony Romani**

Univ. of Maryland, Baltimore

**William N. Ross**

New York Med. Coll.

**Ko Sakai**

Univ. of Tsukuba, Ibaraki, Japan

**Jennifer C. Schiltz**

Uniformed Svcs. Univ. Hlth. Sci., MD

**Utpal Sen**

Univ. of Louisville, KY

**Cristina M. Sena**

Univ. of Coimbra, Celas, Portugal

**Abu S.M. Shamsuzzaman**

Cincinnati Children's Hosp., OH

**Erwin F. Shibata**

Univ. of Iowa

**Yoshizumi Takemura**

Emory Univ., GA

**Cormac T. Taylor**

Univ. College of Dublin, Ireland

**Daniel H. Teitelbaum**

Univ. of Michigan

**Martine Thomis**

Katholieke Univ., Belgium

**Joanne K. Tobacman**

Univ. of Illinois, Chicago

**Ildiko Toma**

Univ. of Southern CA, Los Angeles

**Jashvant D. Unadkat**

Univ. of Washington, Seattle

**Laura S. Van Winkle**

Univ. of California, Davis

**Marcia R. Venegas-Pont**

Univ. of Mississippi, Jackson

**Kalyan C. Vinnakota**

Medical Coll. Wisconsin

**Henrique P. Von Gersdorff**

Oregon Health Sci. Univ., Portland

**Tetsuro Wakatsuki**

Medical Coll. of Wisconsin, Milwaukee

**Mary K. Walker**

Univ. of New Mexico

**David J. Waxman**

Boston Univ., MA

**Noah Lucas Weisleder**

Robert Wood Johnson Med. Sch., NJ

**Bradley W. Wilkins**

Univ. of Oregon

**Marlene Ann Wilson**

Univ. of South Carolina, Columbia

**Jianxiang Xu**

Univ. of Louisville, KY

## New Student Members

**Mohammed H. Abdulla**

Univ. of Sains, Malaysia

**Chikara Abe**

Gigu Graduate Sch. Of Med., Japan

**Ejaife Agnani**

Univ. of Strathclyde, UK

**Heather Argadine**

Mayo Clinic, MN

**Bethzaida Astorga**

Univ. of Southern California

**Christina Barry**

Univ. of South Alabama

**Eileen Bauer**

Univ. of Pittsburgh, PA

**Benjamin T. Bikman**

East Carolina Univ., NC

**Ebbe Boedtkjer**

Univ. of Aarhus, Denmark

**Eric Bombardier**

Univ. of Waterloo, Canada

**Erick A. Bourassa**

Univ. of Mississippi

**Kristen M. Brennan**

Washington State Univ.

**Kimberly Anne Brown**

Syracuse Univ., NY

**Cord Brundage**

Univ. of Alaska, Fairbanks

**Scott E. Burley**

Northern Michigan Univ.

**Paulo Caceres**

Henry Ford Hospital, MI

**Cosima Ciuhandu**

Univ. of British Columbia

**Ricardo Costa-e-Sousa**

Fed. Univ., Rio de Janeiro, Brazil

**Joshua Cotter**

Ohio State Univ.

**Debora De Carvalho**

Fed. Univ. of Sao Carlos, Brazil

**Carrie C. Dean**

Lark Atlanta Univ., PA

**Lisa M. Del Valle**

Univ. of Puerto Rico

**Michelle DiGeronimo**

Ohio State Univ.

**Bryan Doreian**

Case Western Reserve Univ., OH

**Maryana Duchcherer**

Univ. of Calgary, Alberta

**Brottamu Dykstra**

Univ. of Alaska, Fairbanks

**Mostafa Elgebaly**

Univ. of Georgia

**Saad Enouri**

Guelph Univ., Canada

**Federico Esposti**

Politecnico Di Milano, Italy

**Fiona C. Familton**

Univ. of Notre Dame, Australia

**Rebecca Ford**

Univ. of Waterloo, Canada

**RC Giachini**

Medical College of Georgia

**Hope Gole**

Univ. of Missouri, Columbia

**Jordan Guenette**

Univ. of British Columbia

**Courtney H. Guenther (DeBruin)**

Univ. of Wisconsin, Madison

**Norberto F. Hernandez-Llanes**

Inst. de Fisiologia Celular, Mexico

**Justin P. Hooker**

Univ. of South Carolina

**Wei Chieh Huang**

Stony Brook Univ., NY

**David Infanger**

Cornell Univ., NY

**Hana Itani**

Univ. of Iowa

**Olan Jackson-Weaver**

Univ. of New Mexico

**Teresa Y. Jackson**

Univ. of Missouri, Columbia

**Yonas Keleta**

Univ. of Texas, San Antonio

**Kristina D. Keys**

Morehouse School of Med., GA

**Areum Kim**

Univ. of Missouri

**Brett Kirby**

Colorado State Univ.

**Julia Kolmakova**

Boston Univ., MA

**Whitney F. Kellett**

Univ. of South Carolina

**Matthew Krause**

York Univ., Canada

**Barbara Kuri**

Case Western Reserve Univ., OH

**Erich Kushner**

Univ. of Colorado, Boulder

**Rita Labatia**

York Univ., Canada

**Ryan Larsen**

Univ. of Massachusetts, Amherst

**Renata Lataro**

Sch. of Med. Ribeirao Preto, Brazil

**Jonah Lee**

Ball State Univ., IN

**Ming De Lin**

Duke Univ., NC

**Katherine Lindborg**

Univ. of Arizona

**Exazevia Logan**

Wake Forest Univ., NC

**Lou Lombardo**

Salisbury Univ., MD

**Katherine-Ann Massey**

Wayne State Univ., MI

**Tanecia R. Mit**

Univ. of Arkansas

**Natasha C. Moningka**

Univ. of Florida

**Anna Moore**

Univ. of Connecticut

**Sydney Murphy**

Univ. of Mississippi

**Altin Ndrira**

Black Watch Soccer Club, FL

**Sean Newsome**

Univ. of Michigan

**Persoulla Nicolaou**

Univ. of Cincinnati

**Kenia Nunes**

Fed. Univ. of Minas Gerais, Brazil

**Max Nunn**

Canterbury Christ Church Univ., UK

**Juliana O. Odetunde**

Univ. of Louisville, KY

**Elizabeth B. Oliveira-Sales**

Fed. Univ. Sao Paulo, Brazil

**Scott Oliver**

Ohio State Univ.

**Min Park**

York Univ., Canada

**Jeff Peterson**

Weill Cornell Medical College (NY)

**Elena Petroff**

Univ. of Iowa

**Jimmy Tam Huy Pham**

California State Univ.

**Christopher P. Renzi**

Univ. of Texas, Austin

**Brandon Rhines**

Ohio State Univ.

**Matthew Robinson**

Colorado State Univ.

**Kamakshi Sachidanandam**

Univ. of Georgia

**Mohamed Saleh**

Medical College of Georgia

**Stephen Schepel**

Cornell Univ., NY

**Graham Scott**

Univ. of British Columbia

**Jyoti Shukla**

Bhabha Atomic Res. Ctr., India

**Darci Sheridan**

Eastern Washington Univ.

**Mario Sierud**

Medical Research Council, UK

**Ana Quenia Silva**

Univ. Federal De Minas Gerais, Brazil

**Flavia Souza**

Louisiana State Univ.

**Paul Spagnuolo**

Univ. of Waterloo, Canada

**Joshua Speed**

Univ. of Mississippi

**Frank Spradley**

Medical College of Georgia

**Meera Sridharan**

St. Louis Univ., MO

**James P. Stice**

Univ. of California, Davis

**Jeffrey Stott**

Univ. of Minnesota

**Xiaowei Sun**

Univ. of Alabama, Birmingham

**Croline E. Svard**

Linkoping Univ., Sweden

**Ricardo Tanhoffer**

Univ. of Sydney, Australia

**Rebecca Torres**

Univ. of South Alabama

**Nathan Tykocki**

Michigan State Univ.

**Jenifer Utz**

Univ. of Nevada, Las Vegas

**William Van Trump**

Univ. of California, Irvine

**Himani Vejandla**

West Virginia Univ.

**Chris Vigna**

Univ. of Waterloo, Canada

**Chi-An Wang**

Univ. of Oregon

**Oliver Witard**

Univ. of Birmingham, UK

**Ashley Woods**

Cornell Univ., NY

**Guangying Wu**

Univ. of Southern California

**Atsuko Yamahiro**

Cornell Univ., NY

**Andrew Yannaccone**

Virginia Commonwealth Univ.

**Xiaoyuan Zhu**

Univ. of Alabama, Birmingham

**Daniel Zoccal**

Univ. of Sao Paulo, Brazil

## New Affiliate Member

**Will Jonen**

California Lutheran Univ.

## Recently Deceased Members

**James R. Cade**

Gainesville, FL

**Setsuro Ebashi**

Okazaki, Japan

**Piero P. Foa**

Southfield, MI

**Samuel L. Leonard**

Ithaca, NY

**Musa A. Hazhiu**

University Heights, OH

**Benjamin Libet**

Davis, CA

**John R. Pappenheimer**

Cambridge, MA

**Hinez P. Pieper**

Cape Coral, FL

**Morris Rickstein**

Coral Gables, FL

**Ronald H. Thompson**

Port Richey, FL

**Donald M. Watkin**

Washington, DC

## Highlights From PhUn Week 2007

More than 100 APS physiologists volunteered their time in reaching out to more than 3000 students last November during Physiology Understanding Week (PhUn Week), the APS member-based annual outreach program to local area K-12 schools ([www.PhUnWeek.org](http://www.PhUnWeek.org)). APS members partnered with more than 70 teachers and science educators from across the nation to develop engaging classroom or campus presentations for students at all grade levels, from day care through twelfth grades. The following vignettes are only a few samples of the excitement and fun generated by the focus on the physiology of health and exercise during the first week in November. All events with the primary APS member and lead teacher coordinators are listed in Table 1.

PhUn Week was kicked off by an all-day event at the Boston Children's Museum that was organized and led by Andrea Gwosdow, museum staff, and a crew of research volunteers. Children were engaged by finding their pulses and experiencing the museum's KidPower Health Exhibit.

Young students listened to their heart beats simply with stethoscopes in rural New Mexico with 2007 APS K-12 Outreach Fellow Jessica Clark (Washington Univ. School of Medicine, St. Louis, MO).

Another 2007 APS K-12 Minority Outreach Fellow, Clintoria

Richards-Williams (Univ. of Alabama, Birmingham) orchestrated department faculty, postdocs, and grad students in working with teachers to reach out to several Birmingham schools. They included a "Dress a Scientist" activity to debunk the traditional perceptions of scientists.

Guido Santacana and Jose Garcia (Univ. of Puerto Rico, Medical Sciences Campus, San Juan) led a team of volunteers and coordinated a two day event with elementary and high school students. Students identified basic health terms in a word find puzzle, and learned about blood flow and heart chambers by coloring activities developed by the volunteer crew. The students were captivated by hamster heart specimens that were brought in by a volunteer whose research was on this animal model.

Teens competed to see how many repetitions they can squeeze an anatomical stress-ball heart while learning about muscle fatigue.

Students measured their blood pressure with stethoscopes and cuffs when APS members visited



Children and families learn to find their pulse at the Boston Children's Museum.

their classroom. In a rural community with only regional schools in Nebraska, students learned about blood pressure by visiting an exercise performance laboratory on the campus of Wayne State College in Wayne, NE. The campus was arranged as an "open house" field trip organized by Barbara Engebretsen.

Students also visited the campus of the University of North Dakota and had a two-day event among different research laboratories, headed by Van Doze and 2007 APS Research Teacher Lorraine O'Shea.



Students listen to their hearts with a stethoscope.



Students eagerly observe a hamster heart specimen.





Teenagers learn about muscle fatigue with a “squeezy” heart.



A high school student on an exercise bicycle prepares to have his blood pressure taken before and after exertion.

**Table 1. Lead coordinators and event sites for PhUn Week 2007. RT: APS Research Teacher (current or past fellow), PS: Primary School, ES: Elementary School, MS: Middle School, HS: High School.**

Lead APS Member Coordinator	Institution	Lead Teacher Coordinator	City, State	School Level
Joey Benoit	Univ. of North Dakota	Sarah Holtzman	Grand Forks, ND	ES
Marvin Bernstein	New Mexico State Univ.	Sandra Cross (RT)	Las Cruces, NM	MS
Lorrie Brilla	Western Washington Univ.	Beth Crissy, Mindy Galbraith, Carter Maden, Mark Parrish, Julie Pohlman, Doug Robinson	Bellingham, WA	HS
Jackie Brittingham	Simpson College	Will Nailor	Indianola, IA	ES
Virginia Brooks	Oregon Health and Science Univ.	Debbie Frankel (RT)	Sherwood, OR	MS
Jessica Clark	Washington Univ. School of Medicine	Kerry Zimmerman	St. Louis, MO	HS
Caron Dean-Bernhoft	Medical College of Wisconsin	Frank Lammers	Milwaukee, WI	ES
Van Doze	Univ. of North Dakota	Lorraine O'Shea (RT)	Grand Forks, ND	MS
Barbara Engebretsen	Wayne State College	Ed Brogie	Wayne, NE	HS
Jeff Falcone	Univ. of Louisville	Jonni Miller (RT)	Louisville, KY	HS
Robin Gandley	Univ. of Pittsburgh	April Wright	Gibsonia, PA	ES
Barbara Goodman	Univ. of South Dakota	Sally Stoll (RT)	Vermillion, SD	MS
Andrea Gwosdow	Gwosdow Associates Science Consultants	Alissa Daniels, Emily Kuross	Boston, MA	PS/ES
David Holtzclaw	Univ. of Nebraska Medical Center	Kaye Goetzinger, Lisa Sterba	Omaha, NE	ES/MS
Steven Miller	Indiana Univ. School of Medicine	Norman Leonard (RT), Kathryn Madren (RT)	Indianapolis, IN	HS
Jeffrey Osborn	Univ. of Kentucky	Donna Martin	Lexington, KY	HS
Clintoria Richards-Williams	Univ. of Alabama at Birmingham	V. Maiden	Birmingham, AL	ES
Roy Russ	Mercer Univ. School of Medicine	Stephanie Blackwell	Macon, GA	ES
Guido Santacana, Jose Garcia Colon	Univ. of Puerto Rico	Zugeily Marcano	San Juan, PR	MS/HS
Patric Stanton	New York Medical College	Maria DeCandia (RT)	Scarsdale, NY	MS/HS
Caroline Sussman	Mayo Clinic	Gina Sundsmo, Jennifer Blaine, Kari Shultz	Rochester, MN	PS/ES
Karen Sweazea, Jessica Snow	Univ. of New Mexico	Craig Snow	Albuquerque, NM	MS
Andrew Thomas	Univ. of Medicine and Dentistry of NJ - New Jersey Medical School	Dawn DeMayo (RT)	Montclair, NJ	HS
Catherine Uyehara	Tripler Army Medical Center	Jo Ann Yamane	Honolulu, HI	ES
Stan Willenbring	Dabney S. Lancaster Community College	Stephen Biscotte (RT)	Roanoke, VA	HS
n/a	n/a	Margaret Shain (RT)	New Albany, IN	MS
n/a	n/a	Cory Slifstein (RT)	Guilford, CT	MS
n/a	n/a	Tonya Smith (RT)	Sumter, SC	MS



**A second grader's note of appreciation for an APS member's visit to the classroom.**

Also from the University of North Dakota, Joseph Benoit (Education Committee) visited his daughter's second grade classroom and received heartfelt thank you notes a few days later.

Other teenagers observed their blood pressure and pulse rate by using the LabTutor monitoring systems generously loaned by ADInstruments, Inc. at two event sites, St. Louis, MO (Jessica Clark in partnership with Alecia Riley of ADI), and Vermillion, SD (Barbara Goodman, APS Councillor, Univ. of South Dakota, and Sally Stoll, past APS Research Teacher).

All event sites received educational resources for students such



**Jose Garcia from the Univ. of Puerto Rico hands out the PhUn Week drawstring sport packs to students as a memento of their visit to the school.**

as the *Science of Life, Physiology Research in Action* comic books, career brochures, and promotional memorabilia such as squeeze anatomical hearts, wrist sweatbands, and drawstring sport packs. The team of volunteers received PhUn Week 2007 t-shirts. Additionally, APS members and

lead teacher coordinators received travel mugs in recognition of their time and efforts in planning successful PhUn Week events across the nation. The great success of this APS member-based program is a tribute to the dedication and commitment of our members who can make an impact on the future generation of research scientists.

Plans are in full motion for PhUn Week 2008 during the week of November 3. The theme will again focus on the physiology of exercise and fitness, but APS members are welcome to focus on other areas of physiology. For more detailed information, be sure to join us for a continental breakfast at the PhUn Week training session on Sunday, April 6 at EB 2008. Send an email to: [phun-week@the-aps.org](mailto:phun-week@the-aps.org) to reserve your spot at the breakfast session, and/or for notification of program updates on the [www.PhUnWeek.org](http://www.PhUnWeek.org) website. For other information, contact Mel Limson in the Education Office at [mlimson@the-aps.org](mailto:mlimson@the-aps.org). ❖



**Students put leads on each other while using ADInstruments PowerLabs data acquisition systems to monitor heart and pulse rates.**

## APS Presents Awards at 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 the Austin Convention Center in Austin, TX from November 7-10, 2007. ABRCMS is a national conference designed to facilitate increased minority involvement in biomedical and behavioral science careers. This three-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. Over 2,400 individuals attended the 2007 ABRCMS including 1,288 undergraduate students, 289 graduate students, 76 postbaccalaureate students, and 35 postdoctoral scientists.

The APS, represented by Clintoria Richards-Williams, a 2007-2008 K-12 Minority Outreach Fellow, was pleased to present \$330 awards to six undergraduate students for the best oral and poster presentations in the physiological sciences during the conference. Students also receive a complimentary one-year print subscription to *Physiology*, an APS denim shirt and are added to the Minority Physiologists Listserv. Fourteen judges, including APS members, Latanya Hammonds-Odie, Spelman College, Evangeline Motley, Meharry Medical College, Shyamal Premaratne, Virginia Union Univ., J. Larry Renfro, Univ. of Connecticut, Richard B. Robinson, Columbia Univ., and Roy L. Sutliff, Emory Univ., selected the winners:

Kwesi Blackman (Undergraduate Sophomore); Kingsborough Community College; "Di-(2-ethylhexyl) Phthalate (DEHP) Affects *Drosophila melanogaster* Development Possibly Through Meiotic Defects During Spermatogenesis;"

Obinna Mmagu (Undergraduate Junior); Univ. of Delaware; "The PPAR $\alpha$  Agonist, Fenofibrate, Increases MUC1 Expression in T47D Breast Cancer Cells;"

Chau Tran (Undergraduate Junior); Univ. of California, San Diego; "The Role of Matrix Gla Protein in Preventing

Systemic Calcification of Soft Tissues;"

Leslie Amonoo (Undergraduate Senior); Univ. of Iowa; "MAP2 Expression in Mouse Retina and its Potential Contributions to Blinding Eye Disease;"

Reyniak Richards (Undergraduate Senior); Oakwood College; "Binding Studies of Aptamer and Universal Antidote Complexes;"

Debi Thomas (Undergraduate Senior); Univ. of California, Davis; "Perinatal Exposure to 2,2',4,4'-Tetrabromodiphenyl Ether (PBDE-47) Retards Growth and Delays Neurodevelopment of C57BL/6J Mice."

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

Richards-Williams also staffed an exhibit booth, highlighting the following awards, programs and resources for minority groups underrepresented in science:

APS/NIDDK Minority Travel Fellowship, providing travel support for 50-70 students annually. This fellowship provides funds to attend Experimental Biology and the fall APS conferences. Awardees also are paired with a mentor, an APS member, in their area of research. The intent of this program is to increase participation of pre- and postdoctoral minority students in the physiological sciences;

Undergraduate Summer Research Fellowship, supporting up to 24. fellowships each year. Fellowships support full-time undergraduate students to

work in the laboratory of an APS member. The goal of this program is to excite and encourage students to pursue a career as a basic research scientist;

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

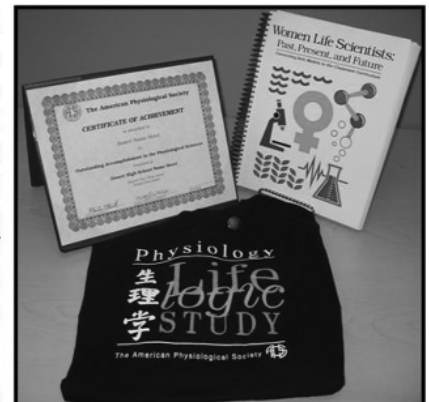
APS Minority Listserv, providing information on APS News, awards, grants, fellowships, science news, positions available and more.

The Career brochure and Career web site, the Archive of Teaching Resources, the Timeline of Physiology, membership for students, and information about Experimental Biology 2008 also were provided for participants.

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. ❖

### 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)

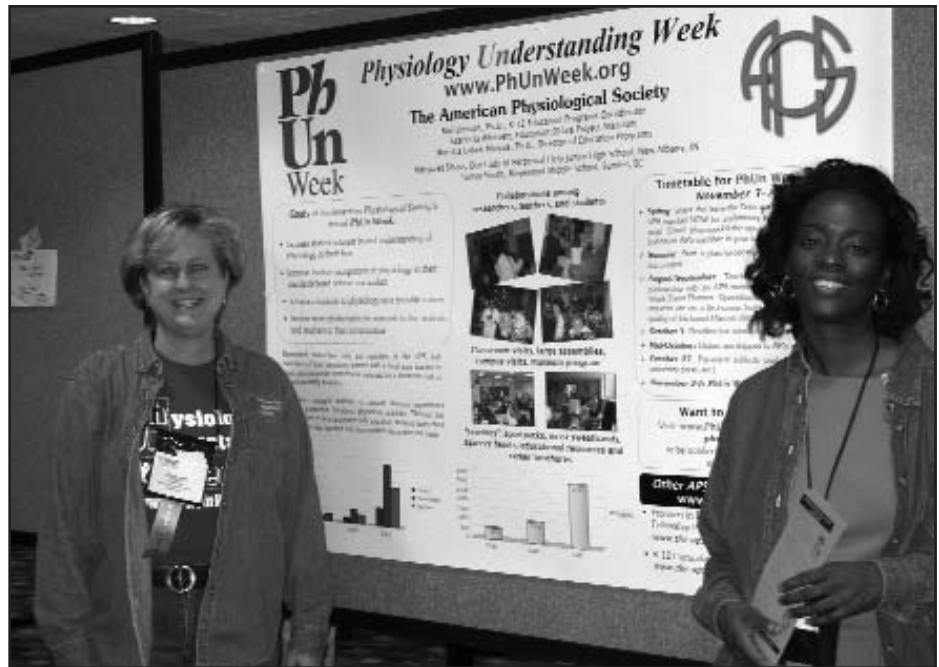


## APS Represented at the National Association of Biology Teachers 2007 Professional Development Conference in Atlanta

Margaret Shain and Tonya Smith, both current Mentor/Instructors for the 2007 Frontiers in Physiology Fellowship for science teachers, assisted Education Office members, Scarletta Whitsett and Mel Limson, and represented the APS at the National Association of Biology Teachers 2007 Professional Development Conference at the end of November in Atlanta, GA.

Shain and Smith assisted in presenting a Physiology Understanding Week poster during the K-12 Outreach Symposium prior to the official opening of the conference. Along with Education Office staff, they then showcased APS Education programs, fellowships, and awards at the exhibit booth throughout the 3-day conference. The annual national conference attracts middle and high school teachers, as well as community college and 4 year college instructors or faculty from across the nation.

Shain and Smith also co-facilitated two workshop sessions for their teacher



**Margaret Shain and Tonya Smith present the APS' Physiology Understanding Week poster in addition to other APS-sponsored workshops and exhibit booth at the annual professional development conference for biology teachers.**

colleagues. Smith led a classroom activity on the digestive system using common household items. The activity was developed by a past Research Teacher in the APS Frontiers in Physiology

Fellowship program (2002), Diana Hill, and was entitled, "Junkyard Digestion."

Shain led a teacher exercise for transforming a traditional "cookbook" lab to incorporate inquiry, equity/diversity, and technology in order to cultivate a better curriculum for any teacher's instructional strategies. This practice is a central element for the annual year-long Frontiers in Physiology Fellowship program for science teachers.

Shain is a middle school science teacher at Our Lady of Perpetual Help School in New Albany, IN, and has been affiliated with APS Education programs since 2000. Smith is a sixth grade science teacher, department chair, and district instructional facilitator at Mayewood Middle School in Sumter, SC, and has been affiliated with the APS Education programs since 2004. ❖



**Teacher participants in an APS workshop on digestion modeled how crackers are processed from the mouth through excretion using orange juice, funnels, filters, zippie bags, pantyhose, and duct tape.**

## Education Special Sessions at EB

### Refresher Course in Respiratory Physiology

(Sponsored by the APS Education Committee)

Saturday, April 5, 8:00 AM – 12:00 NOON

Convention Center, Rm. 27

*Organizers:* L. Britt Wilson, Robert W. Brock

*Speakers:*

**John B. West:** Mechanics of Breathing

**Steven E. DiCarlo:** Alveolar Ventilation/Diffusion of Gases

**Robb W. Glenny:** Ventilation/Perfusion Matching

**Michael G. Levitzky:** Cardiopulmonary Integration

### Mentoring Symposium: Gainfully Employed: From Launching a Job Search to Navigating Negotiations

(Jointly sponsored by the APS Women in Physiology  
and ASPET Women in Pharmacology Committees)

Tuesday, April 8, 8:00–10:00 AM

Convention Center, Rm. 28A

*Organizers:* Siribhinya Benyajati (APS), Colleen Cosgrove

Hegg (APS), Jelveh Lameh (ASPET)

*Speakers:*

**Colleen Cosgrove Hegg:** Launching a Job Search

**Susan C. McKarns:** Delivering a Dynamic Job Talk

**Lynn Wecker:** The Art of Interviewing: Winning the Job

**Kim E. Barrett:** Navigating Negotiations

### Careers Symposium: Mid-career Transitions: Choices and Challenges

(Sponsored by the APS Career Opportunities in

Physiology Committee)

Monday, April 7, 5:45 – 7:45 PM

Convention Center, Rm. 22

*Organizers:* Rolando E. Rumbaut, Nansie McHugh

*Speakers:*

**Marian R. Walters:** How to manage mid-career transitions:  
voluntary and involuntary

**David M. Pollock:** Transitions from industry to academia  
(and vice-versa)

**Edward J. Zambraski:** Scientific career opportunities in  
the government/military

**D. Neil Granger:** Assuming administrative/leadership posi-  
tions while maintaining an active research program

### Trainee Symposium: Marketing Yourself on Paper for Academic Positions

(Sponsored by the APS Trainee Advisory Committee)

Sunday, April 6, 8:00 – 10:00 AM

Convention Center, Rm. 25C

*Organizers:* Lacy A. Holowatz, Eric Berglund

*Speakers:*

**Ryan Wheeler:** Academic Cover letters & the Art of Self-  
Presentation

**James A. Pawelczyk:** Crafting the Research Statement


**Kevin Johnston:** Creating a Teaching Philosophy You Can Use

# Ph Un Week

2008

*Physiology Understanding Week*

*November 3-7*



[www.PhUnWeek.org](http://www.PhUnWeek.org)

## *PhUn Week Training at EB 2008!*

**Date:** Sunday, April 6

**Time:** 9:00 am - 11:00 pm

**Location:** San Diego Marriott Hotel & Marina

*Co-sponsored by the APS and ADInstruments, Inc.*

Interested in reaching out to your local K-12 schools? Ever consider bringing your lab group to do a "show and tell" in a classroom? Need resources and freebies to excite youth into research science and physiology? Want to have an impact on precollege students? Start planning now with teachers in your community to prepare for **Physiology Understanding Week** this November. Send an email to: [phunweek@the-aps.org](mailto:phunweek@the-aps.org) for notifications on program development and/or to reserve your spot for a continental breakfast at the EB 2008 PhUn Week Training session.

[www.PhUnWeek.org](http://www.PhUnWeek.org)

## Selecting Your First Postdoctoral Position

Catherine M. Fuller, Univ. of Alabama, Birmingham

Choosing your first postdoctoral position is an important step in your decision to become an academic scientist. For some people (usually the lucky few), the decision is obvious; they have already identified a mentor or perhaps have made the decision to leave the "traditional" academic environment for a position in industry, teaching or in a completely different field such as law. Women, in particular, may have chosen to focus on family and home, either planning to return to science at a later date or because they are following a partner. While all of these are personal decisions, this article assumes that you are about 12-18 months away from graduating with a PhD/D Phil, and are beginning to consider traditional academic opportunities for your postdoctoral fellowship.

### Set Your Goals

The first and most important question to ask yourself is where do you see yourself in 10-15 years time? If you are considering a postdoctoral position within the conventional university setting, then it is likely that you see yourself as a tenure-track or tenured faculty member with a mixed load of research, teaching, and administrative responsibilities. You are probably fully aware of the problems associated with such a position (dependence on external funding, heavy teaching loads, extensive committee assignments), from observing your current the-



Catherine M. Fuller

sis advisor and other faculty members in your department. However, one would hope that you also feel the great satisfaction that comes from doing laboratory science, i.e., testing and proving an hypothesis, trouble-shooting experimental problems, and having a manuscript submitted for publication. This is why your choice of postdoctoral mentor can be so important; at best this person will continue to foster and encourage your efforts towards your chosen career, and will have your best interests at heart; at worst he/she will be indifferent to your career goals and will be chiefly focused on their own success.

### Selecting a Mentor

So, having thought about your future goals and having decided that you do indeed want to pursue a career in academic science, you now need to select a mentor. You should by now have had sufficient exposure to science to be excited by a particular area of research, which may or may not be related to your current thesis project. Make a realistic appraisal of your own skills, abilities, and accomplishments and factor this into your decision. What new skills and techniques do you want to learn? Take into account your publication record, which is important even at the level of a senior graduate student. Many, if not all, graduate programs require the publica-

tion of one to two manuscripts prior to graduation, so you should have something to show for the time spent in graduate school in addition to your thesis. Good mentors will encourage their postdoctoral fellows and even graduate students to apply for independent funding, either through the NIH NRSA mechanism or through charitable foundations, and it is far more likely that these applications will be successful if you are able to convince the reviewers of your ability to carry out a project using the evidence of prior publications in peer-reviewed journals.

### Finding Potential Laboratories

It is common for people to take postdoctoral positions in laboratories run by colleagues/friends of their thesis advisor who work in related fields, or with individuals they have met either at scientific meetings or while that individual was visiting their institution. However, do not be put off from applying for a position in an area unrelated to your thesis work if that is what interests you; over the course of your PhD you will have acquired an easily transferable skill set and most prospective mentors will be willing to consider individuals with little project specific experience. Furthermore, do not allow yourself to be pushed in to taking a position because it is convenient or because someone else thinks you should; you should have enough laboratory experience by now to realize that if you are working in an area or situation to which you are not committed, your research will quickly become tedious and uninteresting to you. Not being confined intellectually also extends to geographical locations. Many prospective postdoctoral fellows are restricted in their choice of location for their next job by family or other concerns. If you are fortunate enough that this does not apply to you, consider also the possibility of pursuing a postdoctoral fellowship outside of the country. If you speak a second language, your choice might be easier, but even if not, it is easier to function in a foreign country

*Catherine Fuller is an Associate Professor in the Department of Physiology and Biophysics at the University of Alabama, Birmingham. She received her BSc (Hons.) degree from the University of London, and her PhD from the University of Liverpool, in the laboratory of O.H. Petersen. She was a postdoctoral fellow in the laboratory of Irene Schulz at the Max Planck Institut fur Biophysik (Frankfurt, Germany), from 1985-1988. She joined the Department of Physiology and Biophysics as a postdoctoral fellow in the laboratory of Dale J. Benos in 1988. She joined the faculty of the department in 1995.*



both in and out of the laboratory setting than you probably anticipate.

While not always the case, the majority of graduate students will leave their thesis lab in order to pursue a postdoctoral fellowship elsewhere. What about staying in your current lab or institution? The motivation for doing this could be to complete a long-term study or because you are very committed to the research done in that particular lab. If funding is available and the mentor is willing, this can be a very comfortable option and for some people it may be the best; however, you should think again about your position 10 or 15 years in the future; what additional skills or techniques will you learn by staying in your current lab? Is there really nothing you would learn by moving elsewhere? Your PhD mentor may want you to stay on for a short time to finish experiments, write a paper or to teach an incoming lab member a technique. In general, this is rarely a problem, but in this case, you should have a clear idea of how long a period is involved.

## Consider the Laboratory

What other factors should you consider when choosing a postdoctoral laboratory? As it is likely that you will be asked to visit the prospective mentor and to give a short talk based on your thesis work, you should get the opportunity to visit the laboratory and to talk to the other post-docs and graduate students. Consider the size of the lab; is this a small lab of three to four people or are there many post-docs and students? In some large labs multiple post-docs might work on the same project—if this seems to be the case, do they have well-demarcated areas of responsibility or is there a lot of overlap? This latter situation can lead to an unpleasant and highly competitive working environment. Will you be the only post-doc in a lab with several graduate or undergraduate students? In this scenario, you may end up spending more time supervising and trouble-shooting student projects rather than working on your own research. Do the students and post-docs regularly attend local, national or maybe even international meetings to present their work either orally or in poster format?

Do they have the opportunity to present their work in house? Do the people in the lab seem to get along well? Are there lab activities in which everyone participates (parties, picnics, film nights, ski-days etc.), or does there seem to be little social interaction? Remember, that you are going to be spending many of your waking hours with these individuals! Most importantly, do the other people in the lab seem to be enjoying what they are doing? Are they happy, confident, do they talk enthusiastically about their projects? Or do they seem stressed and depressed? Would you be excited to work there?

## Consider the Mentor

Consider the mentor him/herself. Obviously you would want to work with someone with whom you can connect and by whom you are not intimidated. Is the prospective mentor a full professor with a solid track-record or a newly appointed assistant professor? In the first case, the laboratory environment is likely to be stable, the projects clearly focused, and all required equipment/techniques will be on hand. In the latter case, the laboratory environment may not be so established and publication rate may be slower, but it could be a very exciting opportunity and will provide hands-on experience of establishing a new lab that you can draw on when you are in a similar position. Does the mentor have time for you? If you like to interact closely with a mentor, working for a principle investigator who is a “star” may not be right for you, as that individual is likely to have a busy travel and administrative schedule. However, if you can work independently with little hands-on input from the PI, then such a position may be appropriate for you. On the other hand, a mentor that micro-manages the laboratory may make it difficult for you to work at all. Does the laboratory publish routinely in good journals? Or do they publish few papers but always in a high-impact journal? Or do they not publish much at all? Does the mentor give recognition and credit to the people in the laboratory when he/she is giving a talk? Is the mentor supportive of you applying for your own funding,

or becoming involved in the teaching effort of the department? What are prior post-docs currently doing? Are they in independent academic positions, in other science-related fields or are they out of science altogether?

## Getting Advice

If you have a good relationship with your thesis advisor, this person can be one of your greatest assets in selecting a postdoctoral position, and not just because he/she will be providing you with a letter of recommendation! It is likely that he/she may know the individual whom you are considering for your postdoctoral fellowship (if only by reputation) and will be able to offer you some insights as to the suitability of that position for you. If, for whatever reason you don't want to broach this with your current thesis advisor, perhaps someone on your committee or another faculty member may be able to offer some advice. Your thesis advisor may not be fully supportive of your applying for a particular position; they may think that the work would be outside of your particular capabilities, may know something about that particular laboratory that you don't or (rarely) it may even reflect their own personal prejudice against an individual or research area. However, they should explain the basis for their opinion; again you can always seek the advice of others concerning the suitability of a particular lab.

## Final Thoughts

Clearly, not all of the points outlined above will apply to every mentor/postdoctoral fellow combination, but represent points that should be considered based on your own career goals and personal situation. The most important thing to consider is the project itself. If the topic you will be working on genuinely interests you and can sustain you during those sometimes long periods when “nothing works,” then the stage should be set for a successful first postdoctoral experience. ❖

*To comment on this article, go to [www.the-aps.org/careers/careers1/mentor/firstpostdoc.htm](http://www.the-aps.org/careers/careers1/mentor/firstpostdoc.htm).*

## Communications Committee Looks to Harness the Internet

Using the internet to its fullest was the focus of much of the Communications Committee meeting that took place at APS headquarters November 6-7.

The committee planned for the Experimental Biology 2008 Communications Symposium, *How You Can Harness the Internet to Reach the Public: Podcasts, Blogs, Wikis and More*. The symposium will take place 1 pm to 3 pm, Saturday, April 5 at the Experimental Biology 2008 meeting in San Diego. Please attend! Our speakers include:

Kirsten Sanford, the co-host of the popular science podcast *This Week in Science*, as well as a past APS-sponsored AAAS Mass Media Fellow. She will discuss podcasts and blogs.

Christopher Quick of Texas A&M University, who will discuss his online and open source eBat project.

Christine Guilfooy, APS Communications Specialist, who will discuss the making of the APS podcast, *Life Lines*.

The committee has also been working to increase the visibility of the APS web site and has begun efforts to increase our Google ranking by:

- launching the podcast;
- constructing a wiki;
- updating our public web pages, Physiology Info and Topics in Physiology;
- updating our home page;
- linking with the web sites of other prestigious organizations.

The committee has been working to further develop the new APS podcast, *Life Lines* ([www.lifelines.tv](http://www.lifelines.tv)) to increase its popularity and increase the public's awareness of physiology. ❖

vided coverage. Several stories also appeared in India, including the *Times of India* and *Daily India.com*. The Washington news radio station, WTOG, was among the outlets that interviewed Dr. Todd Kuiken, the principal author, and ran stories in the US.

We also featured the prosthetic study on our second episode of *Life Lines*. You can listen at [www.lifelines.tv](http://www.lifelines.tv) or by downloading the episode through iTunes or any other podcatcher of your choice. The second episode also included an interview with Ken Storey, who talked about how wood frogs can freeze, then thaw out and live and an interview with Jim Hicks, who talked about the unique structure of the alligator heart.

We issued press releases at the beginning of PhUn (Physiology Understanding) Week and with the announcement that Joey Granger won the Bodil Schmidt-Nielsen Mentor/Scientist Award.

If you know of a study that is in Articles in Press and might be of interest to the general public, please drop a line to Communications Director Donna Krupa at [dkrupa@the-aps.org](mailto:dkrupa@the-aps.org) or call her at 301-634-7209. ❖

## Physiology in the News

Our press release on a study from the *Journal of Neurophysiology*, "Thinking Makes It So: Science Extends the Reach of Prosthetic Arms" received a lot of attention, particularly in Great Britain and India.

The *Telegraph* and *New Scientist* were among the outlets in the U.K. that pro-

## 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 sent to: The APS Bowditch Lecture Award, c/o Linda Jean Dresser, 9650 Rockville Pike, Bethesda, MD 20814-3991; or submitted online at [http://www.the-aps.org/cgi-bin/Election/Lecture\\_form.htm](http://www.the-aps.org/cgi-bin/Election/Lecture_form.htm).

## 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 sent to: The APS Cannon Lecture Award, c/o Linda Jean Dresser, 9650 Rockville Pike, Bethesda, MD 20814-3991; or submitted online at [http://www.the-aps.org/cgi-bin/Election/Lecture\\_form.htm](http://www.the-aps.org/cgi-bin/Election/Lecture_form.htm).

## Congress Finalizes FY 2008 Funding for Research

On December 19, 2007, nearly three months after the start of the 2008 fiscal year, Congress approved the *Consolidated Appropriations Act, 2008* (H.R. 2764) to fund most federal agencies, including the National Institutes of Health (NIH), the National Science Foundation (NSF), NASA and the VA. Despite objecting to the number of earmarks included in the legislation, President Bush signed the bill into law on December 26. Funding levels for key research agencies are outlined below.

### National Institutes of Health

In FY 2008, the NIH will receive a

### Congress Mandates Public Access to Publicly-funded Biomedical Research

As part of the *Consolidated Appropriations Act, 2008*, Congress included the following language:

“The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine’s PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication: Provided, That the NIH shall implement the public access policy in a manner consistent with copyright law.”

The current policy, which encourages voluntary submission of accepted manuscripts to PubMed Central, has not met with great success. The new language requires NIH-funded researchers to deposit their manuscripts. Exactly how the NIH will implement this directive “in a manner consistent with copyright law” has not yet been announced. ❖

total of \$29.2 billion, a 1.1% (\$329 million) increase over FY 2007 funding. However, an additional \$196 million will be transferred to the Global Fund to Fight AIDS, Tuberculosis and Malaria, leaving the NIH with \$28.9 billion, a mere 0.46% increase over last year. This will be the fourth consecutive year that the NIH budget increase has failed to keep pace with the rate of inflation for biomedical research, estimated at 3.7% for FY 2008. President Bush vetoed an earlier version of the funding measure that would have provided the NIH with an additional \$1 billion in 2008.

While the *Consolidated Appropriations Act, 2008* will essentially provide flat funding or modest increases for most institutes and centers in 2008, some programs will receive increases. The National Children’s Health Study will receive an additional \$42 million (for a total of \$111 million), and the Common Fund for trans-NIH initiatives will grow to \$495 million with a \$12 million increase over last year.

### National Science Foundation

The NSF will receive an increase of 2.5% (\$148 million) in FY 2008, bringing the agency’s total budget to \$6.065 billion. This is a disappointing outcome on the heels of the *America COMPETES Act of 2007*, authorizing legislation that called for putting the agency on track to double its budget over the next several years. The funding level also falls short of the Administration’s budget request that called for an 8.7% increase over FY 2007. Education programs at NSF received a boost of 4% over last year, faring better than research programs, which grew by only 1.2%.

### VA

Funding for Medical and Prosthetic research at the VA was the bright spot in this year’s funding bill, with the program receiving \$480 million in FY 2008, a 16.5% (\$68 million) increase over last year.

### NASA

Funding for NASA’s overall budget increased by 3.1% to a total of \$17.3 billion in FY 2008. While this is a positive result for the agency, the increasing costs of the space shuttle, international space station and other competing priorities have strained the agency’s ability to fund science programs.

## APHIS Policies Should Conform To AWA Regulations

APS has recommended that the USDA conduct a thorough review of the Animal and Plant Health Inspection Service’s (APHIS) Animal Care (AC) Policy Manual to ensure consistency with the Animal Welfare Act (AWA) and the AWA Regulations. This was one of the recommendations made in comments on the AC Policy Manual that were submitted to USDA November 13, 2007.

On July 24, 2007, APHIS published a request for public comments on the AC Policy Manual with a comment deadline of September 24, 2007. However, the notice attracted considerable interest, and the comment deadline was extended to November 16. In the end, more than 60 individuals and organizations submitted comments. Many were submitted by the members of research community challenging various sections of the manual that lack scientific justification or regulatory authority. Certain USDA policies have been a long-running source of frustration because they were used as a quasi-regulatory framework by USDA inspectors even though they were developed and implemented internally by the USDA with no opportunity—until now—for public comment or critique.

In its announcement, APHIS described the AC manual as “[g]uidance developed primarily for USDA’s Animal Care field inspectors, and provided to the regulated community, which clarifies, interprets, and/or provides examples of how to comply with an existing Animal Welfare Act regulation or standard.” It explained that it was issuing a request for comments because of a January 25, 2007 bulletin from the Office of Management and Budget on Agency Good Guidance Practices that now requires federal agencies to publish “significant guidance documents” for public comment. However, while such comments are to be given “due consideration,” according to APHIS this process differs from the notice and comment requirement for regulations in that the agency is not required to publish a response to the recommendations it receives.

In its comments, APS noted, “It has long been a source of concern to the research community that the AC Policy Manual, which is a guidance document,



has been used as if it had the authority of a regulatory document.” APS echoed the recommendation of the National Association for Biomedical Research (NABR) that each policy be reviewed in light of the OMB Bulletin, which calls upon agencies to eliminate the use of “mandatory” language such as “shall,” “must,” “required,” or “requirement” except in cases where the policy is restating a statutory or regulatory requirement. The APS recommended further that in each case, the revised language “should clarify. . .that alternative means to comply with the guidance provided in the Policies are permissible.”

APS specifically urged USDA to revise certain aspects of the Manual that deal with veterinary care (Policy #3), painful procedures (Policy #11), consideration of alternatives to painful/distressful procedures (Policy #12), major survival surgery (Policy #14), IACUC membership (Policy # 15), and annual reports (Policy #17).

The text of the APS comments on the APHIS AC Policy Manual is available at <http://www.the-aps.org/pa/resources/archives/comments/APHIS.htm>.

## Institutions Speak Out Against Extremists

In the wake of a rash of vandalism and harassment from animal rights extremists, a number of organizations have issued public statements denouncing violence against those who conduct medical research with animals. These statements were made in the wake of a series of incidents during the past year and a half at the University of California and the Oregon Health Sciences University.

The University of California has been a focus of animal extremists who have targeted not only facilities, but also the homes and families of three UCLA faculty researchers. Most recently, vandals claiming to be members of the Animal Liberation Front (ALF) flooded the home of Edythe London, a researcher

who is studying the effects of nicotine and methamphetamine addiction. In June, animal militants claimed credit for placing a lit firebomb that fortunately did not explode under the car of another faculty member. In August 2006, a vision researcher gave up his animal research program after extremists placed a Molotov cocktail at the doorstep of the home of an elderly woman, erroneously believing that it belonged to one of his colleagues. [<http://www.the-aps.org/publications/tphys/2006html/October/paffair.htm#research>]

Oregon Health Science University (OHSU) has likewise been a frequent target of extremists, in part due to its National Primate Research Center, the source of promising and high profile research including the November 15, 2007 announcement of the first successful cloning of a primate embryonic stem cell. In July, “ALF Eyes on You” was painted on the garage door of one researcher. This act of vandalism was followed by a threat to firebomb his home. In December, Dr. Miles Novy, who works to reduce the risks of premature births, found “sadist” and “ALF” spray painted on his cars. These attacks follow years of harassment and nighttime protests at OHSU researchers’ homes.

On October 22, 2007 the Association of American Universities (AAU) issued a statement [[http://www.aau.edu/research/STMT\\_AAU\\_Animal\\_Res\\_10-22-07.pdf](http://www.aau.edu/research/STMT_AAU_Animal_Res_10-22-07.pdf)] emphasizing the “vital role” animal research has played in “virtually every major biomedical advance of the last century.” The AAU went on to assert that while universities should “provide a forum for civil discourse” they also have an “obligation to protect faculty, staff members, and students from harassment, threats, and physical harm.”

On November 28, 2007 the American Association for the Advancement of Science (AAAS) issued a statement [[http://www.aaas.org/news/releases/2007/1129board\\_anires.shtml](http://www.aaas.org/news/releases/2007/1129board_anires.shtml)] condemning violence, maintaining its long-time support for animal research, and calling on scientists and the public to

rally together to defend targeted investigators “whose freedom to conduct research is under attack.”

On December 5, 2007, the Chancellors of the University of California (UC) issued a statement [<http://www.universityofcalifornia.edu/news/article/16956>] declaring the value of animal research and condemning the violence of animal rights extremists. The Chancellors’ Statement reaffirmed the invaluable role animal research plays in medical advancement and asserted the university’s dedication to “the highest standards of animal care, safety and health.” It also reiterated the University’s commitment to free speech as a cornerstone of an academic environment. The statement went on to say that, though “individuals are entitled . . . to mount First Amendment-protected protests” these escalated tactics “have crossed the line.”

December 18, 2007 the Council on Governmental Relations likewise issued a statement [<http://206.151.87.67/docs/AnimalResearchStatement.doc>] condemning violence. It went further to maintain “that the rights to free inquiry and expression within the boundaries of applicable laws, regulations and institutional policies are fundamental to academic freedom” and that “among these rights is the responsible and humane treatment and use of animals in research that continues to make vital contributions to the health and well being of humans and animals.”

Meanwhile, NIH Deputy Director for Extramural Research Norka Ruiz Bravo issued two statements in response to the increase in violence. The first was issued November 1, 2007 [<http://www.nih.gov/news/pr/nov2007/od-02.htm>] and the second on December 14, 2007 [<http://www.nih.gov/news/pr/dec2007/oe-14.htm>]. Ruiz Bravo defended the scientists who have come under attack and outlined the pressing need for their research. “Terrorist acts are absolutely intolerable,” Ruiz Bravo said, adding “threats to research with animals threaten the health of the nation.” ❖

## 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>. ❖

## APS Research Journals' Time to Publication Dramatically Shortens in 2007

If you have published an article in one of the APS research journals in the second half of 2007, you may have noticed that the time it took from acceptance of your manuscript to final publication was much shorter than in the past. That is because the Publications Department decreased that time from an average of four months to two and a half months.

A year of meetings and workflow changes put together by the Editorial, Editorial Art, and Peer Review Managers of the department (Mark Goodwin, Eric Pesanelli, and Gil Ebner), put Publications in a position to make a real change. With the help and guidance of APS's printer/compositor, Cadmus, they were able to move to an article-based workflow that made the final difference in shortening the time. Every Journal Supervisor, Copy Editor, and Art Editor stepped up to the challenge and started working in this new workflow. The results have been dramatic.

Perhaps without realizing it, authors have helped, too. APS has been encouraging authors to submit source files (the files used to create the document, i.e., the Word document for the text) during peer review, instead of the PDF version

**Table 1. 2007 Time to Publication for APS Research Journals (in months).**

	January-June Average	July-December Average
<i>AJP-Cell</i>	4.6	2.9
<i>AJP-Endo</i>	4.1	2.8
<i>AJP-GI</i>	4.1	2.3
<i>AJP-Lung</i>	4.1	2.6
<i>AJP-Heart</i>	4.2	2.9
<i>AJP-Regu</i>	3.9	2.5
<i>AJP-Renal</i>	4.1	2.6
<i>JAP</i>	3.7	2.8
<i>PG</i>	3.4	3.7*
<i>JN</i>	2.6	2.3

\*PG is down to 3.0 months for January 2008.

authors had gotten used to submitting. Having those source files upon acceptance of a manuscript has allowed us to move into production much sooner than before, when the Peer Review Department had to work hard in some cases to get the source files from the authors after acceptance, wasting precious days and even weeks.

APS has published accepted manuscripts within a week of acceptance as Articles in PresS since 2003. Even after

the launch of Articles in PresS, however, the time to final publication (printing and posting online in final edited, proofed, and typeset form) was becoming uncompetitive with other journals in related fields.

"We saw the challenge and met it," says Margaret Reich, Director of Publications. "It took a lot of flexibility and creativity, but it was well worth it to better serve our authors." ♦



Staff are pleased with the plummeting time to publication, as reflected on this wall chart in the APS Editorial Department. Some representative staff members are shown here (from left to right). Front row: Mark Goodwin, Eric Pesanelli, Krysia Moore, Karen Concannon, Maria Bokman, David Udoff. Second Row: Stephanie Demma, Ellyn Kestnbaum, Joseph Girouard, Beverly Rude. Back row: Susan Adams, Bonnie Bright, Virginia Million, Martin Mould, Brandy Foster.



PHYSIOLOGY IN PERSPECTIVE:  
THE WALTER B. CANNON  
AWARD LECTURE (SUPPORTED  
BY THE GRASS FOUNDATION)

**Barbara Block**  
Stanford Univ.

*"Ecophysiology in the 21<sup>st</sup>  
Century: Probing Genomes,  
Oceans and Climate  
Change with Bluefin Tuna"*

SATURDAY, APRIL 5, 5:45 PM



HENRY PICKERING BOWDITCH  
AWARD LECTURE

**Stephanie W. Watts**  
Michigan State Univ.

*"The Love of a Lifetime: 5-HT  
in the Cardiovascular  
System"*

SUNDAY, APRIL 6, 5:45 PM



CLAUDE BERNARD  
DISTINGUISHED LECTURESHIP  
OF THE TEACHING OF  
PHYSIOLOGY SECTION

**Randy Olson**  
Filmmaker, Prairie Starfish  
Productions

*"Don't Be Such a Scientist:  
Talking Substance in an  
Age of Style"*

SUNDAY, APRIL 6, 10:30 AM

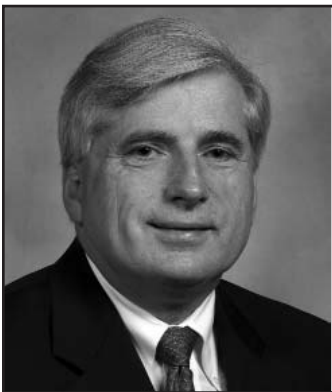


ROBERT M. BERNE  
DISTINGUISHED LECTURESHIP  
OF THE CARDIOVASCULAR  
SECTION

**Michael Wolin**  
New York Medical College

*"Reactive Oxygen Species and  
the Control of Vascular  
Function"*

SUNDAY, APRIL 6, 2:00 PM



ERNEST H. STARLING  
DISTINGUISHED LECTURESHIP  
OF THE WATER AND  
ELECTROLYTE HOMEOSTASIS  
SECTION

**Joey Granger**  
Univ. of Mississippi School of  
Medicine

*"Hypertension During  
Preeclampsia: A Lesson in  
Integrative Physiology"*

SUNDAY, APRIL 6, 3:15 PM



CARL LUDWIG DISTINGUISHED  
LECTURESHIP OF THE NEURAL  
CONTROL AND AUTONOMIC  
REGULATION SECTION

**Patrice Guyenet**  
Univ. of Virginia Health  
System

*"Is Hypertension a  
Neurological Disease?"*

MONDAY, APRIL 7, 8:00 AM



SOLOMON A. BERSON  
DISTINGUISHED LECTURESHIP  
OF THE ENDOCRINOLOGY AND  
METABOLISM SECTION

**David Wasserman**  
Vanderbilt Univ.

*"Four Grams of Glucose"*

MONDAY, APRIL 7, 10:30 AM



HUGH DAVSON  
DISTINGUISHED LECTURESHIP  
OF THE CELL AND MOLECULAR  
PHYSIOLOGY SECTION

**Douglas Eaton**  
Emory Univ. School of  
Medicine

*"The Salt of the Earth, Strike  
While the Ion is Hot"*

MONDAY, APRIL 7, 2:00 PM





EDWARD F. ADOLPH  
DISTINGUISHED LECTURESHIP  
OF THE ENVIRONMENTAL AND  
EXERCISE PHYSIOLOGY  
SECTION

**Ronald Terjung**  
Univ. of Missouri, Columbia

*"Vascular Adaptations  
Induced by Exercise"*

MONDAY, APRIL 7, 2:00 PM



AUGUST KROGH  
DISTINGUISHED LECTURESHIP  
OF THE COMPARATIVE &  
EVOLUTIONARY PHYSIOLOGY  
SECTION

**David Evans**  
Univ. of Florida

*"Osmoregulation in Fishes:  
What Have We Learned Since  
August Krogh, Homer Smith  
and Ancel Keys?"*

MONDAY, APRIL 7, 3:15 PM



JULIUS H. COMROE, JR.  
DISTINGUISHED LECTURESHIP  
OF THE RESPIRATION SECTION

**Stella Kourembanas**  
Harvard Medical School

*"Pulmonary Vascular  
Disease: New Insights on  
Mechanisms & Emerging  
Treatments"*

TUESDAY, APRIL 8, 8:45 AM



JOSEPH ERLANGER  
DISTINGUISHED LECTURESHIP OF  
THE CENTRAL NERVOUS SYSTEM  
SECTION

**Eve Marder**  
Brandeis Univ.

*"Variability, Homeostasis and  
Compensation in Neuronal  
Networks"*

TUESDAY, APRIL 8, 10:30 AM

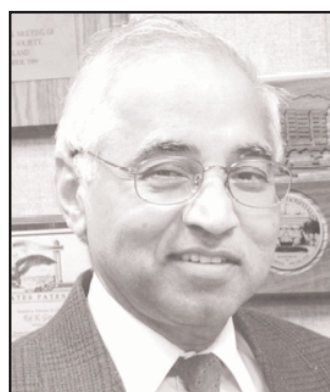


CARL W. GOTTSCHALK  
DISTINGUISHED LECTURESHIP  
OF THE RENAL SECTION

**Peter Aronson**  
Yale Univ. School of Medicine

*"Roles of Ion Exchangers in  
Renal NaCl Transport and  
Pathogenesis of Kidney  
Stones"*

TUESDAY, APRIL 8, 2:00 PM



HORACE W. DAVENPORT  
DISTINGUISHED LECTURESHIP  
OF THE GASTROINTESTINAL &  
LIVER SECTION

**Raj Goyal**  
Harvard Medical School

*"Nitregic Nervous System:  
Its Role in the Gut"*

TUESDAY, APRIL 8, 3:15 PM

WALTER C. RANDALL LECTURER IN BIOMEDICAL ETHICS

**Jerrold Tannenbaum**  
Univ. of California, Davis

*"Bioethics and the Hamburger Principle:  
From Xenotransplantation to Chimeras and Back"*

TUESDAY, APRIL 8, 2:00 PM

Saturday April 5, 2008

Ballroom 20A	(1:00-3:00 PM): Workshop: Mining the Metabolome <b>Samson and Hanley</b>	(3:15-5:15 PM): Workshop: Exercising the Metabolome <b>Parkes and Ferguson</b>	(5:45-6:45 PM): Walter B. Cannon Memorial Award <b>Block</b>
Room 23	(9:00-11:00 AM) MCS Workshop: Bringing it Back to the Whole Animal: In Vivo Techniques for Studying the Microcirculation <b>Unthank and Meininger</b>		
	(2:00-4:00 PM) MCS President's Symp: New Developments for In Vivo Study of the Microcirculation <b>Meininger</b>		
Room 25A	(4:00-6:45 PM) AFMR Translational Research Development Workshop <b>Zucker</b>		
Room 25B	(1:00-3:00 PM) Symp: How You Can Harness the Internet to Reach the Public: Podcasts, Blogs, Wikis and More <b>Belloni</b>		
Room 25C	(3:15-5:15 PM) Symp: What Every Scientist Needs to Know about Ethical Issues in Biomedical Research <b>Reckelhoff</b>		
Room 27	(8:00 AM-12:00 PM) Refresher Course in Respiratory Physiology <b>Wilson and Brock</b>		
Room 28A	(3:00-5:00 PM) Movie: <i>Flock of Dodos: The Evolution-Intelligent Design Circus</i>		
Room 28B	(4:15-5:15 PM) DSI-WEH Student/Fellow Awards Symposium Ecelbarger and Mattson		

## Sunday April 6, 2008

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
Ballroom 20A			Symp: Progress in Pharmacogenomics and Its Promise for Medicine <b>Sobel and Blake</b> (5:45-6:45 PM) Henry Pickering Bowditch Award <b>Watts</b>
Room 22	FT: Smarter Targeting of Genes for Cardiovascular Genomics <b>Paterson and Paton</b>	Symp: The Kidney: Aging, Apoptosis, Endocrine Sensitivity and the Kidney's Role in Hypertension <b>Symonds</b>	Symp: Novel Microscopy Techniques for Imaging Single Molecules in Living Cells and Tissues: RICS/STICS and TIRF Meet PALM while Driving OCT CARS <b>Levi and Peti-Peterdi</b>
Room 23	Symp: Recent Advances in the Renin-Angiotensin-Aldosterone System for the Investigation and Treatment of Hypertension <b>Schnackenberg and Granger</b>	FT: Donald J. Reis Memorial Trainee Symposium <b>Stern and L. DeRuisseau</b>	Symp: Skeletal Muscle Mitochondrial Function and Dysfunction with Age <b>Hood</b>
Room 24	Symp: Caveolae and Caveolins in Cardiovascular Physiology and Disease <b>Patel and Insel</b>	Physiology InFocus: One Physiology Physiology and Global Health <b>Carey and Williams</b>	(2:00-3:00 PM) Berne Lecture of the Cardiovascular Section <b>Wolin</b> (3:15-4:15 PM) Starling Lecture of WEH Section <b>Granger</b> (4:15-5:15 PM): WEH Young Investigator Lecture: <b>Ryan</b> (5:45-7:45 PM): Trainee Highlights in Respiration Physiology: <b>Margulies and Neubauer</b>
Room 25A	FT: Signaling and Control of Skeletal Muscle Remodeling <b>Schilder</b>	Symp: The Na <sup>+</sup> K <sup>+</sup> ATPase Pump: Regulation and Physiological Function in Cardiac and Skeletal Muscle <b>Renaud and Nielsen</b>	Symp: Role of Endogenous Hydrogen Sulfide Signaling in Health and Disease <b>Kraus and Doeller</b>
Room 25B	FT: Renal Ion Transport <b>Carattino and Sansom</b>	Symp: Macromolecular Complexes in Endothelial Force Transduction <b>Frangos and Passerini</b>	Symp: Novel Optical Methods for Studying the Living Circulatory System and Lung <b>St. Croix</b>
Room 25C	Symp: Marketing Yourself on Paper for Academic Positions <b>Holowatz and Berglund</b>	Symp: Publishing 101: Dos and Don'ts of Publishing in APS Journals <b>Barrett</b>	Symp: MicroRNA: Functional Significance in Mammalian Species <b>Liang</b>
Room 26	Symp: Regulatory Mechanisms in Diseases of Epithelial Transport <b>Turner and Nusrat</b>	Symp: The Role of the Carotid Body in Oxygen Homeostasis <b>Lahiri</b>	Symp: Novel Therapeutic Targeting of the Autonomic Nervous System in Heart Failure and Hypertension <b>Foreman and Salgado</b>
Room 27	FT: Out of the Shadows: Uncovering the Role of ACE2 and Ang-(1-7) in Cardiovascular Regulation <b>Lazartigues</b>	Symp: Newly-Emerging Signaling Pathways in the Renal Microcirculation <b>Loutzenhiser and Carmines</b>	(3:15-4:15 PM) MCS Landis Award Lecture <b>Schmid-Schonbein</b>
Room 28A	Symp: Is Formative Assessment an Effective Way to Improve Learning? <b>Kibble and Hansen</b>	(10:30 AM-11:30 AM) Claude Bernard Distinguished Lectureship <b>Olson</b>	Symp: Recent Advances in the Neurobiology of State-Dependent Control of Breathing <b>Kubin and Horner</b>
Room 28B	FT: Renal and Circulatory Physiology and Pathophysiology in Metabolic Syndrome <b>Ecelbarger and Iliescu</b>	FT: Impact of Obesity on Cardiovascular Function: Role of Inflammation <b>Stapp and Tune</b>	FT: Regulation of Ion Channels by Membrane Lipids <b>Ma</b>
Room 6A		Symp: Hepcidin Regulation of Iron Transport <b>Wessling-Resnick, Collins and Knutson</b>	



## Monday April 7, 2008

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
Ballroom 20A	Symp: Extra-Nuclear Steroid Signaling, Roles in Modulating Disease and Physiology <b>Samson and Levin</b>	Symp: Acute Lung Injury and the Acute Respiratory Distress Syndrome (ALI/ARDS): Therapeutics on the Horizon <b>Moore and Fouty</b>	(2:00-3:00 PM) Davson Lecture of the CAMP Section <b>Eaton</b> (3:15-5:15 PM) Symp: Focus on the Fibroblast: Therapeutic Target for the Failing Heart? <b>Long and Villareal</b>
Room 22	FT: Cell Phenotype and Function in Response to Lung Injury and Disease <b>Koval</b>	FT: Energy Balance and Circulatory Control: Central Pathways and Mechanisms <b>Fink and Haywood</b>	NCAR Trainee FT: <b>Potts and Zhang</b> (5:45-7:45 PM) Symp: Mid-Career Transitions: Choices and Challenges <b>Rumbaut and McHugh</b>
Room 23	Symp: Role of Cholesterol in Cardiovascular and Renal Pathology <b>Eaton</b>	Wiggers Award FT: Neural Control of the Circulation: Angiotensin and ROS in Heart Failure and Hypertension <b>Zucker</b>	(2:00-3:00 PM) Adolph Lecture of the EEP Section <b>Terjung</b> (3:15-5:15 PM) Symp: New Insights into the Urine Concentrating Mechanism <b>Sands</b>
Room 24	(8:00-9:00 AM) Ludwig Lecture of the NCAR Section <b>Guyenet</b> (9:00-10:00 AM) NCAR Special Topic: Cardio-Respiratory Control of the Brainstem <b>Potts and Zhang</b>	Physiology InFocus: One Physiology Physiological Basis of Ecosystem Health <b>Williams</b>	FT: Hypertension: Integrated Mechanisms and Sequelae <b>Brands and Webb</b>
Room 25A	FT: Metabolic Syndrome: Molecular Mechanisms, Omics, and Physiology <b>Griffin and Old</b>	FT: Encouraging <i>Unforgettable</i> Learning <b>Wenderoth</b>	Symp: IBS and Chronic Constipation: Mechanisms and Novel Treatments <b>Basavappa</b>
Room 25B	FT: Regulation of Epithelial Transporters and Signaling Processes <b>Caplan and Carmosino</b>	FT: Intercellular Calcium Signaling in the Vasculature <b>Isakson</b>	FT: Hepatocyte Injury to Liver Fibrosis <b>Clemens and Zhang</b>
Room 25C	Symp: Leukocyte-Dependent Arteriolar Vasoregulatory Dysfunction in Inflammatory Conditions <b>Korthuis and Harris</b>	Symp: Microcirculatory Society Young Investigator's Symposium <b>Meininger and Bateman</b>	FT: Hormones and Angiogenesis <b>Levin</b>
Room 26	EEP Symp: Exercise Prescriptions for Prolonged Space Flight <b>Tesch</b>	Symp: Ciliopathies: Common Themes in Diverse Genetic Disorders <b>Satlin and Yoder</b>	Symp: Cell-Cell Communication in Lung Stress Responses <b>Bhattacharya and Koval</b>
Room 27	Symp: The Controversy of Sarcolemmal and Mitochondrial $K^{ATP}$ Channels and Cardioprotection <b>Nichols</b>	(10:30-11:30 AM) Berson Lecture of the Endocrinology and Metabolism Section <b>Wasserman</b>	(3:15-4:15 PM) Krogh Lecture of the CEP Section <b>Evans</b>
Room 28A	FT: Smoking Babies Don't Breathe <b>Harper and Gauda</b>	Symp: Genomic and Proteomics in Colon Cancer <b>Carethers</b>	FT: Role of ROS and NO in Contraction-Stimulated Glucose Uptake in Skeletal Muscle <b>Reid</b>
Room 28B	FT: Molecular Regulators of the Ins and Outs at the Apical Membrane of GI Epithelial Cells <b>Okamoto and Chew</b>	Special Topic: The Antiquity of Exercise, Exercise Physiology, and the Exercise Prescription for Health <b>Tipton and Schneider</b>	FT: Mechanotransduction Mediated by Primary Cilia <b>Liedtke</b>

## Tuesday April 8, 2008

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
Room 22	FT: Renal Hemodynamics <b>J. Pluznick and Welch</b>	Symp: Chateau Resveratrol: Therapeutic Promise for Cardiovascular Diseases <b>Das and Korthuis</b>	FT: O <sub>2</sub> Sensing in Pulmonary Vasculature in Health and Disease <b>Archer</b> (2:00-3:00 PM)
Room 23	FT: Satellite Cell Regulation with Aging and Exercise <b>Hawke</b>	(10:30-11:30 AM) Erlanger Lecture of the CNS Section <b>E. Marder</b>	Gottschalk Lecture of the Renal Section <b>Aronson</b> (3:15-5:15 PM) Symp: Inhibiting Cyclooxygenase with Coxibs and NSAIDs: Efficacy vs. Cardiovascular Risk <b>Reiss and Chan</b>
Room 24	Symp: Temperature Sensing by TRP Channels <b>Zheng and McKemy</b>	Physiology InFocus: One Physiology Global Physiological "Omics": Microbes to Medicine <b>Kwitek and Mockrin</b>	(3:15-4:15 PM) Davenport Lecture of the GI & Liver Physiology Section <b>Goyal</b> (5:45-7:00 PM) APS Business Meeting
Room 25A	FT: Neurohypophyseal Hormones: Regulatory Control in Health and Disease <b>Cunningham and Uyehara</b>	FT: Muscle Fatigue <b>Renaud</b>	FT: Energy Balance, Cancer and Diabetes <b>Nosek</b>
Room 25B	FT: Arteriogenesis and Vascular Remodeling <b>Rocic</b>	FT: Pathophysiology of Renal Injury <b>Sartoro-Valinotti and Sandberg</b>	FT: Apoptosis and Cell Death <b>Quadrilatero</b>
Room 25C	FT: Cyclooxygenases and Cardiovascular Diseases <b>Vanhoutte and Feletou</b>	FT: Bacterial-Intestinal Interaction <b>Gewirtz</b>	FT: Role of TRP Channels in Respiratory Function and Disease <b>Townsley and Kuebler</b>
Room 26	(8:45-9:45 AM) Comroe Lecture of the Respiration Section <b>Kourembanas</b>	FT: Diving Physiology of Mammals and Birds <b>Fahlman</b>	Symp: Neuronal Plasticity in Health and Disease <b>Llewellyn-Smith and Patel</b>
Room 27	Symp: Microbial Infection, Inflammation and Intestinal Transport <b>Dudeja and Merlin</b>	Symp: Systems and Computational Biology: A Direction for Physiology in the 21 <sup>st</sup> Century <b>Ping and Chilian</b>	Symp: Mechano-Sensing at the Vessel Wall in Regulation of Atherogenesis <b>Simon and Hsiai</b>
Room 28A	Symp: Gainfully Employed: From Launching a Job Search to Navigating Negotiations <b>Benyajati, Cosgrove Hegg and Lameh</b>	Symp: Plasticity in Airway Receptor Function: Sensors, Central Integration and Reflex Responses <b>Powell and Lee</b>	(2:00-3:00 PM) Walter C. Randall Lecture on Biomedical Ethics <b>Tannenbaum</b> (3:15-5:15 PM) FT: Oxidative Stress <b>Maron and Pollock</b>
Room 28B	Symp: Computational Physiology <b>Hunter and Nielsen</b>	FT: Regulation of Epithelial Ion and Water Channel <b>Knepper and Helms</b>	Symp: Roles of Vasopressin and Oxytocin in Clinical Disorders <b>Alagarsamy and Uyehara</b>

## Wednesday April 9, 2008

	8:00-10:00 AM	10:30 AM-12:30 PM	3:15-5:15 PM
Room 22	Symp: Cardiac Intracellular Ca <sup>2+</sup> Signaling in Health and Disease <b>Mattiazzi and Rettori</b>	Symp: Cardiac Hormones: For the Treatment of Acute Myocardial Infarctions, Congestive Heart Failure, Acute Renal Failure and Cancer <b>Vesely</b>	
Room 23	Symp: Myriad Mechanisms underlying the Pathophysiology of Diabetes <b>Zhang and Schmidt</b>		
Room 24	Physiology InFocus: One Physiology and Lifestyle <b>Raybould</b>		
Room 25A	Symp: Calponin and the Smooth Muscle Thin Filament <b>Jin</b>	Symp: Reverse Engineering Towards the Goal of Vessel Regeneration <b>Healy and Leach</b>	
Room 25B	FT: Comparative Immunology: Using Non-Model Systems to Understand the Evolution of Immunity <b>Greenlee</b>	Symp: Mechanisms of Metabolic Depression <b>van Breukelen and Podrabsky</b>	
Room 25C	FT: Androgens and the Aging Male and Female <b>Sheffield-Moore</b>	FT: Exercise, Oxidative Stress, and Endothelial Function <b>Phillips</b>	
Room 26	Symp: The Role of GABA and Glutamate on Adult Neurogenesis <b>Vicini</b>		
Room 28A	Symp: Using Nanotechnology to Answer Physiological Questions <b>Miller and Lieske</b>	FT: Plasticity of Respiratory Motoneurons <b>Mantilla and Berger</b>	
Room 28B	FT: Cytokines, Inflammation and Autonomic Regulation <b>Kenney</b>		



## Postdoctoral Positions

### Postdoctoral Research Associate:

Postdoctoral Research Associate needed in the Department of Cellular and Integrative Physiology, University of Nebraska Medical Center to conduct research in ongoing cardiovascular physiology studies utilizing neuronal cell culture and *in vivo* models to investigate the role of free radicals in the central nervous system in the pathogenesis of hypertension. Will be involved in the design of experimental protocols; collection, analysis and interpretation of data; preparation of oral and written scientific reports, such as presentation of results at local, state, and national meetings; composition of scientific manuscripts for submission to journals and writing grant applications. Will also participate in interdepartmental seminars, journal clubs and local and national scientific societies. Will also be expected to incorporate his/her previous skills and knowledge into the evolution of experimental designs, methodology, data interpretations and pursuit of scientific goals. Requires MD or PhD in Medicine/Physiology or related field. Previous experience performing *in vivo* cardiovascular physiology experiments is preferred. Electronic CV, description of research interest and three letters of reference (in PDF format) are preferred and should be submitted to: mmarcua@unmc.edu or you may mail the application package to: Matthew C. Zimmerman, PhD, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, 985850 Nebraska Medical Center, Omaha, NE 68198-5850. The review of applications will continue until the position is filled. Minorities and women are encouraged to apply. [AA/EOE]

**Postdoctoral Associate:** The Division of Nephrology at the University of Utah Health Sciences Center is searching for a Postdoctoral Fellow, MD and/or PhD, with research interest in renal physiology. The individual will participate in an active research project focused on regulation of renal salt and water transport and arterial pressure that is directed by Dr. Donald E. Kohan. The laboratory emphasizes development and use of renal cell-specific gene-targeted mice. Studies are conducted from the molecular biologic, cell biologic, and whole animal physiology

level. Techniques include, but are not limited to, development and use of Cre/lox mice (inducible or constitutive), BP analysis by radiotelemetry, metabolic balance studies, blood flow determination, cell culture, molecular biologic analysis (siRNA using lentiviruses, analysis of transcriptional regulation, and others). There is substantial interaction with other investigators studying renal physiology. The position includes didactic training related to the techniques and field of study, and is part of an NIH T32 training grant. Applicants must be a permanent US resident or a US citizen in order to be eligible for financial support through the T32 mechanism. Application Instructions: interested individuals should submit their CV via email to the address below, and are encouraged to contact Dr. Kohan with any questions. Donald E. Kohan, MD, PhD, Professor of Medicine and Physiology, Chief, Division of Nephrology, University of Utah Health Sciences Center, 1900 East, 30 North, Salt Lake City, UT 84132, Tel.: 801-581-2726, Fax: 801-581-4343, donald.kohan@hsc.utah.edu. Upon receipt and review of the CV, individuals will be contacted and letters of reference solicited. [EOE]

**Postdoctoral Position:** In the Cell Differentiation and Development Center at Marshall University to study the molecular mechanisms which govern cardiovascular adaptation. The successful candidate will have PhD and/or MD, a strong background in physiology and molecular biology, and exceptional oral and written communication skills. Experience with animal models is highly desirable. The candidate will be expected to present research findings at scientific conferences, prepare manuscripts, assist in experimental design, and apply for extramural postdoctoral funding. Salary is nationally competitive and will be commensurate with experience. Review of applications will begin immediately and continue until the position is filled. Please Email curriculum vitae and a brief description of career goals, along with names and contact information of three references in a single PDF document to: Eric Blough, PhD, Laboratory of Molecular Physiology, 241N Byrd Biotechnology Science Center, 1700 3rd Avenue, Huntington WV 25755 USA; Email: blough@marshall.edu. Review of applications will begin immediately. [AA/EOE]

**Postdoctoral Position:** A postdoctoral position in cardiovascular physiology is available at The University of Washington, Seattle, WA. Studies are directed at the regulation of coronary blood flow, especially during exercise. Hypotheses to be tested include the role of ATP and nitrite/nitric oxide in coronary exercise hyperemia. Experiments will involve both anesthetized and chronically instrumented dogs. Previous animal surgery and/or whole animal experimental experience is highly desirable. Applicants should hold a doctoral degree (MD, DVM, or PhD in physiology) and be a US citizen or permanent resident eligible for NIH training grant support. Please send a curriculum vitae and the names of two references to: Eric Feigl, MD, Department of Physiology and Biophysics, Box 357290, University of Washington, Seattle, WA 98195-7290; Email: efeigl@u.washington.edu

### Postdoctoral Research Associate:

The Department of Cellular and Integrative Physiology at the University of Nebraska Medical Center is seeking a Postdoctoral Research Associate to conduct research in ongoing cardiovascular and renal physiology studies utilizing patch clamp, molecular methods, and intricate surgical procedures, analysis of renal function in transgenic mice. Will be involved in the design of experimental protocols; collection, analysis and interpretation of data; preparation of oral and written scientific reports, such as presentation of results at local, state, and national meetings; composition of scientific manuscripts for submission to journals and writing grant applications. Will also participate in interdepartmental seminars, journal clubs and local and national scientific societies. Will also be expected to incorporate his/her previous skills and knowledge into the evolution of experimental designs, methodology, data interpretations and pursuit of scientific goals. Requires MD or PhD in Medicine/Physiology plus 2 years experience in medical research. Also requires demonstrated ability to perform micro catheterization techniques. Please send CV, description of research interests and three letters of reference to: Steven C. Sansom, PhD, Department of Cellular and Integrative Physiology, University of Nebraska Medical Center, 985850 Nebraska Medical Center, Omaha, NE 68198-

5850. Electronic applications (in PDF format) are preferred and should be submitted to: [mmarcua@unmc.edu](mailto:mmarcua@unmc.edu). The review of applications will continue until the position is filled. Minorities and women are encouraged to apply. [AA/EOE]

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**Postdoctoral Position:** The search for new knowledge and new ways to provide care has special meaning at Maine Medical Center. Our focus here is on research that has direct impact on patient care, and on more basic research that lays the groundwork for clinical advances. Our emphasis is on cancer, cardiology, and bone and mineral disease, with other important areas supported as funding allows. The Maine Medical Center Research Institute has attained status not only as a center for biomedical research but as a catalyst for economic and academic growth in the region. An active research program is a direct benefit to our patients, bringing leading-edge treatments to Maine. The Center for Molecular Medicine invites applications from highly motivated individuals to fill a postdoctoral position. The Center for Molecular Medicine is comprised of an interdisciplinary group of scientists focused on investigating signaling mechanisms in cardiovascular disease. The center is housed in a state-of-the-art research building and is supported by excellent core facilities in cell and molecular biology. The position is funded through a Center of Biomedical Research Excellence in Vascular Biology award from the National Institutes of Health. Individuals with strong background in cell and molecular biology, biochemistry and cardiovascular disease are encouraged to apply. The current project will include the use of modern cell and molecular methods to analyze signaling pathways in dyslipidemic cardiomyopathy in *in vivo*, the isolated mouse heart, and *in vitro* approaches. For more information, or to apply please visit [www.mmc.jobs](http://www.mmc.jobs).

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**Postdoctoral Research Fellow:** NIH supported position is available to study epithelial cell signaling. Our laboratory uses a multidisciplinary approach including patch clamp electrophysiology, cellular imaging and biochemical techniques to study the signaling pathways regulating ion channels involved in secretion from intestinal epithelia.

Ongoing studies include the differential regulation of apical and basolateral membrane K channels, basolateral membrane Cl channel activity during changes in secretory rate and coordination of ion channel activation with mucus release. Candidate should have a PhD in physiology or a related discipline (or equivalent). Experience with patch clamping or imaging is preferred. Applications received by January 18, 2008 will receive first consideration. Send curriculum vitae, including a statement of your research interests, along with names and addresses of three references to: Dan R. Halm, Department of Neuroscience, Cell Biology and Physiology, Wright State University, 3640 Colonel Glenn Hwy, Dayton OH 45435. Email: [dan.halm@wright.edu](mailto:dan.halm@wright.edu); Fax: 937 775-3391. [AA/EOE]

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**Postdoctoral positions:** West Virginia University's Department of Physiology and Pharmacology has postdoctoral positions available immediately to study cellular and molecular mechanisms that regulate permeability in intact microvessels. Using single vessel perfusion technique in combination with fluorescence microscopy and electron microscopy, the postdoctoral fellow will conduct NIH-funded research projects to identify and characterize the signaling mechanisms and structural changes in the regulation of microvascular functions during inflammation and disease conditions (<http://www.hsc.wvu.edu/som/physio/bioHe.asp>). An MD or a PhD in Physiology or Biomedical sciences is required. Experience with animal surgical skills is preferred. Salary is commensurate with experience. To view the full position description, please visit the WVU JOBS Bulletin at [www.hr.wvu.edu/jobs](http://www.hr.wvu.edu/jobs). This position will remain open until filled. Interested applicants should email a letter of application, current curriculum vitae or resume, and the names and contact information (including email addresses) of three professional references via email to Tammy McPherson at [tmcpherson@hsc.wvu.edu](mailto:tmcpherson@hsc.wvu.edu). [AA/EOE]

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**Postdoctoral Fellowships:** Two postdoctoral positions in cardiovascular and/or cardiopulmonary physiology are available at the University of Wisconsin-Madison, WI. 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 skeletal blood flow during exercise, and diving physiology. Experiments will involve both non-invasive and invasive human studies, as well as chronically instrumented animals. Techniques span from nuclear medicine imaging in humans and animals, MRI, Doppler ultrasound, whole body and single limb exercise, down to vascular protein expression in muscle and lung circulations. 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 (Physiology, 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. 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 curriculum vitae and the names and contact information of two references to: Marlowe Eldridge, MD, email: [meldridge@pediatrics.wisc.edu](mailto:meldridge@pediatrics.wisc.edu) or William Schrage, PhD Email: [wschrage@education.wisc.edu](mailto:wschrage@education.wisc.edu). Minorities and women are encouraged to apply. [AA/EOE]

## Faculty Positions

**Assistant/Associate Professor:** The Department of Physiology at Dartmouth Medical School invites applications for a tenure-track appointment at the level of Assistant or beginning-level Associate Professor. Faculty members in the Department of Physiology have established research programs in areas broadly defined as neuroscience, endocrinology, immunology, respiratory, cardiovascular and renal physiology. Individuals holding a PhD and/or MD, or equivalent degrees, with postdoctoral experience and using innovative combinations of molecular, genetic, cellular and systems approaches to study any of these areas of Physiology are encouraged to apply. Applicants should have demonstrated excellence in research, the potential for securing and sustaining independent and collaborative extramural funding, and a commitment to teaching in the medical and graduate school curricula. Consideration of applications will commence immediately and continue until the position is filled. Interested applicants are encouraged to submit (preferably electronically in PDF format) a cover letter, curriculum vitae, a statement of research directions and teaching plans, and complete contact information of five references to: Hermes H. Yeh, PhD, Chair and Professor, Department of Physiology, Dartmouth Medical School, One Medical Center Drive, Lebanon, NH 03756, hermes.yeh@dartmouth.edu [EOE]

**Endowed Chair:** Bickner Endowed Chair in Kinesiology; The Division of Kinesiology at the University of Michigan seeks outstanding external candidates for a newly Endowed Chair in an academic area related to our strengths: biomechanics, exercise physiology, motor behavior/development, sport management, and sport medicine. Complementary areas under consideration include, but are not limited to, epidemiology, nutrition, pedagogy, rehabilitation science, and sport business, law, and social science. The successful candidate must have a relevant advanced degree and a nationally-recognized record of scholarly publications and funded research. Applicants must have a history of successful doctoral student training and be willing to contribute to the mentoring of junior faculty.

Appointment will be made at the senior associate or full professor level and will include a competitive research and technical support package. Women and minority candidates in particular are encouraged to apply. Please forward a detailed letter of interest addressing the requirements for this position, curriculum vitae, selected reprints, and the names, addresses, telephone numbers, and Email addresses of three references to Marsha Lewis, Division of Kinesiology, The University of Michigan, 4162 Observatory Lodge, 1402 Washington Heights, Ann Arbor, MI 48109-2013; Tel.: 734-764-5210. Materials may also be submitted electronically to mhlewis@umich.edu. Questions may be addressed to search committee co-chairs Susan Brown (734-763-6755; shcb@umich.edu) or Bruce Watkins (734-647-2698; bawa@umich.edu). Review of applications will begin on February 21, 2008, and will continue until the position is filled. For detailed information regarding research and instructional activities within the Division of Kinesiology, please visit [www.umich.edu/~divkines](http://www.umich.edu/~divkines). [AA/EOE]

**Associate/ Full Professor:** The Department of Pharmacology and Experimental Therapeutics at the Louisiana State University Health Sciences Center (LSUHSC), New Orleans, is seeking candidates at the rank of Associate or Full Professor who will complement existing strengths in Cardiovascular Pharmacology/Physiology and the LSUHSC Cardiovascular Center of Excellence. Targeted areas include cardiovascular complications of diabetes, hypertension, atherosclerosis, stem cell biology, or oxidant signaling. Successful candidates will have a PhD and/or MD and a proven record of publication and extramural support. Competitive salary, start-up funds, space and extensive core facilities are available. LSU Health Sciences Center supports and fosters a diverse community of outstanding faculty, staff and students. Send Applications including a CV, statement of research interest and names of three references to: Pamela A. Lucchesi, PhD, FAHA, Professor and Associate Director, Cardiovascular Center of Excellence, [lucch@lsuhsc.edu](mailto:lucch@lsuhsc.edu) [AA/EOE]

**Tenure Track Faculty Position:** The Department of Medicine in the School of Medicine at the University of California, San Diego is actively recruiting a Tenure Track or Tenured Faculty Position in Physiology. Successful applicants will be expected to teach in organ physiology for medical students and maintain a vigorous program of high-quality federally funded research in physiological sciences. Applicants should have an appropriate doctoral degree. Appointment level will be commensurate with experience and qualifications; compensation is based on established UCSD salary scales. Review of applications will begin November 5, 2007 and will continue until the position is filled. Applicants should submit curriculum vitae, list of publications, a statement of research interests and teaching experience including leadership activities and contributions to diversity, teaching evaluations, and the names and addresses of five referees to: Physiology Search Committee, University of California, Department of Medicine-0623A, 9500 Gilman Drive, La Jolla, CA 92093-0623, or [physiology@ucsd.edu](mailto:physiology@ucsd.edu). UCSD is an EO/AA employer with a strong institutional commitment to excellence through diversity.

**Assistant Professor:** The Department of Biological Sciences at Idaho State University ([www.isu.edu/departments/bios](http://www.isu.edu/departments/bios)) invites applications for a nine-month, tenure-track position in physiology at the level of Assistant Professor. The successful applicant will be expected to develop a vibrant, extramurally funded research program involving graduate students that enhances and strengthens the department's biomedical research emphases in neural or cardiovascular physiology. Individuals using molecular biological approaches to answer questions related to cell signaling are especially encouraged to apply. Teaching responsibilities will include Anatomy & Physiology and perhaps Introductory Pathobiology. Review of applications will begin January 3, 2008 and continue until the position is filled. Women and underrepresented minorities are encouraged to apply. To apply, send cover letter, curriculum vitae, statements of research and teaching philosophy along with contact information for three references, to Dr. Shawn Bearden, Chair of Anatomy & Physiology Search Committee, ISU



Department of Biological Sciences, 921 S 8th Ave Stop 8007, Pocatello, ID, USA, 83209-8007. ISU is and an NSF ADVANCE award recipient. [EOE]

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**Assistant Professor, Animal Physiologist, Tenure Track:**

The Department of Biology in the College of Science and Health at the University of Wisconsin-La Crosse invites applications for a tenure-track position at the level of assistant professor. The University of Wisconsin-La Crosse consistently ranks in the top five of comprehensive universities in the Midwest. The Department of Biology is a vibrant teaching and research environment with over \$7,500,000 in external grants and over 100 peer-reviewed publications in the past five years. We seek an engaging teacher and scholar with a strong commitment to undergraduate education who can serve as an inspirational mentor and role model for students with diverse career goals and backgrounds. Moreover, we seek an individual to expand our upper-level undergraduate and graduate curricula. The animal physiologist will teach animal physiology or environmental physiology, human anatomy & physiology, and develop a course in her/his area of expertise or participate in teaching in our biology core curriculum. A PhD in a biological science is required. Some previous teaching experience and experience with diversity initiatives is desirable. The successful candidate will be expected to develop an externally funded research program and direct undergraduate and graduate (MS) research. Academic year salary is competitive and commensurate with experience. Start August 28, 2008. Applicants should submit letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: Dr. Mark Sandheinrich, Department of Biology, University of Wisconsin-La Crosse, La Crosse, WI 54601. Electronic applications will not be accepted and applications must be received by February 15, 2008. Women, persons of color, and individuals with a disability are encouraged to apply. If you have a special need/accommodation to aid your participation in our hiring process, please contact Mark Sandheinrich to make appropriate arrangements. Employment will require a criminal background check. A

pending criminal charge or conviction will not necessarily disqualify an applicant. In compliance with the Wisconsin Fair Employment Act, UW-La Crosse does not discriminate on the basis of arrest or conviction record. [AA/EOE]

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**Assistant/Associate Professor:** The Department of Kinesiology and Nutrition at the University of Illinois at Chicago invites applications for two new tenure-track faculty positions at the Assistant/Associate Professor level. We are seeking applicants to become part of a collaborative research group focused on different aspects of inflammation and nutrition. Applicants should have a PhD or MD degree and postdoctoral experience. Successful applicants will be expected to develop independent and externally funded research programs in the general areas of inflammation and nutrition that may range from basic to translational and population research. Successful applicants will also be expected to contribute to our education mission at the undergraduate and graduate levels. Screening of applications will begin November 19, 2007, and will continue until the positions are filled. Please submit curriculum vitae, a description of research interests and the names/addresses of at least three references to: Chair: Inflammation/Nutrition Search Committee, Department of Kinesiology and Nutrition, University of Illinois at Chicago, 1919 W. Taylor Street, Room 650 M/C 517, Chicago, IL 60612. UIC is an AA/EOE.

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**Assistant/Associate Professors:** The Department of Cell Physiology and Molecular Biophysics at Texas Tech University Health Sciences Center, Lubbock invites applications from scientists for two tenure-track positions at the rank of Assistant or Associate Professor in the School of Medicine. The successful candidates will be expected to develop and/or maintain an independent program of research with external funding in the general areas of Cell Physiology and/or Molecular Biophysics. Individuals with an interest in structure/function relationships who can contribute to our Center for the Study of Membrane Proteins will be given special consideration. Participation in medical and graduate training is expected after an appropriate transition period. Review of applications will start imme-

diately, with the goal of having the successful candidates in place by the Fall of 2008. A generous start-up package, effective mentoring, and a pleasant lifestyle in a college town are included. Please submit a current CV, an outline of research plans, and the names and addresses of three or more potential referees to Thomas A. Pressley, PhD, Chair of the Search Committee, through TTUHSC's website (jobs.texas-tech.edu), requisition number 75513 (Assistant) or 72874 (Associate). For questions regarding the online application process please call Human Resources Recruiting, 806-743-2865. TTUHSC is an EEO/AA/ADA employer.

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**Assistant Professor:** Exercise Science/Physiology, Auburn University, Department of Kinesiology. Required: enthusiastic, ambitious candidate with earned doctorate in exercise physiology or closely-related life science discipline; a strong publication history and clear potential to attract extramural funding; evidence of mechanistic research in either basic exercise physiology/metabolism/biochemistry or the impact of physical activity on disease; excellent interpersonal and communication skills. The candidate selected for this position must be able to meet eligibility requirements for work in the United States at the time appointment is scheduled to begin and continue working legally for the proposed term of employment, and must be able to communicate effectively in English. Desired: Postdoctoral research experience; evidence of pursuit of innovative research questions in either humans or animal models; evidence of extramural support for research; University teaching experience; and active participation in professional organizations. Responsibilities: establish a successful research program in the integrative physiology of exercise, leading to publications in premier refereed journals, presentations in national and international venues, and extramural funding; teach graduate and undergraduate classes in exercise physiology and related topics; recruit, advise, and train students in the MEd, MS, and PhD tracks, including supervision of graduate research; perform professional, university, and community service as appropriate. Review of applications will begin February 15 and continue until the position is filled. Submit a letter of application addressing the required and desired

qualifications as stated in the position announcement, a curriculum vitae, a copy of transcripts, and the names, addresses, and telephone numbers of three individuals who will be sending letters of recommendation to support the application: Dr. Bruce Gladden, Search Coordinator, Department of Kinesiology, 2050 Beard Eaves Memorial Coliseum, Auburn University, AL 36849 5323. Email: gladdlb@auburn.edu. Tel.: 334-844 1466. Women and minorities are encouraged to apply. [AA/EOE]

**Head of Department:** Endowed Chair and Department Head, Department of Physiology, Louisiana State University Health Sciences Center, School of Medicine, New Orleans. The Louisiana State University Health Sciences Center School of Medicine in New Orleans invites applications and nominations for Head of the Department of Physiology and the Kenneth A. Ardoin/Pfizer Superchair of Basic Cardiovascular Research. The successful candidate will be responsible for all facets of activity in the department, including both graduate and undergraduate medical education, faculty recruitment and retention, and development of research programs. The successful candidate will have a PhD, MD or MD/PhD, will be internationally recognized for research in Physiology, Systems Biology or Cell/Molecular Physiology and will have an exceptional record of extramural research funding. The applicant will be expected to coordinate the development of program project grants and training programs within the department and also to foster translational research. He/she must demonstrate leadership ability, a commitment to biomedical research and education and have the ability to provide a vision of excellence for the Department. Achievements in multi-disciplinary collaborative research, mentorship, teaching, and administration that promote an inclusive environment are essential. Candidates will have opportunities to interact with Centers of Excellence, including the Cardiovascular Center, the Alcohol Research Center, the Neuroscience Center, the Stanley S. Scott Cancer Center, and the Gene Therapy Program. Excellent core facilities are also available. Significant resources will be available for departmental development, and faculty recruitment and start-up. Candidates

must qualify for the rank of tenured Professor in accordance with School of Medicine and LSU System criteria; the compensation package will be competitive. Candidates should provide their Curriculum Vitae, including a full list of publications, a brief statement of educational, research, service, and administrative interests, and a vision statement describing goals for departmental development. These materials should be forwarded electronically to: Dr. Wayne L. Backes, Associate Dean for Research, LSUHSC School of Medicine, 533 Bolivar St., New Orleans, LA 70112, MSfacultyrecruit@lsuhsc.edu Review of applications will commence immediately and will continue until the position is filled. [AA/EOE]

**Anatomy & Physiology Instructor:** Job #FCF842, Fullerton College, 321 East Chapman Avenue, Fullerton, CA 92832-2095. DEADLINE FOR APPLICATIONS: Application package must be received by 5:00 pm, February 13, 2008. Postmarks will not be honored. Application packages received after the closing deadline will not be accepted. The District does NOT accept application materials by fax or email. STARTING DATE: August 13, 2008. DUTIES AND RESPONSIBILITIES: Duties and responsibilities as presented are intended to be representative and not restrictive. The District reserves the right to modify the assignment and allocation of duties. Teach lecture and laboratory courses including, but not limited to, Anatomy, Physiology, and other biological science courses including non-major courses. This assignment will require working with prepared and preserved specimens. Participate in department activities such as program planning, scheduling, budget planning, and outreach. Pursue professional growth to remain current in the discipline and in pedagogy. Participate in curriculum development and serve on division, college and district committees as necessary to maintain and improve the instructional program; participate in appropriate professional development activities. Maintain current knowledge of instructional methods and new technologies pertinent to areas of assignment; learn and apply emerging technologies and advances (e.g., computer software applications) as necessary to perform duties in an efficient, organized and timely manner. Maintain formal

office and campus hours; participate in department and division meetings. Teach scheduled classes and perform related duties as assigned, including timely compliance with clerical and administrative responsibilities; comply with district, college and division policies in the performance of duties. Instruct and assist in the growth and success of a diverse population of students through careful preparation of course materials, effective teaching methodologies and informed critical feedback on assignments and discussions. Work cooperatively with staff and students. Demonstrate sensitivity to and understanding of the disabilities and diverse academic, socioeconomic, cultural and ethnic background of students. Evening and/or Saturday assignments may be required as part of the regular contract. MINIMUM QUALIFICATIONS: Master's degree in any biological science; OR Bachelor's degree in any biological science AND Master's degree in biochemistry, biophysics, or marine science; OR valid California teaching credential authorizing service in a community college in the appropriate subject matter area; OR the equivalent. Equivalent qualifications may include related education, training, employment and professional experience that would be equal to the required degree(s) and experience in the field as determined by the District Equivalency Committee. All degrees and course work used to satisfy the required minimum qualifications must be from accredited postsecondary institutions (see [www.nocccd.edu/Employment](http://www.nocccd.edu/Employment) regarding accredited postsecondary institutions). The award of all degrees must be verifiable on a legible transcript. DESIRABLE QUALIFICATIONS: PhD in a biological science. College-level teaching experience in Anatomy, Physiology, and other areas of biology. Minimum one year of research experience. Experience may include work for a graduate degree. Successful completion of appropriate course work at the undergraduate and graduate level. Knowledge of modern technologies and research. Experience with contemporary teaching methods and computerized classroom applications. Demonstrated commitment to developing and implementing a high quality curriculum for allied health students. Experience with and commitment to working with culturally and ethnically diverse groups. Effective oral and written communication skills. SALARY:

The initial salary placement range is \$54,294 - \$82,200 depending on applicable education and experience. Initial salary placement will be determined by the District Office of Human Resources in accordance with the faculty collective bargaining agreement and is not negotiable. **BENEFITS:** The District is a participating agency in the CalPERS Hospital and Medical Care plan which allows eligible employees to select from several plans for their hospital and medical care. The District pays the full cost of the employee-only health insurance premium for the plan selected by the employee. In addition, the District provides a discretionary fringe benefit allowance that may be allocated toward the premium cost of eligible dependent health insurance, dental insurance, vision insurance, life insurance, accident insurance, income protection insurance, and available investment options. **SELECTION PROCESS:** The Hiring Committee will paper screen applications and select a limited number of candidates for an interview. This process will take several weeks. At the time of the interview a teaching presentation and/or a written exercise related to the assignment may be required. Subsequent to the interviews, the Hiring Committee will determine those candidates for final consideration. A second interview may be required of candidates selected as finalists. Possession of the minimum qualifications DOES NOT ensure an interview. Reasonable accommodations for applicants with disabilities may be requested by calling 714-808-4821 at least three (3) business days in advance of the scheduled examination/interview date. The candidate selected for employment will be required to provide the following: official transcripts and verification of experience prior to the first duty day; identification and eligibility for employment within three (3) days of employment, pursuant to the Immigration Reform and Control Act; fingerprints and required medical certification pursuant to statute. For further information about the position contact: Bruce Cordell – Dean, Natural Sciences, 714-992-7106, bcordell@fullcoll.edu. **APPLICATION PROCEDURE:** Reference Job #FCF842 in all correspondence. Download the District Academic Application on our website at <http://www.nocccd.edu>, or email requests to [hr@nocccd.edu](mailto:hr@nocccd.edu), or contact the Human Resources Office at 714-808-4810. All application materials must be

submitted with the District Academic Application as a complete package. A complete application package MUST include the following: 1) Completed District Academic Application; 2) Letter of interest which demonstrates written communication skills and addresses the qualifications relevant to the position; 3) Resume describing educational background, teaching experience and work experience; 4) Undergraduate AND graduate college transcripts (may be unofficial). Evaluations of foreign degrees and/or course work are required. See [www.nocccd.edu/Employment](http://www.nocccd.edu/Employment) for information regarding evaluation of foreign degrees; 5) Minimum two (2) recent letters of recommendation; 6) Copy of relevant California Community College Credential (if applicable). Incomplete application packages and/or applications without signatures will not be considered. Failure to sign and to complete all fields in the General Information section of the application will be considered an incomplete application. All submitted materials become the property of the North Orange County Community College District and will be considered for this position only. The District will not return or make photocopies of application materials. Applicant bears the sole responsibility for ensuring that the application package is complete when submitted. Materials submitted independently of the application package will not be accepted. Submit application package to: Human Resources Office, North Orange County Community College District, 1830 W. Romneya Dr., Anaheim, CA 92801. For more information on Fullerton College visit our website at [www.fullcoll.edu](http://www.fullcoll.edu).

**Assistant Professor:** The Biology Department at the University of St. Thomas ([www.stthomas.edu/biol/](http://www.stthomas.edu/biol/)) invites applications for a tenure-track position at the assistant professor level in integrative organismal biology of vertebrates or invertebrates, to start September 2008. Individuals whose work complements current departmental strengths and may lead to interdisciplinary collaboration are particularly encouraged to apply. Successful candidates will teach undergraduate courses at introductory and upper-division levels. Development of an active research program that involves undergraduate students and is competitive for external

funding is expected; support will include lab space and significant start-up funds. A PhD is required; postdoctoral experience is preferred. The University of St. Thomas has a strong commitment to the principles of diversity and inclusion, to equal opportunity policies and practices, and to the principles and goals of affirmative action. In that spirit the University strongly encourages applications from women, persons of color, and persons with disabilities. Review of applications will begin January 18, 2008; the position will remain open until filled. Please submit a CV and Cover Letter that addresses the needs of the department electronically at: <http://jobs.stthomas.edu/applicants/Central?quickFind=51508>. In addition please submit separate statements of teaching philosophy and research experience and goals, and three letters of reference electronically online or via regular mail to Dr. Dwight Nelson, Search Committee Chair, University of St. Thomas, Mail # OWS 390, 2115 Summit Ave, St. Paul, MN 55105, or via Email [denelson@stthomas.edu](mailto:denelson@stthomas.edu).

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**Assistant/Associate/ Full Professor:**

The Department of Physiology and Biophysics at the University of Alabama at Birmingham (UAB) invites applications for a tenure track or tenured faculty position. UAB is a leading research university ranked among the top public universities in NIH funding. We are seeking a dynamic investigator/educator to complement the existing strengths of our department (see our website at [www.physiology.uab.edu](http://www.physiology.uab.edu)). Applicants with expertise in cell signaling and/or cancer biology are especially encouraged to apply. The successful candidate will have an MD or PhD in a biomedical science, a strong publication record, a commitment to teaching, and excellent funding potential. Salary and rank (Assistant, Associate, or Full Professor) will be commensurate with experience. Competitive startup funds and generous laboratory space will be offered. Please send a curriculum vitae, statement of research plans and three references to: Dr. Kevin L. Kirk, Department of Physiology and Biophysics, University of Alabama at Birmingham, 1918 University Blvd., MCLM 982, Birmingham AL 35294-0005 or by Email to: [klkirk@uab.edu](mailto:klkirk@uab.edu). [AA/EOE]

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**Instructor/Assistant Professor/Associate Professor:** The Department of Health, Leisure and Exercise Science at Appalachian State University is seeking applicants to fill three nine month tenure track positions in the area of exercise science. Effective date will be August 2008. The successful candidate will have appropriate training and research expertise to teach undergraduate and graduate students in a clinical exercise physiology (position 1) or strength and conditioning (position 2) subdisciplines. A third faculty position at the assistant/associate rank will feature a reduced teaching load and emphasize research. Please see our website ([www.hles.appstate.edu/dept\\_info/positions.htm](http://www.hles.appstate.edu/dept_info/positions.htm)) for specific information on all three of these positions. Review of complete applications will begin January 17, 2008 and remain open until filled. A complete application includes a letter of interest, unofficial transcripts, vita, and the names, Email addresses and telephone numbers of five references. Send applications to Dr. Charles Dumke (position 1), Dr. Jeff McBride (position 2), or Dr. John Quindry (position 3), Department of Health, Leisure, and Exercise Science, Appalachian State University, 111 Rivers St, Boone, NC 28608. Federal law requires proper documentation of identity and employability prior to final consideration for this position. [AA/EOE]

**Professor:** National University of Ireland, Galway. Founded in 1845, NUI, Galway now has approximately 15,000 students and 1,200 staff. Professorship of Physiology: The University invites applications for the above full-time permanent post. NUI Galway is a dynamic, growing University that has placed the development of a new wave of productivity in biomedical research to the forefront of its strategic agenda. NUI Galway is rapidly increasing its research capability through investment in the development of innovative, collaborative research programmes involving departments and centres within and outside the University. A new Human Biology building to house the Department of Physiology, along with the Departments of Anatomy and Pharmacology & Therapeutics is a current priority. The success of NUI Galway in the Biomedical research initiative to date is reflected in its success in attracting very substantial research funding.

Education at NUI Galway is also undergoing significant reform with a new emphasis on interdisciplinary integrated courses. The Department of Physiology plays a key role in supporting the development of research and teaching at NUI Galway within the Colleges of Medicine, Nursing & Health Sciences, Science, and Engineering and Informatics. Further development of Physiology at NUI Galway is a vital component of the University's plan to promote biomedical research and health education. We are seeking an individual with the ability to lead the Department of Physiology at this exciting time. Applicants for the Chair shall possess: 1) the capacity to provide leadership in the development of physiology and in the promotion of teaching and research; 2) a distinguished record of research in a physiological area as evidenced by publications in top ranking journals and a proven ability to attract significant research funding; 3) the capacity to represent effectively the subject and the Department, inside and outside the University; 4) The ability to act as Head of Department; 5) the ability to promote and foster research and educational interactions with cognate departments; 6) the ability to promote intra-institutional and national research activities; 7) the desire to participate in the overall life of the University; 8) a PhD or an MD Degree. A Medical qualification, while desirable, is not essential. Additional information on the Department of Physiology is available at: [www.nuigalway.ie/physiology/](http://www.nuigalway.ie/physiology/). For informal discussion contact: Professor Peter Dockery, 091-494520, or Email [peter.dockery@nuigalway.ie](mailto:peter.dockery@nuigalway.ie). Closing date for receipt of applications is at 5.00 p.m. on 18th January 2007. Salary: 112,324 x 7 = 143,194 p.a. Salary: 106,708 x 7 = 136,034 p.a. (pre 1995 entrants) Further information is available from the HR Office: <http://www.nuigalway.ie/vacancies> ; Email: [hr@nuigalway.ie](mailto:hr@nuigalway.ie); Tel. 353 91 492151; Fax 353 91 494523 Candidates should submit seven hard copies of their application (i.e. cv, application form, covering letter), with the names and addresses of at least three and not more than five referees to: The Human Resources Office, National University of Ireland, Galway, Galway. Please note that applications by email or fax will be rejected. [EOE]

## Research Positions

**Research Fellowships:** Cell and Molecular Biology and Molecular Medicine at the University of Pennsylvania Institute for Environmental Medicine. Programs are available for qualified PhD, MD or equivalent US citizens/permanent residents in an NIH funded program. Candidates have a choice of 10 established laboratories. The focus of the research is oxidant stress, protein and lipid trafficking, exo/endocytosis, cell membrane receptors, cell signaling, immunotargeting, lung surfactant, mechanotransduction, endothelial cell biology, NO metabolism, gene therapy and related areas. We provide full benefits and stipend supplementation. Website: [www.med.upenn.edu/ifem/pep.htm](http://www.med.upenn.edu/ifem/pep.htm) Applications may be submitted by fax or electronically to S. Turbitt at 215-898-0868 or [turbitt@mail.med.upenn.edu](mailto:turbitt@mail.med.upenn.edu) Qualified women and minority candidates are especially encouraged to apply. [AA/EOE]

**Research Assistant:** The Department of Anatomy and Physiology invites applications for the position of Research Assistant. Duties include: plasmid DNA preparation and analysis, isolation and analysis of DNA and RNA, electrophoresis of protein samples, immunoblotting and mammalian cell culture, as well as general laboratory organization. A minimum of a BS degree in natural or physical science with previous laboratory experience is required. Screening of applications will begin on November 30, 2007. Materials to be submitted: letter of interest, current resume, and contact information for three references. Submit to: Dr. Peking Fong via Email at [pfong@vet.k-state.edu](mailto:pfong@vet.k-state.edu) or send to: Anatomy and Physiology Department; 228 Coles Hall; Manhattan, KS 66506-5802. KSU actively seeks diversity among its employees. [AA/EOE]

**Research Assistant:** Currently recruiting for at least one graduate student interested in pursuing research in molecular physiology, beginning in the Fall of 2008 at the University of Alaska, Fairbanks. Our laboratory is investigating the molecular mechanisms regulating muscle remodeling in response to cold temperature in the three-spine

stickleback. We use a combination of biochemical and molecular biological techniques to understand how muscle function is maintained at cold temperature in fishes. Preference will be given to students interested in obtaining a PhD, but MS students will also be considered. Interested students should contact: Dr. Kristin O'Brien, Institute of Arctic Biology, University of Alaska, [ffko@uaf.edu](mailto:ffko@uaf.edu), 907-474-5311.

**Graduate Assistantships:** Available at Iowa State University, Department of Kinesiology for MS and PhD students. Our students are prepared as kinesiologists in a positive, supportive environ-

ment in which both biological and behavioral contributions to the study of physical activity are examined. Our students also develop strong teaching skills. Areas of emphasis include preparation and research in biomechanics, exercise physiology, exercise psychology, motor control, physical activity and health promotion, pedagogy and applied motor development, or sport sociology. Support areas include food and nutrition, biochemistry, psychology, education, neuroscience, immunology, sociology, and epidemiology. Funding and support are available in the form of teaching and research assistantships, scholarships, research awards for dissertation research, and travel support to confer-

ences. Iowa State University is a doctoral extensive university and a member of the Big 12 Conference. Our doctoral Kinesiology program was rated among the top 20 in the nation by the American Academy of Kinesiology and Physical Education. Ames is a charming small town with amenities of a big city and was recently ranked among the top small American cities in which to work and live. For more information go to: <http://www.kin.hs.iastate.edu/graduate/>. For additional questions contact Dr. Ann Smiley-Oyen: [asmiley@iastate.edu](mailto:asmiley@iastate.edu) (Departmental Homepage: [www.kin.hs.iastate.edu/](http://www.kin.hs.iastate.edu/); ISU Homepage: [www.ias-tate.edu/](http://www.ias-tate.edu/)). ❖

## People & Places

### Hiroko Nishimura Receives Niigata Nippo Culture Award



Hiroko Nishimura

APS member Hiroko Nishimura has been awarded the Niigata Nippo Culture Award. She is the first female to receive this honor in the science-scholarly activity division. The award ceremony was held on November 1, 2007, in Niigata, Japan.

This award was established in 1947 by the Niigata Daily Newspaper Company, Niigata, Japan. The award is given in four areas: science, art, industrial technology, and public service. The award recognizes individuals who have contributed significantly to these fields, and who have established national, international, and/or local recognition. Nominations are made by authorized individual or groups and awardees are selected by an independent selection committee representing the four fields.

Dr. Akira Hasegawa, President of

Niigata University, nominated Nishimura for her internationally recognized research on comparative physiology of cardiovascular-renal regulation, specifically the role of the renin-angiotensin system in the control of blood pressure and vascular wall injury.

Nishimura was the recipient of the 2005 Japan Society for Promotion of Science Invited Investigatorship and was the APS 2006 August Krogh Distinguished Lecturer.

### Bin-Jalialh Elected as Secretary General of Saudi Society for Medical Education

Ismaeel M. Bin-Jalialh, a Regular Member of APS, has been elected as the Secretary General of Saudi Society for Medical Education (SSME) in November 2007. Dr Bin-Jalialh is an Assistant Professor of Neurophysiology and the Director of Medical Education Center at King Khalid University in Abha, Aseer, Saudi Arabia.

**William S. Beckett** is currently a Professor in the Department of Internal Medicine, Mount Auburn Hospital, Cambridge, MA. Prior to his new position, he was a Professor at the University of Rochester School of Medicine, Department of Environmental Medicine, Rochester NY.

**Stanley Brown** recently affiliated with Mississippi State University, Department of Kinesiology. Brown had been associated with Our Lady of the Lake College, Baton Rouge LA.

**Tyson Hedrick**, an Assistant Professor, recently affiliated with the University of North Carolina Department Biology, Chapel Hill NC. Hedrick had been associated with the University of Washington, Department of Biology, Seattle WA.

**Andor Kiss** is currently a Visiting Assistant Professor, Department of Zoology, Miami University. Prior to his new position, Kiss was a Postdoctoral Fellow at the University of Delaware.

**Jeffery Potts** is currently an Associate Professor, Department of Integrative Physiology, University of North Texas Health Science Center, Fort Worth Texas. Prior to his new position, Potts was at the University of Missouri, Columbia, Dalton Cardiovascular Research.

**Michael Wacker** is currently an Assistant Professor, Basic Medical Sciences, at the University of Missouri, Kansas City, MO. Prior to his new position, Wacker was a Postdoctoral Fellow at the University of Kansas, Lawrence. ❖

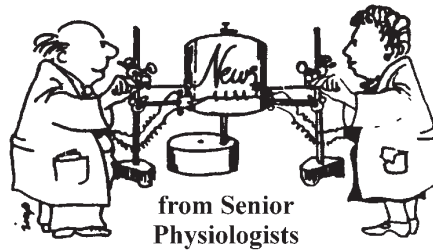
## Letters to Charles Tipton

**Vivian Abrahams** writes: "I can only claim to be happily retired. I stayed past the mandatory retirement age of 65 as I was a Medical Research Council of Canada Research Group Director at Queen's University, as well as being part of the management of the one of the Networks in the Canadian Networks of Excellence and a Human Frontiers Research Program Councillor. This work was superimposed on the full range of teaching and administrative responsibilities of a University Professor. Retirement was quite welcome. However, my interest was not totally dimmed and for six or seven years after retirement I attended scientific meetings and continue to scan the journals, and even read the occasional article. "No real words of wisdom. Had the good fortune to go to a superb school that had its origins before the discovery of America (City of London School, 1442) and which offered exemplary science teaching. Was sent initially to the University of Edinburgh by the British Army to improve my math and physics and returned there after the Army funded by a grateful nation. Discovered Physiology largely because of a group of superb teachers with a deep commitment to research and to their students."

**Hugh Welch** writes: "It was good to hear from you, although I was taken back a bit to realize that I had joined that society of 'Senior Physiologists,' whose letters I have read with great interest for the past 30-40 years.

"In reading those letters in *The Physiologist*, I have been struck by the different ways these individuals approached their 70th birthdays. Some seemed to move almost seamlessly through that period and continued in the same way in their laboratories or in their writing. Others seemed to make a complete break and to start an entirely different style of life.

"My path has been somewhere in between these two extremes. My work required a skilled team in the lab, and when my university made a decision to put its emphasis in the Life Sciences program into molecular biology, I realized that the resources I needed would become less available. I made the



decision to phase out the lab and see my last graduate students through the completion of their programs.

"As members of the Physiology faculty retired, they were typically replaced by geneticists or molecular biologists, and eventually Physiology was merged into a large department of Biochemistry and Cellular and Molecular Biology. There is almost no Physiology presence in that department that most of us would recognize.

"My impression is that this experience is not unusual; the Physiology department where I trained is now a Department of Physiological Genomics. I was not sure of the wisdom of these decisions, but they were clearly here to stay, and I opted to retire somewhat early.

"Shortly after that, I began to receive invitations to teach Physiology at institutions where I had friends or former students. These were typically the result of open positions and the need to fill courses, especially graduate courses in Physiology. I had always enjoyed teaching, and this proved to be an enjoyable and rewarding experience. Fortunately, I have a wife who was amenable to the short term moves that were required, and we had the opportunity to renew some old friendships and make some new ones.

"I found the need for Physiology courses to be enormous and the general quality of instruction to be disappointing. There seems to be an attitude that anyone can teach Physiology, and it was discouraging to see the low regard that students had toward a subject that I regard as one of the most important, not only in the Life Sciences, but as a part of a Liberal Arts education.

"These new, large, catchall departments seem to generally assign their weakest faculty to handle the Physiology courses. I sometimes think that APS has let slip an opportunity that exists in institutions that do not have medical schools on the campus.

There are many potential positions in Physiology that are being filled by faculty from other disciplines.

"Beyond that, I have found retirement rewarding, especially having the time to spend with grandchildren. They are spread as far as 500 miles in different directions, so this entails quite a bit of travel.

"Thanks again for your card and the kind note."

**Kenneth Zierler** writes: "Thanks for the invitation to offer a brief summary of my life, with emphasis on the 10 years since I became emeritus, at the age of 80. Now I am 90. For the first 7 1/2 years of my life I was an only child. My father drove me on his rounds. My mother's preoccupation was with my education. She was responsible for urging school administrators to advance me, so that I was only 18 when I got my A.B. degree at Hopkins.

"I was stimulated by the head of my high school math department, Dr. Ballard. At college I majored in chemistry, but I was equally fond of English and Math. At the University of Maryland Medical School, while I was a student I worked in the lab of Dr. William R. Amberson, who had worked with A.V. Hill, a physicist who became one of the leaders in muscle physiology. I was resident in internal medicine on the NYU service of Dr. Murray Steele, who generously let me use his lab after 5 p.m. and taught me that one could be a wise clinician and at the same time carry out lab research. While I was Dr. Steele's resident I was allowed to make observations of patients in a ward full of patients with muscular dystrophy at the Rockefeller University, across the street from our Hospital. The main outcome of my investigation was that I recognized that some number of patients with skeletal muscular dystrophy had cardiac muscular dystrophy, which had not been described.

"Two months before I would have completed my chief residency, I quit to join the Army. I was on active duty for three years. For the first half I was assigned to the Army Air Corps, where I was mostly a ward officer in an air corps station hospital. The second half of my service was as battalion surgeon in an armored division. In mid-April, 1945, my battalion came upon a concentration, or slave-



labor, camp in the south east corner of the Harz Mountains, where I was briefly supplying elementary medical care.

"On my return to Baltimore, discharged honorably from the Army, Dr. Warfield Longcope, chairman of the department of medicine at Hopkins, accepted me, and gave me a small room but no money. I found a Warburg apparatus in a cupboard and began my studies. At the same time I was studying, creatinuria, because creatinuria was considered a hallmark of muscle disease. But I had found that post-partum creatinuria was not due to discharge from the healing uterus but rather to failure of the renal tubules to absorb creatine. At the same time I was disappointed in the Warburg apparatus. It could measure  $O_2$  only in dying muscle. At the time, I was calculating creatine clearance in normal volunteers and in certain diseases. The determination of creatine clearance is essentially an input-output-stay-put method. I decided that I would measure the arterio-venous difference of whatever we are interested in, forearm muscle uptake (blood oxygen and glucose), and blood  $CO_2$  forearm muscle output and forearm venous blood lactic acid, all in people. We successfully developed a technique for measuring forearm arterial and venous differences, and to our surprise found that oxidation of glucose accounted for only about 16% of oxidation by forearm muscle. We found that about 84% of serum free fatty acids were the substrate for the observed forearm oxidation.

"Paul Meier and I published a mathematical analysis of the theory of indicator-dilution method for measurement of blood flow and volume. Its use has been applied to many parts of the circulation.

"At the same time I was developing a technique for measuring the electrical potential across the cell membrane in isolated muscle, and, later, in single muscle fibers. It had been known for many years that insulin reduces serum potassium concentration, and we expected to find that the transmembrane potential difference increased hyperpolarization. But the decrease in serum K, lagged behind the progressive hyperpolarization; that is, the hyperpolarization was responsible for the uptake of K, not that the low K was responsible for the

hyperpolarization. Insulin-induced hyperpolarization is probably an early step in the cascade that produces glucose uptake.

"I have several 'think' papers: on the theory of indicator-dilution, theory of the use of arterio-venous concentration differences for measuring metabolism in steady and non-steady states, why tracer-dilution curves through a vascular system have the shape they do, an error in interpreting Scatchard plots, a critique of compartmental analysis. An especially interesting one is that I demonstrated mathematically that the prevailing belief, that insulin-induced increase in the amount of plasma membrane GLUTS can account for the entire increased glucose uptake. At least half the increased glucose uptake is accounted for by increased rate of membrane GLUT; this is a mathematical necessity whenever there is more than one type of GLUT in the plasma membrane. I felt that my paper was helpful, on the theory of the use of arterio-venous concentration differences for metabolism in steady and non-steady states, which appeared in *J. Clin. Invest.* in 1964.

"Our lab group, using the forearm arterio-venous and Blue Dye muscle blood flow method, demonstrated that in Type 2 diabetes mellitus there is resistance to post-receptor action of insulin. A similar resistance to insulin was demonstrated in some obese subjects who did not have diabetes.

"I became emeritus professor of medicine and of physiology when I became 80 in 1997. I was fortunate in that I retain an office, five days a week, with a computer, a spot in a parking garage, a telephone. Since 1997 I have reviewed my some 200 lab notebooks and found some worthwhile unpublished work. The data were obtained in 1955 and written and published in *Diabetologia* in 2002, an interval that even Darwin did not reach. Since I became emeritus I have been invited to write two papers; one invitation was "Whole body glucose metabolism," *Am J Physiology*: the other, "Indicator dilution methods...A brief history and memoir." I have always loved teaching, and have been blessed with the intelligence and enthusiasm of our scholars.

"I have been lucky in my colleagues, the post-docs and the students."

## Letter to Beverly Bishop

**F. Eugene Yates** writes: "Having enjoyed autobiographical reports from the many very durable scientists you have been publishing in *The Physiologist*, I am delighted to get my turn, after I celebrated my 80th birthday last week. Your invitation and questions naturally evoked memories and reflections on the shape of my whole career, so I begin with a sketch of its six epochs, before presuming to offer fragments of (as you put it) 'wisdom to pass on to (my) younger colleagues.' I composed this reply, in outline, as I was skiing on a blue sky day, in good snow, at Park City Mountain Resort in Utah. As a result, my endorphins are high as I write.

"While I was overseas serving as a Navy doctor during the Korean War, I had much time to think about the next step of my career when I got out of the service. I knew I wanted more scientific education, so I applied (by brief telegrams!) to Gene Landis, head of the Harvard Physiology Department, and to Arnold Rich in Pathology at Hopkins, seeking a postdoctoral fellowship. After a few weeks I received a telegram from Harvard accepting me, with details to follow in a letter. I accepted via return telegram immediately. (The very next day I received an acceptance from Hopkins, and had these responses reached me in reverse order I would have had a very different professional life!).

"I have been a member of The American Physiological Society for over 50 years, and my best contribution to APS was to invent, and launch the section journal *AJP: Regulatory, Integrative and Comparative*. I was its first Editor in Chief, and introduced three special sections: Letters, Invited Opinions, and Modeling Methodology Forum (that included a home for formal statistics). I also founded the *Annals of Biomedical Engineering* for the BME Society, edited it for seven years, and became the third President of the Society. I also founded *Endocrine Reviews* for the Endocrine Society. All three journals are currently thriving.

"The 'epochs' of my career, in sequence, unfolded as seven years in the Physiology Department at Harvard, ten years in the Physiology Department at Stanford (where I ultimately became Executive), ten years in the Biomedical Engineering

Department at the University of Southern California (where I served as Director of an NIH-sponsored Medical Engineering Center), and 23 years at UCLA, (where for the initial seven of those years I was the first Director of the Crump Institute for Medical Engineering, the Ralph and Marjorie Crump Professor of Medical Engineering and also Professor of Chemical Engineering), and for all 23 years also Professor of Medicine. From 1970 to 1997 I was a Consulting Principal Scientist to the ALZA Corporation, working on designs and clinical trials for novel, controlled delivery systems for therapeutic drugs, and for the past seven years I have been a member of the External Advisory Council of the NASA-affiliated National Space Biomedical Research Institute in Houston.

"I retired from academic life in 2003. I am currently active as a Science Advisor to the John Douglas French Alzheimer's Foundation, with an office in their headquarters (email: gyates@jdfaf.org), and am continuing as a member of the External Advisory Council of the National Space Biomedical Research Institute/NASA, that is preparing medical support for the many and varied risk factors associated with astronauts in long-duration space flights, away from a near-earth orbit.

"Traveling along my unguided career path—a seemingly random walk—I encountered and benefited from the experience and wisdom of many scientists, including: Cliff Barger (skills in gentle handling of chronic preparations in animals who remained unstressed), John Pappenheimer (introduction to transport phenomena), Bob Brennan (computer simulation of engineering control systems), Tom Sebeok (signs, symbols and significance), Arthur Iberall (a new physics for complex systems), Phil Anderson (needed balance between reductionism (analysis) and holism (synthesis) for many comprehensive descriptions in sciences, and showing that they are not technical inverses), Howard Pattee (information versus dynamics in biology), Bob Rosen (a mathematics for complexity), Alex Zaffaroni (adding control to chemistry in pharmaceutical science), Walter Bortz (showing me that good medical science can be an effective basis for sensible

public health policies), and Larry Young (countermeasures against risk factors for long-duration, human space flights). I owe them all (and many others—including students and post-docs) profound thanks for the joy and passion their insights have added to my professional life.

"My current research focuses on three themes: 1) theories of senescence (why do we grow old and die?); 2) reinterpretation of subjective neo-Darwinian natural selection as objective dynamic filtering-in evolution, senescence and extinctions; 3) extension of Cannon's concept of *homeostasis* (the core theory of physiologists) as a new, physical stability and control theory for biology, that I call *homeodynamics*. I am actively publishing and presenting my work in each area.

"As for advice for young scientists, I yield to the classic books by Ramón y Cajal, Peter Medawar and Walter Cannon. I can add only that I notice certain common temperaments among my favorite colleagues in science: all have deep respect for rules of evidence, humility in the face of what they don't (yet) understand, courtesy toward colleagues and openness in discussions of their own past and present work. (That latter feature can be very difficult to sustain in a commercial world where non-scientific requirements for secrecy intrude.) I also notice that some colleagues are 'splitters' (reductionistic analysis is their style) while others are 'lumpers' who want the big picture with all its complexities and mysteries. They like synthesis. A few try to adopt both styles – at the risk of being, or being thought to be, dilettantes. My modest advice to young scientists is merely: *Do what you want to do, and do it now, with whatever scientific style fits most happily.*

"Finally, though it may not be generalizable, I have found that a durable marriage (57 years and counting) with a person you like, admire and have much in common with (in my senior year of medical school I married one of my classmates—who happened to be the daughter of one of our faculty 'greats' in internal medicine) greatly enhances the professional journey by providing a secure and emotionally fulfilling base. Our five children and eight grandchildren add a guarantee that I shall die a happy man.

## Letter to Hannah Carey

**Kiyo Koizumi** writes: "It was a surprise and a great pleasure to receive your gracious letter and a beautiful gift for being a member of the APS for 50 years. I did not expect to be honored in such a 'big' way.

"I have found that working as a physiologist in this country is truly a rewarding and blessing experience for me. I came to the USA in 1949 as a young MD from Japan, went to Wayne University Medical College in Detroit (then a city university), and in 1951 found a job at the present SUNY Downstate Medical Center under Prof. Chandler McC. Brooks, Chairman of Dept. of Physiology. He too was honored as a 50-year member of the APS in his lifetime.

"With a great help of Dr. Brooks and many of my postdoctoral fellows mostly from abroad, I could make some accomplishments in the field of physiology as well as gain satisfaction as a teacher to many medical students.

"When I was elected to become a member of the APS in 1957, we needed to have at least one paper with a sole authorship. I am grateful to Dr. Brooks, my life-long mentor, who encouraged me to accomplish the step in my early career in his Department. Since those early days the physiology and medical sciences have advanced greatly, but I am still thrilled to find the beauty and mystery of how our body functions.

"Although I now come to 'work' twice a week to advise to and also being pampered by my young associates at our laboratory, I am not very active in research or in teaching. My interest in the field still persists, however, and I enjoy reading the *Physiological Review* and other scientific journals.

"Regrettably, I neglected to respond to a letter from the APS concerning the society's 'Senior Physiologist' section at my 80<sup>th</sup> birthday three years ago. I felt then it was too early in my life to do so, although I was honored on that occasion in Japan at the Japanese Physiological Society Meeting.

"I do hope that our Society will continue to contribute to the scientific development and the better understanding of disease processes. ❖

Hi all:

The 2007 New Zealand Sauvignon Blancs are popping up faster than you can produce transgenic mice. I have had the chance to try almost a dozen in recent weeks, and I have yet to find one I would not happily drink. And, except for Cloudy Bay, they are still significantly better bargains than most other decent wines these days at \$10-15, some even less than \$10. So, how to decide on which of the many to try? I think the biggest differentiator among NZ SB's is their acidity, and suggest that you base your selection on your own acid level preference. I say this because irrespective of acidity, almost all that I have tasted have excellent fruit flavors and are clean and attractive. The flavors are primarily grassy, herbal gooseberry in character with added layers of citric and/or tropical fruit to varying degrees. So here goes:

#### High acidity NZ SB's:

2007 Kim Crawford, Marlborough, \$13. Has a definite citric edge (high acid) but very clean and crisp with nice fruit intensity and excellent length.

2007 Huia, Marlborough, \$15. Same wording applies. Flavor differences from the above are there but too subtle for me to find words for.

#### Medium Acidity NZ SB's:

2007 Oyster Bay, Marlborough, \$12. I really like this one for its richness and viscosity coupled with classic grassy, gooseberry fruit and medium level acidity.

2007 Babich, Marlborough, \$10. Much the same as Oyster Bay, but a touch of interesting sage and lemon lends complexity. Again, richness comes across in part because the acidity is not too high.

2007 Matua Valley "Paretai", Marlborough, \$17. No reason to cost 50% more than the above. Same descriptors as Oyster Bay, just as enjoyable until the price is revealed.

Let me also mention a current release 2006 NZ SB:

2006 Whitehaven, Marlborough, \$11. Another classic, clean, medium acidity example with excellent gooseberry fruit, and good length. SB's usually are best drunk young. While right now this 2006



Peter Wagner

tastes as young as the 2007's above, I would not keep it too long.

In contrast, the 2007 Cloudy Bay (\$22) was disappointingly simple, lemony - and that was in a blind tasting so that this was not just a reaction to unmet expectations. Recall that it was Cloudy Bay SB that introduced the world to New Zealand as a wine region.

In sum, for my palate and wallet, Oyster Bay and Babich will be my targets this year until additional NZ SB's (and there are many more I have not yet seen) displace them.

Here are some recent red wine releases:

2005 Tobin James "Rock and Roll" Paso Robles Syrah, \$14. Great fruit on the nose and palate - rich plum and dark cherry. Excellent mouthfeel, medium bodied and soft but noticeable tannin. This is a very easy-to-drink wine, with 14.6% alcohol, so best imbibed at home with the cars locked in the garage. Some earth, vanilla, and slight gamey/bacon element (which is actually quite common in syrah). Good balance and length.

2005 Trentadue "Old Patch Red" Sonoma County, \$10. This is mostly Zinfandel (70%) with the balance being petite sirah, syrah, and carignane. It has

a jammy, slightly earthy and sweet nose with obvious oak, and a palate that follows in kind. It is an interesting wine, big and bright and spicy but with soft tannins and OK acidity. The fruit is both red and dark berry, and the 14.9% alcohol does show as heat at the finish. But very approachable and will be excellent with food.

2006 Macchia Barbera, Cooper ranch, Amador county, \$20. This is a 15.3% alcohol blockbuster. It has lots of American Oak on the nose and palate (dill/coconut), but definitely has the dark berry fruit to match it. The richness of fruit and viscous mouthfeel without heavy tannin is very seductive. For some, the oak will be in excess, but for me this wine has enough balance to make it to the column. The oak and alcohol give it an almost sweet palate, but there is no residual sugar that I can taste. Probably this wine will not age too long. It should be drunk in the next 1-2 years, I think.

2006 Marquis Phillips Shiraz, SouthEast Australia, \$12. Here we go again - 15.5% alcohol, tons of lush dark berry fruit, soft tannin, soft acid, some spice and a fair dose of American Oak. Mae West in a bottle. The oak, alcohol and ripe fruit combine to suggest sweetness but the wine is quite dry technically - no sugar. This is definitely a short term wine - drink within the next year. It does not have much structure or complexity and needs to be drunk young.

2005 Yangarra Estate Shiraz, McLaren Vale, South Australia, \$20. This is definitely a couple of steps up from all of the above. This is a big, powerful wine with great structure. It will cellar for several years (if kept at a cool constant temperature of course). Rich blackberry nose, with oak that is not as obvious as in the above wines. The palate is opulent, and the tannins are just right - enough for structure, not at all heavy. The acidity is just on the high side, which will help its aging potential. There is complexity, with some earth, spice and oak to complement the blackberry fruit. While a fairly high extract wine, it is not at all forced - it is powerful without being heavy. ❖



*March 2-7*

**Molecular Mechanisms in Lymphatic Function and Disease, Ventura, CA.** *Information:* Geert Schmid-Schonbein, University Of California, San Diego, Department Of Bioengineering, 9500 Gilman Drive, 0412, La Jolla, CA 92093-0412. Email: gwss@bioeng.ucsd.edu; Internet: <http://grc.org/programs.aspx?year=2008&program=molecmech>.

*March 17-20*

**Genomic Disorders 2008 - Studying the Genome to Understand Human Development and Disease, Cambridge, United Kingdom.** *Information:* Lucy Criddle, Wellcome Trust Meetings Programme, Wellcome Trust Conference Centre, Wellcome Trust Genome Campus, Hinxton, Cambridge, CB10 1RQ. Tel.: +44 (0) 1223 495000; Fax: +44 (0) 1223 495023; Email: l.criddle@wtconference.org.uk; Internet: <http://firstcontact.hinxton.wellcome.ac.uk/>.

*April 7-9*

**5th Conference of the European Study Group on Cardiovascular Oscillations, Parma, Italy.** *Information:* ESGCO2008, Conference Secretariat, Polo Tecnologico - Fondazione Don Carlo Gnocchi Onlus, Via Capecelatro 66, 20148 Milano, Italy. Tel.: +39 02 40308305; Fax: +39 02 4048919; Email: esgco2008@dongnocchi.it; Internet: <http://www.dongnocchi.it/polotecnologico/esgco2008/>.

*April 12-19*

**60th Annual Meeting of the American Academy of Neurology, Chicago, IL.** *Information:* Internet: <http://www.aan.com/go/am>.

*April 23-26*

**Nicotinic Acetylcholine Receptors 2008, Cambridge, United Kingdom.** *Information:* Jemma Beard, Wellcome Trust Conference Centre, Wellcome Trust Genome Campus, Hinxton, Cambridge, CB10 1RQ. Tel.: +44 (0) 1223 495120; Fax: +44 (0) 1223 495023; Email: j.beard@wtconference.org.uk; Internet: <http://www.wtconference.org.uk>.

*May 16-21*

**2008 American Thoracic Society International Conference (ATS), Toronto, Canada.** *Information:* American Thoracic Society, 61 Broadway · New York, NY 10006-2755. Tel.: 212-315-8600; Fax: 212-315-6498; Email: ats2008@thoracic.org; Internet: <http://www.thoracic.org/index.cfm>.

*May 18-21*

**TIDES 2008, Las Vegas, NV.** *Information:* Internet: <http://www.ibclifesciences.com/tides/8490.xml>.

*June-September*

**FASEB's 2008 Summer Research Conferences held in Carefree, AZ; Saxtons River, VT; New Haven, CT; Snowmass Village, CO; Lucca, Italy; and Copenhagen, Denmark.** *Information:* FASEB Summer Research Conferences, 9650 Rockville Pike, Bethesda, MD 20814. Internet: <http://src.faseb.org/>.

*June 1-5*

**15th International Vascular Biology Meeting, Sydney, Australia.** *Information:* IVBM 2008 Conference Secretariat, PO Box 1179, Crows Nest, NSW 1585. Tel.: +61 2 9436 0232; Fax: +61 2 9436 4462; Email: ivbm@conceptevents.com.au; Internet: <http://www.ivbm2008.com/>.

*June 4-6*

**Second Annual Scientific Meeting of The Organization for the Study of Sex Differences, New Orleans, LA** *Information:* Viviana Simon, PhD, Tel: (202) 496-5002; Email: viviana@ossdweb.org; Internet: [http://www.ossdweb.org/meeting\\_2008.html](http://www.ossdweb.org/meeting_2008.html).

*June 8-14*

**IWPCPS@-10 -- Tenth International Workshop on Physical Characterization of Pharmaceutical Solids, Bamberg, Germany.** *Information:* Internet: [http://www.assainternational.com/workshops/IWPCPS\\_10/IWPCPS\\_10.cfm](http://www.assainternational.com/workshops/IWPCPS_10/IWPCPS_10.cfm).

*June 26-28*

**5th International Symposium on Courgh: Mechanisms and Treatment, London, UK.** *Information:* Karina Dixon, Events Office, National Heart & Lung Institute, Imperial College, Dovehouse Street, London SW3 6LY, UK. Tel.: 00 44 (0) 207 351 8172; Fax.: 00 44 (0) 207 351 8246; Email: k.dixon@imperial.ac.uk.

*June 28-July 3*

**33rd FEBS Congress and 11th IUBMB Conference, Biochemistry of Cell Regulation, Athens, Greece.** *Information:* Georgina Alexopoulou, Promotion and Communication. Tel.: +30 210 6889100; Fax: +30 210 6844777; Email: febs-iubmb2008@cnc.gr; Internet: <http://www.febs-iubmb-2008.org/>.

*August 17-22*

**IASP 12th World Congress on Pain, Glasgow, Scotland, UK.** *Information:* Fiona McGillvray or Vicki Grant, Congress Secretariat, Meeting Makers, Jordanhill Campus, 76 Southbrae Drive, Glasgow G13 1PP, United Kingdom. Tel.: +44 (0) 141 434 1500; Fax: +44 (0) 141 434 1519; Email: jasp2008@meetingmakers.co.uk; Internet: [http://www.iasp-pain.org/AM/Template.cfm?Section=World\\_Congress\\_on\\_Pain&Template=/CM/HTMLDisplay.cfm&ContentID=3928](http://www.iasp-pain.org/AM/Template.cfm?Section=World_Congress_on_Pain&Template=/CM/HTMLDisplay.cfm&ContentID=3928).

*September 8-15*

**Cardiovascular & Respiratory Systems Modeling: From Cell to Organ, Seattle, WA.** *Information:* Kay Sterner, The NSR Physiome Project, Box 355061, University of Washington, Seattle, WA 98115-5061; Tel.: 206-685-2005; Email: sterne@u.washington.edu; Internet: <http://www.physiome.org/Course/sept07.html>.

*September 11-14*

**Workshop on the Biology of Signaling in the Cardiovascular System, Cape Cod, MA.** *Information:* Bernadette Englert, Tel: (301) 760-7745; Email: mailto:bernadette@navbo.org; Internet: <http://www.navbo.org/BSCVS>.

# DONATE at least \$35.00 and receive this gift from APS...the *APS Guide to Wine Appreciation*

***APS Guide to Wine Appreciation***  
***...or how to convince your friends that you know more about wine than you really do.***

by Peter D. Wagner, MD, University of California-San Diego, La Jolla, California  
(Paperback 52 pages, October 2007—Excerpts from the book are below)

## **Excerpts From The Book**

### **CHAPTER 1: Preamble—general considerations**



What's a preamble? A bit like priming the pump, a pre-systolic accentuation in mitral stenosis perhaps. Fat Albert's rocket-assisted takeoff (footnote: Fat Albert is the C-130 transport that supports the Blue Angels, and if you don't know what a C-130 is or who the Blue Angels are, may your Dean have pity on your soul).

**Point 1:** Wine appreciation should be done in parallel, not in series.

**Point 2:** No matter what type of wine, no matter how good or bad it actually is, no matter how experienced a taster you may be (or think you may be), you must remember this (not the song): There are TWO parts to the appreciation of wines.

**Point 3.** Don't be seduced by the label, or the price or (especially) the reputation of a particular wine.

**Point 4.** A closely parallel warning: Don't be influenced by your fellow tasters, not even by me.

### **CHAPTER 2: The Process of Evaluation of a Wine—step by step**



**PART 1:** Do you like the damn stuff or not?

**PART 2:** Why you like or hate the damn stuff. Science rules, sort of.

### **CHAPTER 3: The Most Common Grape and Wine Varieties—their features as wines**



There are many styles of grapegrowing and winemaking that provide a wide array of attributes in the finished wine, even wines from the same grapes in adjacent regions. What follows describes the classical, expected, stereotypical features of each, especially as they apply to U.S. wines.

### **CHAPTER 4: The Conduct of a Wine-Tasting Session—how to run it**



Remember, you do not need to know anything at all about wine or tasting to succeed here. All you need is courage, bravado, and a proficiency in public speaking (which you have all gotten anyway from years of teaching graduate and medical students). Remember—the more forcefully you speak, the more enobabble you use, the more your reputation grows even if you are flat out wrong in everything you say. It's not what you say, it's how you say it.

## APS Guide To Wine Appreciation

*...or how to convince your friends that you know more about wine than you really do*



Peter D. Wagner, MD  
University of California-San Diego, La Jolla, California

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3. If you answered yes to above, what is your category of Membership? \_\_\_\_\_ Year elected? \_\_\_\_\_
4. Name of Applicant: \_\_\_\_\_  
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5. Date of Birth \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Optional: Male  Female   
Month / Day / Year
6. Institution Name \_\_\_\_\_ Department \_\_\_\_\_  
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**12. 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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**13. WHAT IS YOUR SECTION AFFILIATION?** Please identify and rank up to three sections to which you desire affiliation. (e.g., 1 = primary affiliation, 2 = secondary affiliation, 3 = tertiary affiliation). **There can be only one "Primary" affiliation.**

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## 16. 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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## 17. 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 cotransport in isolated mammalian villus enterocytes. Am J Physiol Gastrointest Liver Physiol 280: G26-G33, 1991.

## 18. DOCTORAL DISSERTATION TITLE (if applicable):

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## 19. POSTDOCTORAL RESEARCH TOPIC (if applicable):

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## 20. 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  
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