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## The Secret to Getting Your Foot in the Door: the Academic Job Search Portfolio

Barbara T. Alexander • The University of Mississippi Medical Center



Barbara T. Alexander

The APS Mentoring Forum by Colleen Cosgrove Hegg (*Physiologist* 52: 17-18, 2009) highlighted the important steps necessary to initiate your job search. But, now that you have started looking, how do you land the position in the department that is “perfect” for your career goals and research interests? The secret to getting your foot in the door involves the assembly of a strong, effective, professional academic job search portfolio. What is an academic job search portfolio? It is a concise but comprehensive summary of your professional growth that highlights your professional training, goals, and work philosophy. It contains a collection of

documents intended to showcase your potential to garner extramural grant support, lead a comprehensive and innovative research program, and demonstrate your commitment to excellence in teaching. Your academic job search portfolio should tell prospective employers that you meet all expected requirements for the advertised position, and, in general, it will fulfill the requested documents needed for the initial application. There are several components to an academic job search portfolio. Each has its own unique role, and each provides information that is critical to getting the position that you desire. The five major components of an academic job search portfolio are as follows:

- 1) Cover letter
- 2) Curriculum vitae (CV)
- 3) Research statement
- 4) Teaching philosophy statement
- 5) References

The cover letter is probably the most important part of your academic job search portfolio. It is the component that can literally “get your foot in the door.” How? Think about how you shop for a book while waiting to catch a flight. Think about what persuades you to buy a particular book. You probably initiate your search for a novel by looking for books by authors whose work you have previously read and enjoyed (name recognition). Then the next step in the decision-making process involves reading the blurb on the back cover of the book that highlights

Continued on page 151

### A Matter of Opinion

## D.O.A.

We were taught in high school civics class that “the President proposes and the Congress disposes.” Once again President Obama proposed the 2015 budget on March 4th and House Speaker John A. Boehner (R-OH) disposed of it calling it “a clear sign this president has given up on any efforts to address our serious fiscal challenges.” Senate Minority Leader Mitch McConnell (R-KY) chimed in by saying that Obama had “opted for the political stunt for a budget that’s more about firing up the base in an election year than about solving the nation’s biggest and most persistent long-term challenges.” Lawmakers in both parties acknowledged that the White House proposal is at least as much

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# Science Policy

## APS Takes Part in FASEB Hill Day!



Mark Weiss and Alicia Schiller

On March 5, APS members and staff participated in the Federation of American Societies for Experimental Biology (FASEB) Hill Day event. This year set a record of 87 meetings with legislators and their staff. Hill Day participants advocated for FASEB's research funding recommendations, including \$32 billion for NIH, \$7.6 billion for NSF, and \$621 million for the Veterans Affairs Medical and Prosthetic Research Program. They also documented their efforts on Twitter using the hashtag #FASEBHillDay. Read more about FASEB's funding recommendations at [www.faseb.org/fundingreport](http://www.faseb.org/fundingreport). ●

## President Obama Releases FY 2015 Budget Proposal

On March 4, 2014, President Obama released the Administration's fiscal year (FY) 2015 budget proposal. The \$3.9 trillion budget proposal provides a starting point for Congressional action to determine funding levels for all federal agencies and programs, including the National Institutes of Health (NIH), National Science Foundation (NSF), NASA, and Veterans Affairs (VA) medical and prosthetic research.

Increases for research were modest as the White House worked to stay within the budget caps established by the Budget Control Act of 2011. White House Office of Science and Technology Policy Director John Holdren noted in a briefing that the 1% increase in research and development funding outpaced the 0.2% increase for overall discretionary spending, reflecting the priority that the President places on research programs.

For the NIH, the FY 2015 budget would be \$30.2 billion, \$200 million above the FY 2014 level (0.7% increase). This would allow the agency to fund an additional 329 research project grants. The budget proposal details a number of investments, including the BRAIN Initiative (\$100 million), the Big Data to Knowledge (BD2K) project (\$88 million), and a new DARPA-like program

(\$30 million) within the Common Fund to support "high risk, goal-driven activities that aim to achieve rapid technology." The proposal also highlights new and ongoing efforts to foster a talented and diverse future workforce.

The NSF would receive \$7.255 billion under the FY 2015 proposal, \$83 million more than in FY 2014 (1.2% increase). Despite the overall increase for the agency, funding for research and related activities is slated for a small cut of 0.03% (\$5.807 billion), and the BIO directorate's funding would decrease by 1.8% (\$708.52 million). Education and human resources would increase by 5.1% (\$889 million). Highlights of the NSF budget proposal include investment in cognitive science and neuroscience (\$29 million) and research at the interface of biological, mathematical, and physical sciences (BioMaPS, \$29 million).

The FY 2015 proposal would trim the NASA budget to \$17.5 billion, \$100 million below FY 2014 (0.06% decrease). The proposed science budget at NASA is \$4.972 billion, down from \$5.15 billion in FY 2014, and the research budget for the International Space Station would also decline slightly to \$312.2 million



from \$317.5 million in FY 2013 (FY 2014 levels not specified). Under the proposed budget, the Human Research Program would increase to \$160.5 million. The budget highlights the importance of understanding the physiological changes that humans undergo during prolonged spaceflight, with a future goal of sending humans beyond low earth orbit.

The proposal calls for Medical and prosthetic research at the VA to be funded at \$589 million, \$3 million above FY 2014 (0.5% increase). Core research priorities include big data/bioinformatics, genomic medicine, and critical needs for combat veterans (prosthetics, traumatic brain injury, spinal cord injury, and rehabilitation engineering). The proposal estimates that there will be 2,224 projects supported in FY 2015, the same as in FY 2014 (<http://www4.va.gov/budget/docs/summary/Fy2015-VolumeII-MedicalProgramsAndInformationTechnology.pdf>).

In addition to regular budget appropriations, the proposal includes a new "Opportunity, Growth and Security Initiative." This initiative would generate funds through a combination of taxes and changes to existing

programs, including crop insurance, airport security, and unemployment. If Congress acts on this proposal, it would provide up to an additional \$56 billion in spending, \$5.3 billion of which would go to research and development. Under this plan, the NIH would receive an additional \$970 million over and above the FY 2015 budget. This would fund up to 650 new grants and support other activities, including the BRAIN Initiative, Big Data to Knowledge (BD2K), research on Alzheimer's disease, vaccines, and the new Accelerating Medicines Partnership. The initiative would also bring additional funds to NSF (\$552 million) to support NSF priorities across the agency's portfolio. The additional funds would enable the agency to make an estimated 1,000 more awards and provide support for 3,000 more graduate students for the next 5 years. At NASA, an additional \$886 million would add funding for science and the International Space Station along with other agency priorities. However, prospects for passage of the Opportunity, Growth and Security Initiative are uncertain as Congress continues to strive for a balance between fiscal constraint and economic growth. ●



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**Science Policy News**

The banner features a teal background with a network of white lines. On the right, there are two small images: a purple flower and the US Capitol dome.

A monthly bulletin for APS members about science policy issues of concern to physiologists with an **emphasis on advocacy opportunities**

Email [SciencePolicy@the-aps.org](mailto:SciencePolicy@the-aps.org) to sign up!



## APS Comments on Travel Restrictions for Federal Scientists

In the wake of allegations of misspent government funds, the Office of Management and Budget (OMB) in 2012 imposed new restrictions on travel for federal employees. OMB directed agencies to cut their travel budgets by 30% and imposed new limits on conferences and meetings.

The Senate Homeland Security and Government Affairs Committee held a hearing January 14, 2014 to assess the impact of these regulations and consider legislation to codify these regulations. To learn how the regulations are affecting government scientists, APS members who work for the federal government were asked to share their concerns in an anonymous forum. Their input was included in a letter that the APS sent to the committee. Excerpts appear below.

- Each year, the APS sponsors scientific conferences where scientists exchange ideas, share the results of their research, and forge critical connections with their colleagues. Restricting the ability of federal scientists to participate in these interactions has a negative impact on the scientists themselves, as well as on the scientific community as a whole.
- Scientific meetings provide a unique environment where researchers gather to share the results of their work with others. This exchange of ideas is crucial for problem-solving and future innovation. Scientists critically review the work that is presented, including preliminary data. Their feedback in turn enhances the research. These interactions are particularly important for early career scientists.
- Current travel restrictions effectively set some government scientists up for failure. For example, scientists at the NIH must achieve an international scientific reputation in order to be granted tenure. Because they are not allowed to make timely commitments to present their research at scholarly meetings – even when there would be no cost to the government – the organizers have to look elsewhere.
- Scientific conferences also serve as a place to meet other scientists trying to solve similar problems. Senior scientists looking to hire personnel for their labs recruit at these meetings, and junior scientists attend to seek future employment. By restricting travel, federal researchers are unable to take advantage of opportunities to share the results of their work, collaborate with their peers, improve their research programs, and recruit promising junior scientists.
- Restrictions placed on travel for federal scientists also limit their participation in the activities of their scientific societies that sometimes include continuing medical education. Because clinicians who work for government agencies are required to maintain their credentials, they face particular challenges when travel restrictions prevent them from participating in continuing education activities.
- Travel restrictions have also imposed a significant administrative burden due to the lengthy and onerous approval process. Some members report they have to request approval so far in advance that the meeting programs are not yet published, making it difficult to judge whether the meeting would be useful to attend. Moreover, due to the long processing time, final travel approval may come just before the scientific meeting, when booking travel is expensive and problematic.
- Restricting the ability of federal scientists to participate in the scientific community is detrimental to the progress of science. Cross-cutting collaborations and interdisciplinary interactions are increasingly being recognized as the shortest and best path to the successful translation of scientific findings into practice. Reducing the participation of government scientists in the research community dilutes federal input, influence, and impact on the course of scientific thought, and it runs counter to the goal of maximizing access to the results of government-funded research.
- Many government scientists make funding decisions about grants for the extramural scientific community. By restricting their access to scientific conferences, they cannot maintain an up-to-date knowledge of their fields. These scientists also serve as an invaluable source of information for extramural scientists, who look to them for information about funding priorities and the grant review process.
- The current restrictions on travel for federal scientists have limited their ability to effectively and efficiently carry out their missions. Efforts should be made to revise the regulations to ensure that scientists can be active participants in the scientific community without wasting taxpayer dollars on administrative burden. ●

# APS News

## Trainees Engaged in Writing and Ethics Training On Martin Luther King, Jr. Holiday Weekend

It is an annual tradition for APS to host its "Writing and Reviewing for Scientific Journals Course" in Lake Buena Vista, FL. This year, APS was pleased to not only hold this course but also a new course entitled "Professional Integrity: Best Practices for Publishing Your Work."

### Professional Integrity: Best Practices for Publishing Your Work

For the first time, 25 early career graduate students met for 2 and a half days to discuss publication ethics issues including authorship, plagiarism, data presentation, overlapping publications, conflict of interest, human and animal subject welfare, and data fraud and fabrication. Small group activities, facilitated by expert faculty, provided opportunities for students to discuss sensitive issues and to identify ways to address them in their role as graduate students and in their future professional positions. Overall, the course was a success; as one student stated, "The APS ethics course helped me see ethics in a real/applied way . . . This was the first time I really took the time to check journal guidelines, and now I feel better prepared to write a manuscript. This topic is not frequently discussed in grad school, but you have

to be aware that it is important from beginning to end in everything you do as a scientist."

The course was developed as part of a National Science Foundation (NSF) Ethics Education in Science and Engineering (EESE) grant that was awarded to APS, in collaboration with the Biomedical Engineering Society (BMES) and the Society for Biological Engineers (SBE). Each publication ethics topic has been prepared as individual teaching modules that can be incorporated into Responsible Conduct of Research (RCR) courses, as needed. The materials should be available for broad distribution and testing later this year. For more information visit: <http://www.the-aps.org/mm/Education/GraduateProfessional/Educational-Projects/Professional-Integrity>.

### Writing and Reviewing for Scientific Journals

For the ninth consecutive year, graduate and postdoctoral trainees met with APS members for 2 and a half days to polish their first-author draft manuscripts and learn the essentials of writing a manuscript from abstract



APS PSTC ethics group





APS PSTC writing group

to discussion. New to this year's program, APS offered graduate credit through Adams State University to trainees who successfully completed the course. The course was taught by an excellent team of instructors, ranging from journal editors to APS presidents. Trainees left this program with a revision-ready manuscript, a stronger sense of the manuscript review and editing process, and very positive comments, such as: "I was very happy to have this opportunity to participate. I fully believe it

will have a positive impact on my academic progress and career. Thanks to everyone involved in making this happen. I wish every trainee could participate!"

This program will be offered again in Florida in January 2015 and will also be offered as an online course June 23 to August 8, 2014. Both courses are eligible for graduate credit through Adams State University. To learn more, visit [www.the-aps.org/PST](http://www.the-aps.org/PST). ●

### Course Participants

Professional Integrity Faculty  
 APS President Kim Barrett,  
 University of California,  
 San Diego  
 Editor in Chief, Charles Lang,  
 Penn State University  
 Editorial Board Member, Rudy  
 Ortiz, University of California,  
 Merced  
 Editorial Board Member, Ann  
 Schreihöfer, University of North  
 Texas Health Science Center  
 Lydia Contreras, University of  
 Texas at Austin

### Professional Integrity Attendees

Brittni Baynes, Louisiana State  
 University Health Sciences Center  
 John Henry Dasinger, University of  
 Mississippi Medical Center  
 Gail Gifford, University of Michigan  
 Ellen Gillis, University of Mississippi  
 Medical Center  
 Kelly Harris, Meharry Medical  
 College  
 Brian Hodge, University  
 of Kentucky  
 Sarah Lehman, University  
 of Arizona  
 Roxana Loperena, Vanderbilt  
 University Medical School

Neysha Martinez-Orengo,  
 Ponce School of Medicine  
 John Maxi, Louisiana State  
 University Health Sciences Center  
 Jacques Mayeux, Louisiana State  
 University Health Sciences Center  
 Peter Mittwede, University of  
 Mississippi Medical Center  
 Clarissa Muere, Medical College of  
 Wisconsin  
 Richelle Mayfield, University  
 of Michigan  
 Dennis Pollow Jr., University  
 of Arizona  
 Aaron Provence, South Carolina  
 College of Pharmacy

# APS News

Yainyrette Rivera-Rivera, Ponce School of Medicine  
 Alicia Schiller, University of Nebraska Medical Center  
 Christopher Slay, University of California, Irvine  
 Lauren Stein, St. Louis University  
 Mathew Valdez, University of California, Merced  
 Guillermo Vazquez-Anaya, University of California, Merced  
 Jalessa Wright, University of Alabama at Birmingham  
 Ling Xin, University of Massachusetts  
 Wenlin Zhang, Indiana University

## Writing and Reviewing Faculty

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 Editorial Board Member Heddwen Brooks, University of Arizona  
 Editorial Board Member Robert Hester, University of Mississippi Medical Center

Mark Knuepfer, Saint Louis School of Medicine  
 Editor in Chief Sadis Matalon, University of Alabama at Birmingham  
 APS President Elect David Pollock, University of Alabama at Birmingham

## Writing and Reviewing Attendees

Bumsoo Ahn, University of Florida  
 David De La Zerda, University of California, San Diego  
 Wenting Du, Georgia Regents University  
 Weisi Fu, University of Kentucky  
 Kathleen Gavin, University of Colorado Anschutz Medical Campus  
 Ricci Haines, University of South Florida  
 Koeun Lim, MIT  
 Jenny Lutshumba, University of Kentucky  
 Morag Mansley, Friedrich-Alexander-Universität Erlangen-Nürnberg

Bridget Martinez, University of California, Merced  
 Jacqueline Minas, University of California, Merced  
 Danielle Plomaritas, University of New Mexico  
 Ruben Rodriguez, University of California, Merced  
 Martin Rosario, University of Puerto Rico Medical Sciences Campus  
 Maricelly Santiago, Ponce School of Medicine  
 Maria Alicia Sepulveda, Georgia Regents University  
 Inger Stallmann-Jorgensen, Georgia Regents University  
 Shani Stern, Weizmann Institute of Science  
 Lilith Torres, Ponce School of Medicine  
 Elizabeth Vogel, Mayo Clinic  
 Venus Welch-White, Tuskegee University  
 Andriy Yabluchanskiy, University of Mississippi Medical Center



## APS Professional Skills Training Upcoming Courses

### Manuscript Writing Skills

Writing and Reviewing for Scientific Journals  
 June 23–August 8 (Online)  
 Work with leading experts online to improve your first-author draft manuscript while learning the essentials of scientific writing and reviewing.

### Meeting and Presentation Skills

Abstract Writing for Scientific Meetings  
 October 16–22 (Online)  
 Receive feedback on your first-author abstract while improving your abstract writing skills.

### Interviewing Skills

Interviewing for an Academic Position  
 May 8–18 (Online)  
 Work with experienced faculty on how to start a job search, prepare a curriculum vitae and research statement, have a successful interview, and present an engaging job talk.

Interviewing for an Industry Position  
 September 11–21 (Online)  
 Work with industry professionals on how to start a job search, prepare a cover letter & resume, have a successful interview, and present an engaging job talk.

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



## APS Announces New Award Honoring Beverly Bishop



Beverly P. Bishop

In 2007, the American Physiological Society received a bequest from Beverly P. Bishop and Charles W. Bishop to establish the Beverly Petterson Bishop Award for Excellence in Neuroscience. Beverly had been a member of the Society since 1965, serving on council from 1988 to 1991. She died September 20, 2008, but before her death, Beverly was interviewed for the

Society's Living History program (<http://www.the-aps.org/mm/Membership/Living-History/Bishop>). Beverly was survived by her husband Charles, who passed away January 11, 2014. Charles had been an APS member since 1977. Charles and Beverly had been regular attendees at the Society's annual Experimental Biology

meeting, oftentimes flying in their small plane to the annual meeting.

In establishing the new award, the Bishop's made a bequest of \$500,000 to the Society. The Beverly Petterson Bishop Award for Excellence in Neuroscience recognizes excellence in neuroscience/neurophysiology research and will be given to an investigator who holds an academic rank no higher than assistant professor. The award will be presented annually to an individual demonstrating outstanding promise based on his/her program in neuroscience/neurophysiology research. Applications will be accepted from APS members in good standing. The selection committee will be comprised of representatives from the CNS and NCAR sections. It is anticipated that the first Beverly Petterson Bishop Award for Excellence in Neuroscience will be made during the annual meeting of APS held as part of the Experimental Biology 2015 meeting in Boston. ●

## APSselect

### Introducing APSselect

A new website from which you can access the "best of the best" articles from the APS journals. APSselect highlights articles from the more than 250 papers published each month by the Society's 10 research journals. Articles are selected by an editorial team that includes editors and members of the Publications Committee. You can access the APSselect collection all in one place at [apsselect.physiology.org](http://apsselect.physiology.org).

### About the New Website

The editorial team carefully selects the top articles published each month across all 10 APS research journals that highlight, promote, and rapidly disseminate our very best original research. This collection provides:

- Outstanding scientific discoveries published by our Society each month.
- Timely, convenient, and concise "one-stop shopping" mechanism to broadly transmit our exceptional work.
- Easy access from the APS homepage ([the-aps.org](http://the-aps.org)).

APSselect is an ideal mechanism to enable a broader mission: to promote excellence of the physiological discipline to biomedical researchers in other fields.



[apsselect.physiology.org](http://apsselect.physiology.org)



# APS News

## Adams Named Editor of *AJP – Cell*



Josephine C. Adams

Josephine C. Adams has been named editor of the *American Journal of Physiology – Cell Physiology*, effective July 1, 2014.

Adams was born in Leicester, UK, and grew up in the nearby city of Nottingham. She read Natural Sciences (Biological) at the University of Cambridge, UK, where she was an undergraduate member of Newnham College. She received her PhD in 1987 from the University of London. She undertook postdoctoral research at Imperial Cancer Research Fund London and then held consecutive EMBO Long Term and Human Frontiers Science Program Long Term fellowships as a postdoctoral researcher in the Vascular Research Division, Department of Pathology, Brigham and Women's Hospital, Harvard Medical School, Harvard University. In 1994, she became a Wellcome Trust Senior Fellow in Basic Biomedical Research and set up her own research laboratory at the MRC-Laboratory for Cell Biology, University College London, with honorary appointments as Lecturer, then Reader in Molecular Cell Biology, in the Department of Biochemistry and Molecular Biology at UCL. From 2002, she was a faculty member in the Department of Cell Biology, Lerner Research Institute, Cleveland Clinic, Cleveland, Ohio, rising to the level of Professor of Molecular Medicine. Since 2009, she has been Professor of Cell Biology in the School of Biochemistry, University of Bristol, UK, where she also acts as

organizer for second-year Biochemistry Units and as a member of the management group for the Wellcome Trust PhD programme in "Dynamic Cell Biology."

Adams has served on multiple editorial boards, as an associate editor of *Molecular Biology of the Cell* and as reviews editor for the *International Journal of Biochemistry and Cell Biology*. She has acted as guest editor for several journal special issues and was the editor of "Methods in Cell-Matrix Adhesion" in the *Methods in Cell Biology* series. From 2006 to 2009, she served as the American Society for Cell Biology representative on the editorial board of *Physiological Reviews*, and from 2009 to 2014 has been a member of the European editorial committee of *Physiological Reviews*. She has organized several research conferences and is the author of numerous original research papers, reviews, and book chapters.

Adams' research has received grant support from the Wellcome Trust, Medical Research Council, UK, National Institutes of Health, British Heart Foundation, and other agencies. Her research is in the area of cell interactions with extracellular matrix, and emphasizes the identification of basic cellular mechanisms and the application of interdisciplinary approaches to examine their roles in tumor progression and metastasis, fibrosis, or smooth muscle cell function. Research topics include extracellular matrix assembly and extracellular matrix activities in actin cytoskeletal organization, cell motility, and nucleocytoplasmic communication. The evolution of metazoan extracellular matrix is also an interest of the laboratory. ●

## Yates Named Editor of the *Journal of Neurophysiology*



Bill Yates

Bill Yates has been named editor of the *Journal of Neurophysiology*, effective July 1, 2014.

Yates is Professor of Otolaryngology, Neuroscience, and Clinical and Translational Science at the University of Pittsburgh School of Medicine. His undergraduate and graduate studies in neuroscience were completed at the University of Florida, and in 1986

he relocated to Rockefeller University to pursue postdoctoral work under the mentorship of Victor Wilson. During his time as a postdoc, Yates became interested in the role of the vestibular system in maintaining postural stability and cardiovascular and respiratory homeostasis during postural alterations. Most of his career has been spent unraveling the contributions of the vestibular system to autonomic regulation. Yates' research activities are described on his laboratory website (<http://neuroyates.com>).

Yates was promoted to the rank of assistant professor at Rockefeller University in 1990, and in 1994 he relocated to the University of Pittsburgh. Alongside his research program, another focus of Yates' career has been research ethics, particularly related to the use of animals in biomedical research. He served as chair of the University of Pittsburgh's IACUC, and since 2006 has co-directed the University's Research Conduct and Compliance Office (<http://www.rcco.pitt.edu>). He has been a member of the Board of Directors of the research advocacy organization Americans for Medical Progress (<http://www.amprogress.org>) since 2010 and contributes blog entries to *Speaking of Research* (<http://speakingofresearch.com>), which provides information to the public regarding the need for animal use to achieve

medical progress.

Yates has served on a variety of committees for the American Physiological Society (APS), including the Central Nervous System Section steering committee, the Committee on Committees, and the Animal Care and Experimentation committee. He was chair of the Animal Care and Experimentation committee from 2010 to 2012, and since 2010 has served as APS's representative on the Board of Trustees for the Association for the Assessment and Accreditation of Laboratory Animal Care, International (AAALAC). Most recently, Yates was elected to APS Council. He also serves on the ethics committee of the International Union of Physiological Sciences. He organized symposia at the 2010 and 2012 Experimental Biology meetings related to advocacy for the use of animals in biomedical research and addressing the threats posed by the animal rights movement.

Yates served as neurophysiology section editor for *Experimental Brain Research* from 1996 to 2014, and has also been an associate editor of *Frontiers in Respiratory Physiology*. He edited the book *Vestibular Autonomic Regulation* (CRC Press, 1996) with Alan Miller, and is currently co-editing the book *Regulatory Compliance* (Elsevier, 2015) with Mark Suckow. He has been a member of a variety of peer review committees for both the National Aeronautics and Space Administration and the National Institutes of Health (NIH), including service as a chartered member of NIH's Sensorimotor Integration study section.

Yates' scientific communication skills are frequently tested in the classroom, where he teaches undergraduate, graduate, and medical students. He was awarded the University of Pittsburgh's highest teaching honor, the Chancellor's Distinguished Teaching Award, in 2010. ●



# Chapter News

## Puerto Rico Physiological Society Meets in Ponce

Caroline B. Appleyard, PRPS

The Puerto Rico Physiological Society (PRPS) celebrated its 4th Annual Scientific Meeting on Saturday February 8, 2014 in Ponce at the Ponce School of Medicine and Health Sciences (PSMHS). This meeting, which was organized by Caroline B. Appleyard (PSMHS), President of PRPS, in collaboration with colleagues from the University of Puerto Rico-Medical Sciences Campus (UPR-MSC) and Universidad Central del Caribe School of Medicine, brought together a diverse group of medical and public health professionals from across the island and the U.S. to explore the topic of "Exercise Physiology: from Molecules to Systems." A total of 136 participants, mainly composed of undergraduate and graduate students, as well as postdoctoral fellows, faculty, and laboratory technicians, attended the meeting.

The meeting began with a continental breakfast and welcoming remarks from Olga Rodriguez-Arzola, President and Dean of PSMHS. The program included a cadre of speakers from universities and health centers in Puerto Rico and the U.S. covering a diverse range of aspects of exercise physiology.

The sessions, moderated by Caroline Appleyard and other members of the PRPS, commenced with a stimulating and thoughtful presentation from the Executive Director of the American Physiological Society, Martin Frank, on "Publishing in the 21st Century." This was followed by an exciting talk on the

effects of exercise on epigenetics and mechanisms of adaptation from Stephen Roth (University of Maryland). During the latter part of the morning, Walter Frontera (Vanderbilt University) and local speaker Anita Rivera-Brown (UPR-MSC) gave scientific sessions related to the effects of exercise on aging and on the thermoregulatory responses that occur during exercise in response to heat stress, a concern for many athletes in Puerto Rico.

After a brief break for lunch and interactive networking, the sessions continued with a short presentation from local faculty member Farah Ramirez (UPR-MSC) on the consequences of physical activity deficit disorder, followed by our final speaker, Carlos Crespo (Portland State University), who spoke about the implications of health disparities in physical activity on the Latino community.



Poster session



Martin Frank addresses audience



First place winner Yaria Arroyo-Torres (middle)

During an afternoon networking session, 28 posters highlighted clinical and scientific research from the three major medical schools in Puerto Rico. Undergraduate, graduate, and postdoctoral trainees were evaluated by judges (20 faculty members) on the overall quality of their presentations. The winners earned a monetary award and commemorative plaque. They were:



Second place winner Sehwan Jang (left)



Third place winner Carolina J. Garcia-Garcia (middle)



PRPS committee

**First place:** Yaria Arroyo-Torres from the University of Puerto Rico Medical Sciences Campus: "Mitochondrial DNA Damage and Mitochondrial Function During Acute Oxidative Stress induced by  $H_2O_2$  in *Saccharomyces cerevisiae*."

**Second place:** Sehwan Jang from the University of Puerto Rico Medical Sciences Campus: "Ischemia-Reperfusion Injury of the Isolated Heart: Role of C-Jun N-terminal Kinase."

**Third place:** Carolina J. Garcia-Garcia from the University of Puerto Rico-Mayaguez: "Frequency of IL33 Polymorphisms in Puerto Ricans with Asthma."

Following the poster session, Caroline Appleyard updated attendees on the society's activities during the past year, including its various outreach efforts around the island, which have impacted more than 260 students, and the new presence of the PRPS on social media. The officers for the PRPS Executive Committee for 2014-2015 were also announced and are as follows: president: Guido Santacana (UPR-MS); president-elect: Sabzali Javadov (UPR-MS); past president: Caroline B. Appleyard (PSMHS); secretary/treasurer: Sylvette Ayala (UPR-MS); councilors: Jose Santiago (UPR-Carolina), Abigail Ruiz (graduate student, PSMHS), Cariluz Santiago (Pontifical Catholic University of Ponce), and Iris Salgado (postdoctoral fellow, UPR-MS). The PRPS acknowledged this year's sponsors for their support, which included the American Physiological Society, Laboratorio de Patologia de Noy, Merck, BioAnalytical Instruments, Coca-Cola, Ponce School of Medicine and Health Sciences (PSMHS), the UPR-Medical Sciences Campus (UPR-MS), and the RISE training programs at PSMHS and UPR-MS.

The meeting concluded in the late afternoon with closing remarks from Kenira Thompson, Dean of Research at PSMHS, and the poster session awards ceremony. Evaluations collected from participants were overwhelmingly positive, and we look forward to next year's meeting. ●



# Education

## New Undergraduate Researcher Blog to be Launched

APS has developed a strong social media and public understanding of physiology presences with multiple Facebook pages, targeted listservs, PhysiologyInfo.org, Twitter feeds, blogs – including a popular blog by a comparative physiologist (<http://scienceblogs.com/lifelines>) – and a successful national K-12 outreach program (PhUn Week). However, APS must develop and evaluate ways to effectively engage undergraduate students in social media discussions and K-12 outreach to help affirm their commitment to integrative organismal systems (IOS) fields. Therefore, as part of the APS IOS Physiology (IOSP) Summer Research Fellowship Program ([www.the-aps.org/iosp](http://www.the-aps.org/iosp)) funded by NSF, APS will launch a new Undergraduate Researcher blog on the Life Science Teaching Resource Community (LifeSciTRC; [www.LifeSciTRC.org](http://www.LifeSciTRC.org)), formerly known as the Archive of Teaching Resources.

What will the new blog do? We plan to initially involve the 2013 and 2014 IOSP Fellows in promoting comparative physiology and IOS research to the public. Students will describe their interest in IOS-related research and careers and share information with fellow students and lay persons about the excitement, importance, and impact of comparative physiology research. We will include audio and video clips of IOSP

awardees discussing the program and their experiences in research and at the EB meeting. Eventually, the blog will be open to all undergraduates participating in the other four summer research programs.

Why blog? Sharing what one has learned with non-scientists can confirm and validate one's standing as a scientist. IOSP Fellows will engage in being advocates for IOS-related research via the blog. Posts and comments can become part of a student's "living CV" or "e-portfolio." So watch the APS eNewsletter for announcement on when the blog is officially launched. We trust the APS membership will enjoy reading what the students post and even offer a comment or two of encouragement.

The IOSP program is supported by a grant from the National Science Foundation (NSF) Integrative Organismal Systems (IOS) Award No. IOS-1238831.

For more information about the blog or the IOSP Fellowship program, please contact Melinda Lowy, Senior Program Manager, Higher Education Programs, or Brooke Bruthers, Senior Program Manager, Diversity Programs, at [education@the-aps.org](mailto:education@the-aps.org). ●





## Medical Physiology Course Directors' Website Now Available

The new website for Medical Physiology Course Directors is now available at [www.the-aps.org/medical-physiology-course-directors](http://www.the-aps.org/medical-physiology-course-directors).

Access is limited strictly to medical physiology course directors and requires a log-in and password.

Members of the Medical Physiology Course Directors listserv have been granted access already. For other course directors who would like access to the site or

for those who do not know their log-in information, please contact Melinda Lowy ([mlowy@the-aps.org](mailto:mlowy@the-aps.org); 301-634-7787).

Materials are being recruited to re-populate the site. A checklist of items needed can be downloaded under *Resources* on Website Entry Page or the home page of the site. Any other resources course directors are willing to share are welcome as well. Items requested include course administration documents

(course management software used, handout policy, LCME accreditation timing); teaching materials (classroom and laboratory, type of teaching used); assessment tools for students, faculty, and course; along with syllabus, schedules, outlines, and case histories.

Comments and suggestions to make the website more useful to medical physiology course directors are welcome. ●

The screenshot shows the homepage of the Medical Physiology Course Directors Website. At the top, there is a navigation bar with links for 'About Us', 'Jobs', 'APS Store', and 'FAGEB Directory'. Below this is a secondary navigation bar with tabs for 'Awards', 'Careers', 'Education', 'Meetings', and 'Membership'. The main header area displays the APS logo and the title 'Medical Physiology Course Directors Website' with a breadcrumb trail 'home / medical physiology course directors'. A personalized welcome message reads 'Welcome, Melinda Lowy!' with links for 'Logout', 'Member Directory', and 'My Profile'. A sidebar on the left, titled 'In this section', lists various resources with expandable arrows: 'Course Administration', 'Medical Physiology Learning Objectives', 'Teaching Methods and Materials', 'Content Resources', 'Assessment of Students', 'Evaluation of Course', 'Curriculum Design', 'Course Director Roster', 'Educational Meetings & Conferences', 'Faculty Development Resources', and 'Contact Us'. Below the sidebar is an 'Information For...' section with links for 'Advertising / Marketing', 'Advocacy', 'Chapters', 'Committees', 'Early Career Professionals', 'Graduate/Professional Students', and 'Students'. The main content area on the right contains an 'Introduction' section explaining the website's purpose, a list of 10 major resource areas, a 'Background' section detailing the joint venture between APS and ACDP, and a 'Contributing Resources' section encouraging user input.

**Medical Physiology Course Directors Website**  
home / medical physiology course directors

Welcome, Melinda Lowy!  
Logout Member Directory  
My Profile

**In this section**

- Course Administration
- Medical Physiology Learning Objectives
- Teaching Methods and Materials
- Content Resources
- Assessment of Students
- Evaluation of Course
- Curriculum Design
- Course Director Roster
- Educational Meetings & Conferences
- Faculty Development Resources
- Contact Us

**Information For...**

- Advertising / Marketing
- Advocacy
- Chapters
- Committees
- Early Career Professionals
- Graduate/Professional Students
- Students

**Medical Physiology Course Directors Website**

**Introduction**  
The APS and ACDP seek to support excellence in medical physiology education and, in particular, to provide resources for its members who play an integral role in the development and coordination of medical physiology courses.

This website includes resources in 10 major areas:

- Course Administration
- Medical Physiology Learning Objectives
- Teaching Methods and Materials
- Content Resources
- Assessment of Students
- Evaluation of Course
- Curriculum Design
- Course Director Roster
- Educational Meetings & Conferences
- Faculty Development Resources

**Background**  
This site was developed as a joint venture by the APS and ACDP. Members of the joint working group were as follows:

**APS:** Robert Carroll (East Carolina University)  
Martha Blair (University of Rochester Medical Center)  
Jeffrey Freedman (SUNY Upstate)  
Thomas Schmidt (University of Iowa)

**ACDP:** Michael White (Drexel University)  
Robert Blair (Oklahoma University)  
Robert Gunn (Emory University)

**Contributing Resources**  
If you have or know of resources that you think would be valuable additions to this web site, please contact us.

# Education

## Undergraduates Starting APS Summer Research Fellowships



APS again is pleased to have five undergraduate fellowship programs occurring this summer. Many of the students have already started working in the lab of an APS member of their choice or will begin soon.

In addition to conducting research, all students will participate in an online undergraduate professional development program. They will gain experience and skills in networking, writing and fine-tuning research hypotheses, career exploration, writing a meeting abstract, and developing a personal implementation plan.

Below are the five programs and links to the awardees and more information about each program.

### **Integrative Organismal Systems Physiology (IOSP) Fellowship**

#### **Supported by NSF**

Up to six students from underrepresented backgrounds will work in the labs of members exploring comparative and evolutionary biology research questions. The program provides exposure to IOS mission areas of comparative and evolutionary research. Students will also be blogging during the year about comparative physiology. Students will attend Experimental Biology 2015 to present their research.

Program website: [www.the-aps.org/iosp](http://www.the-aps.org/iosp)

### **Short-Term Research Experience for Underrepresented Persons (STEP-UP) Fellowship**

#### **Supported by NIDDK/NIH**

Up to 24 students from underrepresented backgrounds will work in the labs of members exploring the core NIDDK mission areas of diabetes, endocrinology, metabolism, nutrition, obesity, or digestive, liver,

urologic, kidney, and hematologic diseases. They will attend the STEP-UP Symposium at NIH at the end of the summer with the other STEP-UP students from the other coordinating centers (Children's Hospital-LA and Penn State-Hershey).

Program website: [www.the-aps.org/stepup](http://www.the-aps.org/stepup)

### **Short-Term Research Education Program to Increase Diversity in Health-Related Research (STRIDE) Fellowship**

#### **Supported by NHLBI/NIH**

Up to 24 students from underrepresented backgrounds will work in the labs of members exploring the core NHLBI mission areas of cardiovascular, pulmonary, hematologic, and sleep disorders. Students will attend Experimental Biology 2015 to present their research.

Program website: [www.the-aps.org/stride](http://www.the-aps.org/stride)

### **Undergraduate Research Excellence Fellowships (UGREFs)**

#### **Supported by APS**

Six students from across the world will work in the lab of members exploring a variety of physiology research topics. Students will attend Experimental Biology 2015 to present their research.

Program website: [www.the-aps.org/UGREF](http://www.the-aps.org/UGREF)

### **Undergraduate Summer Research Fellowships (UGSRFs)**

#### **Supported by APS**

Twenty-four students from across the world will work in the lab of members exploring a variety of physiology research topics. Students will attend Experimental Biology 2015 to present their research.

Program website: [www.the-aps.org/UGSRF](http://www.the-aps.org/UGSRF)

For more information about these programs, please contact Melinda Lowy, Senior Program Manager, Higher Education Programs, or Brooke Bruthers, Senior Program Manager, Diversity Programs, at [education@the-aps.org](mailto:education@the-aps.org). ●

# Membership

## New Regular Members

### \*Transferred from Student Membership

**Stephen Abbott**

Beth Israel Deaconess Medical Center,  
Boston, MA

**Kirk Abraham**

Transylvania Univ., Lexington, KY

**Carlos Aizenman**

Brown Univ., Providence, RI

**Juan Arroyo\***

Yale Univ., Howard Hughes Med. Inst.,  
New Haven, CT

**Gerald Audet\***

U.S. Army Res. Inst. of Environmental  
Med., Natick, MA

**Ravi Balijepalli**

Univ. of Wisconsin, Madison, WI

**Matthew David Barberio\***

Children's National Med. Ctr.,  
Arlington, VA

**Jamie Baum**

Univ. of Arkansas, Fayetteville, AR

**Jennifer J. Bea**

Univ. of Arizona, Tucson, AZ

**Lori Bogren**

Univ. of Alaska Fairbanks,  
Fairbanks, AK

**Jessica Bradley\***

LSU Health Science Center,  
New Orleans, LA

**Jennifer L. Busch**

Wheaton College, Wheaton, IL

**Carol Bussey**

Univ. of Otago, Dunedin, New Zealand

**Joshua Butcher\***

Univ. of Virginia, Charlottesville, VA

**Sonja Buvinic**

Universidad De Chile, Santiago, Chili

**Paulo Sebastian Caceres**

Henry Ford Hospital, Detroit, MI

**Jonathan Carp**

Wadsworth Center, Albany, NY

**Adam Carter**

New York Univ., New York, NY

**James E. Casanova**

Univ. of Virginia, Charlottesville, VA

**Valerie Chappe**

Dalhousie Univ., Halifax, NS, Canada

**Surapong Chatpun\***

Prince of Songkla Univ. Fac. Med.,  
Thailand

**Pankaj Chaturvedi**

Univ. of Louisville, Louisville, KY

**Le Chen**

Univ. of California, Davis, CA

**Wenbiao Chen**

Vanderbilt Univ. Sch. Med.,  
Nashville, TN

**Jake Chen**

Tufts Univ. Sch. Dental Med.,  
Boston, MA

**Mashkoor Choudhry**

Loyola Univ. Chicago Stritch Sch.  
Med., Maywood, IL

**Lynn Cialdella Kam**

Case Western Reserve Univ. Sch. Med.,  
Cleveland, OH

**Dawn Cornelison**

Univ. of Missouri, Columbia, MO,

**Joseph Cornicelli**

Charles River, Ann Arbor, MI

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NJ

**Steven G. Denniss**

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**Vincent Dionne**

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Baylor Coll. Med., Houston, TX

**Mark Dranias**

Duke-Nus Graduate Med. Sch.,  
Singapore

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**Khalid Elased**

Wright State Univ. Boonshoft Sch.  
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**Sherif M. Elbasiouny**

Wright State Univ., Dayton, OH

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NASA-Johnson Space Center,  
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**Dan Zhou**

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**Alicia Jo Avelar**

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**Odunayo I. Azeez**

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**Maria Angeles Baker**

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**Tyler Bancroft**

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**Peter R. Bassett**

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**Andres Carrillo**

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**Moumita S. R. Choudhury**

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**David James Cornell**

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**Edward S. Crockett**

Univ. of South Alabama, Mobile, AL

**Felipe Da Cunha**

Univ. Rio de Janeiro St. Univ., Rio de Janeiro, Brazil

**Meredith Anne Cusick**

Georgetown Univ., Washington, DC

**Jake Andrew Deckert**

Univ. of Kansas, Lawrence, KS

**Sheila Dervis**

Univ. of Ottawa, Ottawa, ON, Canada

**Bhavna Nikhil Desai**

Georgia Regents Univ., Augusta, GA



**Pablo Andres Diaz Molina**  
Univ. de Chile, Santiago, Chile

**Lola Divincenzo**  
Northeast Ohio Med. Univ.,  
Rootstown, OH

**Jennifer N. Do**  
Univ. of California, San Diego, CA

**Laura A. Enzor**  
Univ. of South Carolina, Columbia, SC

**Michele Thais Favero**  
São Paulo State Univ., São Paulo, Brazil

**Daryl Pinion Fields**  
Univ. of Wisconsin, Madison, WI

**Scott Martin Frendo-Cumbo**  
Univ. of Guelph, Guelph, ON, Canada

**Gabrielle Francesca Fundaro**  
Virginia Polytechnic Inst. and St. Univ.,  
Blacksburg, VA

**Yaminah Dolores Gilles**  
Howard Univ., Washington, DC

**Maria Natalia Gobetto**  
Univer. of Buenos Aires, Buenos Aires,  
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**Michael James Gray**  
City Coll. of New York, New York, NY

**Sarah Marie Gray**  
Univ. of Virginia, Charlottesville, VA

**Duy Minh Ha**  
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Univ. of South Carolina, Columbia, SC

**Corey R. Hart**  
Univ. of Utah, Salt Lake City, UT

**Stephen R. Hennigar**  
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**Wiem Kebisi**  
Renns 2 Univ., Tunisia

**Christine E. M. Keller**  
Purdue Univ., West Lafayette, IN

**Matilde Bylov Kristensen**  
Tech. Univ. of Denmark, Kongens  
Lyngby, Denmark

**Adam Thomas Lanigan**  
Univ. of Regina, Regina, SK, Canada

**Kaleen M. Lavin**  
Ball State Univ., Muncie, IN

**Andrew Ying-Ping Lee**  
Univ. of California, Merced, CA

**Koeun Lim**  
MIT, Somerville, MA

**Danilo Lustrino**  
Univ. São Paulo, Ribeirão Preto Med.  
Sch., São Paulo, Brazil

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State, MS

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Univ. Puerto Rico Sch. of Med.,  
Puerto Rico

**Eunice Ogunwole**  
Bingham Univ., Nigeria

**Olugbemi Tope Olaniyan**  
Bingham Univ., Nigeria

**Tolani Folajimi Olonisakin**  
Univ. of Pittsburgh Sch. of Med.,  
Pittsburgh, PA

**Cemal Ozemek**  
Ball State Univ., Muncie, IN

**Bailey Peck**  
Univ. of North Carolina at Chapel Hill,  
Chapel Hill, NC

**Gislaine De Almeida Pereira**  
Univ. Sao Paulo, Sch. of Med. of Rib,  
Sao Paulo, Brazil

**Raphael Rodrigues Perim**

Sch. of Medicine of Ribeirão Preto,  
USP, Brazil

**Lonnie Grove Petersen**

Univ. of Copenhagen, Copenhagen,  
Denmark

**Timothy Son Phan**

Rutgers Univ., New Brunswick, NJ

**Estefania Prentki Santos**

Univ. Buenos Aires, Buenos Aires,  
Argentina

**Nicholas Ravanelli**

Univ. of Ottawa, Ottawa, ON, Canada

**Filomena Ricciardi**

Max Planck Inst. Heart & Lung Res.,  
Munich, Germany

**Alexander Jacob Rosenberg**

Univ. Chicago, Chicago, IL

**Leslie A. Roteta**

Vanderbilt Univ. Sch. of Med.,  
Nashville, TN

**Ilan M. Ruhr**

Univ. of Miami, Miami, FL

**Mukta Subhash Sane**

North Dakota State Univ., Fargo, ND

**Hannah J. Seong**

New York Univ., New York, NY

**Santhosh Sethuramanujam**

Univ. at Buffalo, Buffalo, NY

**Zulaykho Shamansurova**

Univ. of Montreal, Montreal, QC,  
Canada

**Imelda Rosalyn Sianipar**

Kobe Univ, Kobe, Japan

**Jacob Siedlik**

Univ. of Kansas, Lawrence, KS

**Jerneja Stare**

McGill Univ. Health Ctr., Montreal,  
QC, Canada

**Yuki Tamura**

Univ. of Toyko, Tokyo, Japan

**Yogesh Taxak**

MAMC, Agroha, India

**Karina Thieme**

Univ. of São Paulo, São Paulo, Brazil

**Max Andrew Thorwald**

Univ. of California, Merced, CA

**Lilith Torres**

Ponce Sch. of Med. and Hlth. Sci.,  
Puerto Rico

**Maria Jose Torres**

East Carolina Diabetes and Obesity  
Inst., Greenville, NC

**Lauren Trennel**

Indiana State Univ., Terre Haute, IN

**Daniel John Tyrrell**

Wake Forest Baptist Med. Ctr.,  
Winston-Salem, NC

**Mohammed Umar**

King's College London, London, UK

**Julian Vallejo**

Univ. of Missouri-Kansas City,  
Kansas City, MO

**Sarah Rongavilla Woldemariam**

Univ. of California, San Francisco, CA

**Jeetendra Yogi**

Seth G. S. Med. Coll., Mumbai, India

**Guannan Zhou**

Univ. of Florida, Gainesville, FL

### New Undergraduate Student Members

**Mustafa Abdulameer Alrubaiee**

Univ. of Maryland, College Park, MD

**George Bourdages**

Univ. of Pittsburgh, Pittsburgh, PA

**Desta Doro Bume**

Univ. of Tennessee, Knoxville, TN

**Howard Cheng**

Univ. California, Riverside, CA

**Aaron Benjamin Clarke**

Univ. Minnesota, Minneapolis, MN

**Andrielle Cowl**

Univ. Minnesota, Minneapolis, MN

**Laura Abigail Farr**

Univ. of Pittsburgh, Pittsburgh, PA

**Rebecca Frazier**

Susquehanna Univ., Selinsgrove, PA

**Patricia Louise Gali**

Univ. Toronto, Toronto, ON, Canada

**Julie Ann Horwath**

Cornell Univ., Ithaca, NY

**Alexandra Justine Huckabee**

Hardin-Simmons Univ., Abilene, TX

**Sajid Ibrahim**

Univ. of Karachi, Karachi, Pakistan

**Shreya Natesh Kashyap**

Tulane Univ., New Orleans, LA

**Sarah Marie Kruse**

Univ. Wisconsin, Madison, MN

**Cheng Li**

Univ. California, Berkeley, CA

**Susan Therese Lubejko**

Univ. of Maryland, College Park, MD

**Frank Paul Marowitz**

Univ. of New Hampshire,  
Durham, NH

**Alyssa Christine Medina**

California State Univ.,  
San Bernardino, CA

**Denise Colonia Pesons**

Montgomery Coll., Rockville, MD

**Carolina Mercedes**  
Brown Univ., Providence, RI

**David Michael Rosenberg**  
Univ. of Pittsburgh, Pittsburgh, PA

**Samuel Rubin**  
Pitzer College, Claremont, CA

**Sandeep Satapathy**  
Indian Inst. of Sci. Education and Res.,  
India

**Sarah Shidban**  
UCLA, Los Angeles, CA

**Taylor Thomas Shuster**  
Univ. of Wisconsin, Madison, WI

**Bryon Arnaldo Silva**  
Pontificia Univ. Católica De Chile,  
Santiago, Chile

**Jacob Stout**  
Mississippi St. Univ., Starkville, MS

**Nalini Tata**  
Brown Univ., Providence, RI

**Michael Cam Tay**  
Univ. New Hampshire,  
Manchester, NH

**Abigail Yimeng Wang**  
Univ. of Michigan, Ann Arbor, MI

**Brittany Yalamanchili**  
Rutgers Ernest Mario Sch. of  
Pharmacy, New Brunswick, NJ

**Joseph Yi Zhou**  
McGill Univ., Montreal, QC, Canada

#### New Affiliate Members

**Elizabeth Becker**  
Elgin Community Coll., Elgin IL

**Susan Bingaman**  
Univ. of Missouri, Columbia, MO

**Paulo Cavalcante Muzy**  
Muzy Performance Com Saúde, Brazil

**David M. Conner**  
Orthopaedics Northeast, Ft. Wayne, IN

**Chad Joseph Macias**  
Inst. For Human Kinetics,  
San Diego, CA

**Karen Wiedenfeld Needham**  
Univ. of Oregon, Eugene, OR

**Wendy Riggs**  
College of the Redwoods, Eureka, CA

**Paul Sparks**  
Univ. of Alabama, Birmingham, AL

**Dusty Allen Van Helden**  
Univ. of Minnesota, Minneapolis, MN

#### Recently Deceased Members

**Knut Aukland**  
Bergen, Norway

**Maria W. Seraydarian**  
Los Angeles, CA

**M. Elizabeth Tidball**  
Adamstown, MD

**Melvin Weisbart**  
Victoria, BC, Canada

## Address Changes

**Holly Van Rammem** is now a Member in the Department of Free Radical Biology and Aging at Oklahoma Medical Research Foundation, Oklahoma City, OK. Prior to this move Dr. Van Rammem was Professor in the Department of Cell and Structural Biology at University of Texas Health Sciences Center, San Antonio, TX.

**Monica Janine McCullough** is now Assistant Professor, in the Department of Exercise Science, Adrian College, Adrian, MI. Prior to this move

Dr. McCullough was a Graduate Student in the Department of Biological Sciences, Western Michigan University, Kalamazoo, MI.

**William W. Chin** is now Executive Vice President in the Department of Scientific and Regulatory Affairs at Phrma, in Washington, DC. Prior to this move Dr. Chin was Executive Dean for Research and Professor of Medicine at Harvard Medical School, Boston, MA. ●



# People and Places

## Dzau Named IOM President

APS member Victor J. Dzau has been named to be the next president of the Institute of Medicine, the National Academy of Sciences announced today. Currently, chancellor for health affairs at Duke University, president



Victor J. Dzau

and CEO for Duke University Health System, and James B. Duke Professor of Medicine, Dzau will succeed Harvey V. Fineberg, who has served as IOM's president for 12 years. Dzau's 6-year term as president will begin July 1, 2014.

Dzau is highly regarded as a trailblazer in translational research, health innovation, and global health care strategy and delivery. He was the guiding force in establishing the Duke Translational Medicine Institute, Duke Global Health Institute, Duke-NUS

Medical School in Singapore, and Duke Institute for Health Innovation. Dzau's own seminal research laid the foundation for the development of angiotensin-converting-enzyme (ACE) inhibitors, which are used globally for the treatment of high blood pressure and congestive heart failure. He pioneered gene therapy for vascular disease, being the first to introduce DNA decoy molecules to block transcriptions as gene therapy in humans.

The Institute of Medicine was established in 1970 by the National Academy of Sciences and has become recognized as a valuable resource for independent, scientifically informed analysis and recommendations on health issues. Under the academy's 1863 congressional charter, IOM provides advice to government policymakers, health professionals, and the public on issues such as health care delivery and quality, the obesity epidemic, vaccine safety, nutrition, cancer prevention and management, and military and veterans' health. Dzau was elected to the IOM in 1998 and has served on several leadership committees. ●

# Save the Dates!

## Experimental Biology 2015

March 28 – April 1 • Boston, Massachusetts

## APS Conference: 14<sup>th</sup> International Conference on Endothelin—From Physiology to Therapeutics

Savannah, Georgia



[the-aps.org/mm/Conferences](http://the-aps.org/mm/Conferences)

## President and Provost Award for Teaching Excellence

Thomas Schmidt was chosen to receive a President and Provost Award for Teaching Excellence at the University of Iowa. The Council on Teaching states, "The fact that



Thomas Schmidt

you were chosen to be recognized is a testament to your dedication and success in enhancing the quality of education at the University of Iowa and is evidence of the strong support you garnered from students and colleagues alike." The APS extends its congratulations to Tom on the university's recognition of his teaching prowess. ●

## Skorton Takes Helm at the Smithsonian Institution

Former APS member David Skorton will take the helm at the Smithsonian Institution, a partially U.S. government-funded organization consisting of 19 museums, a zoo, and 9 research centers. David Skorton, president of Cornell University since July 2006, will become the 13th secretary of the 168-year-old Smithsonian, the institution's Board of Regents announced today. In July 2015, he will replace the retiring G. Wayne Clough, an engineer who previously was the president of Georgia Institute of Technology. Trained as a cardiologist, Skorton specialized in treating children and adults with congenital heart disorders and helped develop computer-assisted, three-dimensional imaging of the heart and its arteries. He also spent more than 20 years as a university president, first from 2003 to 2006 at the University of Iowa, where he was a professor for 26 years, and now at Cornell. ●

# The **aps** Institute on Teaching and Learning

June 23-27, 2014 • College of the Atlantic, Bar Harbor, Maine

**Register Today!**  
 Deadline: May 23

**Building a Life Sciences Education Community of Practice for:**

- ✓ Reforming Life Sciences Education
- ✓ Developing and Using Core Concepts and Competencies
- ✓ Using Innovations in Student Centered Learning
- ✓ Aligning Teaching and Assessment
- ✓ Facilitating Educational Research Collaborations
- ✓ Publishing and Funding Educational Research

## the-aps.org/ITL

The American Physiological Society, Meetings Department  
 Phone: 301.634.7967 • Fax: 301.634.7264 • Email: meetings@the-aps.org

# Positions Available

**Postdoctoral Fellow:** Postdoctoral position in cardiovascular pharmacology is available in the laboratory of Dr. Gilberto De Nucci at the University of São Paulo (USP; São Paulo, Brazil). The present offer is a 2-year post-doc position funded by FAPESP, performed at USP (Pharmacology Department). Area of research focuses on the identification and pharmacological, electrophysiological, and morphological characterization of new TTX-resistant sodium channel coupled to the smooth muscle of the corpus cavernosum of snake. Applicants must have an advanced degree, PhD or equivalent, in the field of molecular biology or biochemistry and at least one peer-reviewed publication in an internationally recognized journal. Ideal candidate should have previous experience in reptilian and amphibian tissue handling. A strong background in gene expression analysis and RNA manipulation will be highly preferred. Interested applicant should send as a .pdf CV, a letter of interest, and the names and contact information for three references to [denucci@gilbertodenucci.com](mailto:denucci@gilbertodenucci.com). Review of application is ongoing until April 15, 2014.

**Visiting Assistant Professor:** The University of Mary Washington invites applications for a 1-year visiting assistant professor to begin in the fall of 2014. A PhD degree in human physiology or related field in hand by August 15, 2014 is required for this position. The department seeks an individual to teach and coordinate laboratories for three sections of our Human Physiology course and to provide instruction for either Human Anatomy or Cellular Biology classes. The teaching load is 12 hours per semester. The University of Mary Washington is a state-supported, primarily undergraduate university, with ~4,000 students, located halfway between Washington, DC and Richmond, VA. Visit the University's web page at [www.umw.edu](http://www.umw.edu) and the department's web page at [cas.umw.edu/biology/](http://cas.umw.edu/biology/) for more information. A complete application consists of a letter of interest, curriculum vitae, copies of undergraduate and graduate transcripts, a statement on teaching philosophy and plans for professional development, and three letters of recommendation. To apply for this position, please visit <https://careers.umw.edu>. Only applications submitted through this site will be considered. In addition, the three letters of recommendation should be sent to Deborah O'Dell, Search Committee Chair, Department of Biological

Sciences, University of Mary Washington, 1301 College Ave., Jepson Science Center, Fredericksburg, VA 22401-5300. In a continuing effort to enrich its academic environment and provide equal educational and employment opportunities, the University of Mary Washington actively encourages women and minorities to apply.

**Postdoctoral Position in Neurovascular Biology:** Opportunity for a postdoctoral fellowship in Molecular & Cellular Physiology is available immediately (Spring 2014) for a motivated postdoctoral fellow. Candidates should have experience with vascular and endothelial biology, tissue culture, and cell/molecular biology skills and be within 5 years of receiving their PhD degree. Grant funding is potentially fundable for a total of 3 years (with good productivity). Salary is based on NIH scale (~\$40K) commensurate with experience. Budget includes a project supply and travel budget (\$30K). Environment is a productive, enthusiastic laboratory at LSUHSC in Shreveport Louisiana. Please send CV to J. Steven Alexander, PhD; email: [jalex@lsuhsc.edu](mailto:jalex@lsuhsc.edu). LSU Health is an Affirmative Action/Equal Employment Opportunity Employer.

**Visiting Assistant Professor of Biology:** The College of Idaho seeks a broadly educated biologist for a 1-year, full-time Visiting Assistant Professor of Biology to start Fall 2014. The individual will teach upper-division human anatomy and physiology with labs and an upper-division course in area of expertise with a biomedical emphasis. Experience with human cadaver dissection is desirable. There is also the potential opportunity to teach a course in the new graduate Physician Assistant program. Qualifications are doctoral degree in biology or a biomedical-related discipline and commitment to undergraduate liberal arts education. Founded in 1891, The College of Idaho is the state's oldest private college. It has educated some of the most accomplished graduates in Idaho, including 7 Rhodes Scholars, 3 Marshall Scholars, and 10 Truman and Goldwater Scholars. The College is located on a beautiful campus in Caldwell, Idaho, a half-hour drive from Idaho's capital, Boise, which features a philharmonic orchestra, a nationally prominent dance company, and a summer-long Shakespeare festival. The location is within easy reach of Idaho's splendid mountains, providing opportunities for hiking, biking,



skiing, and whitewater sports. For more information, visit [www.collegeofidaho.edu](http://www.collegeofidaho.edu). Send curriculum vitae, three letters of recommendation, statement of teaching philosophy, and copies of academic transcripts to [HR@collegeofidaho.edu](mailto:HR@collegeofidaho.edu) (identify as Biologist search), The College of Idaho, 2112 Cleveland Blvd., Caldwell, ID 83605. Applicant screening begins March 21, 2014. Candidates must be authorized to work in the United States as of the expected hire date and throughout the date of the contract without sponsorship from The College of Idaho. The College of Idaho is an Affirmative Action, Equal Opportunity Employer.

**Assistant Professor:** The College of Veterinary Medicine at the University of Georgia is recruiting for a tenure-track position at the assistant professor in the Department of Physiology and Pharmacology. The successful candidate is expected to develop and maintain an externally funded research program, participate in teaching pharmacology in the veterinary professional curriculum, and teach graduate courses commensurate with candidate's expertise. Qualifications for the position include a PhD, DVM, MD, or equivalent degree. Although we seek candidates who will complement existing research activity within the department (see <http://www.vet.uga.edu/vph/> for more information) and who will interact with clinical faculty with pharmacology interests, evidence of research excellence is of primary importance. Interested applicants should electronically submit their application, including a statement of research plans, a statement of teaching interests/expertise, a curriculum vitae, and three reference letters, to the search committee at [physphrm@uga.edu](mailto:physphrm@uga.edu). Applications received by March 1, 2014 are assured full consideration; the position will remain open until filled. The University of Georgia is an Equal Opportunity / Affirmative Action employer.

**Postdoctoral Position:** A postdoctoral position is available for studying molecular mechanisms of cardiovascular and renal disease in the Department of Pharmacology and Nutritional Sciences at the University of Kentucky. This position is sponsored by a NIH-funded project. Salaries are competitive, and fringe benefits are included. The applicant will join a dynamic and collaborative research team that stands in the forefront of cardiovascular and metabolic research. This position is ideal for highly motivated individuals who would like to prepare themselves for an independent faculty position. This postdoctoral trainee will receive a wide array of in vivo and in vitro methods to investigate cardiovascular, metabolic, and renal functions and diseases. The main topic is the study of the developmental origins of adult disease, specifically renal and cardiovascular systems. Current areas of research emphasis include 1) molecular mechanism of hypertension and renovascular disease, 2) influence of stress in renal vascular development, and 3) role of the sympathetic system in stress and obesity. Studies are available in rats, mice, and genetically engineered rodent models. Skills for whole animal physiology techniques are preferred (acute and chronic surgeries). Candidates must have a PhD, MD, or comparable degree, with an interest in renal and cardiovascular research. Training with at least two of the followings areas is preferred: genetics, renal cell physiology/biology, vascular biology, cardiovascular/renal physiology, and animal models. Our laboratories are housed in a biomedical research building with excellent core facilities. Applicants should send curriculum vitae, a statement of research interests and career goals, and the names of three references to Dr. Analia Loria, Department of Pharmacology and Nutritional Sciences, University of Kentucky, Lexington, KY; e-mail: [analialoria@uky.edu](mailto:analialoria@uky.edu). Please apply by May 20, 2014. ●

# News from Distinguished Physiologists

## Letter to Jim Schafer



Kenneth Dormer

**Kenneth Dormer** writes: "Thank you for your celebratory greeting . . . time goes fast when you are having fun!"

"In 2013, I resigned from the University of Oklahoma, Department of Physiology, to take on a new challenge here at Liberty University, where we are starting a new medical school.

Classes begin in August with 150 students, and this is an Osteopathic school, emphasizing primary care, treating the whole person (body, mind, and spirit) and care for underserved patients. We will use a spiral curriculum with basic and clinical sciences woven through 4 years. Additionally, we will encourage, promote, and endorse character development in future physicians, based on the Judeo-Christian ethic.

"As I shall be more heavily involved in teaching now, my research will be secondary. I am continuing with the applied physiology track that has earmarked my career. I made only minor contributions on mechanistic (cardiovascular) physiology but have been blessed by co-inventing several implantable medical devices that are FDA approved and implanted now in several hundred thousand patients worldwide. Most recently, I cofounded my third startup company, NanoMed

Targeting Systems, Inc., where we are developing a magnetic nanoparticle formulation for targeting drugs to tissue sites. Our first feasibility project proven has been the targeting of a neuromodulator to the ganglionated plexi (GP) on the surface of the left atrium, where GP are (pathophysiologically) responsible for the initiation of atrial fibrillation, the most common cardiac arrhythmia in the world. Walter C. Randall, Past President of the APS, and Benjamin Scherlag each separately discovered these autonomic GPs in the 1970s, and they now are becoming more understood in their role of intrinsic cardiac control.

"Words of advice for younger colleagues? I would say that, with the explosion of information in the biomedical sciences, don't let productivity get in the way of creativity, discovery, and innovation. Sometimes the projects we are locked into by funding obligations, after months of waiting, are surpassed by newly emerging data. Sometimes discovery or innovative side tracks are put off or sacrificed by obligations to 'crank out the data.' The joy of discovery, especially that which leads to clinical means of helping patients, has been the most rewarding of episodes along the career of this senior physiologist. The best wish I could pass to younger colleagues is that they too discover life is indeed a balance – mental, physical, and spiritual. Physiologists easily understand this integrative concept, because our profession explores the integration of mechanisms that give us fantastic life." ●

# Book Reviews

## The Rise of Fetal and Neonatal Physiology: Basic Science to Clinical Care

Lawrence D. Longo

*New York: Springer, 2013, 428 p., \$159.00 (eBook); \$209.00 (hardcover)*  
ISBN: 978-1461479208

One of the world's foremost authorities on fetal and neonatal physiology has written the definitive history of his profession.

Lawrence D. Longo, founder and director emeritus of the Center for Perinatal Biology at Loma Linda University School of Medicine, took 10 years to write *The Rise of Fetal and Neonatal Physiology: Basic Science to Clinical Care* on weekends, evenings, and holidays. Springer, an international publisher in science, technology, and medicine, released the volume under the imprint of the American Physiological Society.

John R. G. Challis, a prominent physiologist and professor at three Canadian universities and another in Australia, wrote the foreword.

The 530-page treatise includes two comprehensive indexes and an extensive bibliography of more than 2,000 references. Much of the treatise focuses on the life and contributions of pioneering Oxford University pharmacologist-physiologist, the late Geoffrey S. Dawes.

Longo's motivation for writing this series of more than 20 essays stemmed from the importance of the field and a dearth of literature on the subject.

"As an investigator with more than a passing interest in the history of biomedical science, and presently, one of the few people who knew almost all of the major figures in the field during the latter half of the 20th century, I believe that it was incumbent on me to do so," he asserts.

Compared with other "hot topics" in neuroscience and molecular biology, Longo sees developmental physiology as a rather neglected area of research. "Many consider it too 19th century," he explains. "I would argue, however, that this is not the case."

Aside from a better understanding of basic physiological mechanisms, Longo says his field's greatest contributions are a series of monumental discoveries that have led to great improvements in the care of pregnant mothers, their fetuses, and newborn infants.

He could easily buttress that last claim by pointing to the countless thousands of individuals alive today because of the groundbreaking discoveries emanating from his own research at Loma Linda University during the 50+ years of his very productive career, but that would contradict his nature.

Instead, he couches his personal interest in the field as merely that of an insider with a broad perspective and access to bibliographical resources.

During his four-decade tenure at the center he founded, Longo has overseen the professional development of more than 200 postdoctoral fellows as well as numerous visiting scientists and scholars from Europe, Asia, South America, and the United States.

Although noting that he wrote primarily for an audience of perinatologists, neonatologists, and physiologists, Longo also sought to make it interesting to lay readers. "I tried to give it something other than just a hardcore science context," he shares.

To keep the book closer to fact than fantasy, he didn't paint his subjects as invincible heroes of science but as real researchers who sometimes had their contributions discounted and their papers rejected for publication.

At the beginning of the first chapter, a poignant quote from Sir Cyril Norman Hinshelwood lays a solid ideological framework for everything that follows: "Science is not the dry syllogistic handling of obvious facts," Sir Cyril observes. "It is an imaginative adventure of the mind seeking truth in a world of mystery."



In extending the observation, Longo places his subject within the larger discourse of science and naturalistic philosophy in the following pivotal paragraph:

*Midway between the extremes of the infinitesimally expansive cosmos to that of the infinitesimally minute subnuclear particle, is the human being, Homo sapiens, that sentient creature that observes, contemplates, and wonders. As the study of vital life processes and functions, the discipline of physiology (from the Greek physis "nature" and logia "the word" or "study of") lies at the core of an integrated understanding of biological function.*

Writing with elegance, Longo introduces wide-ranging treasures of poetry, philosophy, and literature into the text as well as colorful stories of the countless researchers and clinicians who labored to improve health outcomes for mothers and children during their science's infancy and childhood.

At several points in the book, readers may get the impression that Longo himself is the proverbial elephant in the room. Despite his reputation as a top-flight researcher, venerated educator, and beloved mentor to hundreds of today's brightest luminaries in many fields, Longo – who has served as advisor to the World Health

Organization, National Institutes of Health, National Science Foundation, and National Research Council – refuses to indulge in self-promotion.

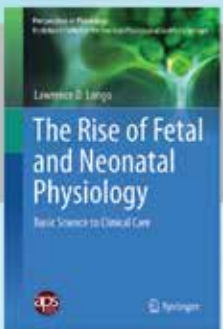
Fortunately, for those seeking a bit of self-disclosure from the author, the concluding chapter opens a tiny window into his personal involvement with the field. In it, he retells an incident from the dawn of his career when, at the request of his mentor, the late Daniel Green Morton, Longo spent three days escorting Nicholson J. Eastman around town to deliver a series of lectures. Eastman, a distinguished professor of obstetrics and gynecology at Johns Hopkins School of Medicine, was considered one of the reigning giants of medicine at the time.

The story is touching, funny, and self-revelatory, but it shall not be disclosed here. Instead, readers are invited to obtain a copy of the book. Some things are better read in context. ●

James Ponder

Loma Linda University Health, Loma Linda, CA

The content of this review was originally published in *Loma Linda University Health Today* (vol. 27, no. 1), and is used here with permission from Loma Linda University.




## ANNOUNCING...

### New Monograph Series FREE to APS Members

The APS is pleased to announce the publication of the first new monograph as part of our partnership with Springer. **Lawrence Longo, Loma Linda University School of Medicine**, has written a definitive history of an important field of physiology, that which concerns the developing fetus and newborn infant. The book, titled ***The Rise of Fetal and Neonatal Physiology – Basic Science to Clinical Care***, addresses the contributions of physiologists and other basic scientists to clinical problems of prematurity. APS members can read the book for free online and purchase a printed copy for \$40.



The APS has collaborated with Springer to digitize 33 book titles in the APS monograph series (*Methods in Physiology*, *Physiology in Health and Disease*, and *Perspectives in Physiology*).

Springer will be publishing more new titles that will be freely available to APS members in eBook format.



For more information, please visit:

<http://bit.ly/FetalNeonatalPhysiology>

# Meetings & Congresses

## 2014

May 7-9

**Jared Grantham Symposium: Future Directions in Polycystic Kidney Disease Research**, Kansas City, MO. Information: internet: <http://www.kumc.edu/school-of-medicine/kidney-institute/jared-j-grantham-symposium.html>

May 12-13

**36th International Symposium of the GRSNC: Sensorimotor Rehabilitation: At the Crossroad of the Basic and Clinical Sciences**, Montreal, Canada. Information: internet: <http://www.grsnc.umontreal.ca/36s/home.html>

May 12-16

**The Mathematical Sciences in Obesity Research**, Birmingham, AL. Information: internet: <http://www.soph.uab.edu/energetics/shortcourse/first>

May 16-21

**ATS 2014: Pulmonary, Critical Care, and Sleep Medicine**, San Diego, CA. Information: internet: <http://conference.thoracic.org/2014/>

June 8-10

**The 49th Annual Meeting of the Lake Cumberland Biological Transport Group**, Jamestown, KY. Information: Norma Adragna, Chair; e-mail: [norma.adragna@wright.edu](mailto:norma.adragna@wright.edu); internet: <http://www.cumberlandbio.org>

June 10-13

**Dynamic Walking Conference**, Zurich, Switzerland. Information: internet: <http://www.dynamicwalking.org>

June 16-20

**Life in Space for Life on Earth and Aging in Space for Life on Earth**, Waterloo, Ontario, Canada. Information: Richard Hughson; internet: <http://www.uwaterloo.ca/isgp2014>

June 22-27

**9th Annual Human Placenta Workshop**, Kingston, Ontario, Canada. Information: internet: <http://www.queensu.ca/workshops/placenta/>

June 23-27

**2014 APS Institute on Teaching and Learning**, Bar Harbor, ME. Information: internet: <http://www.the-aps.org/mm/Conferences/APS-Conferences/2014-Conferences/ITL>

June 24-28

**The International 22nd Puijo Symposium "Physical Exercise in Clinical Practise - Critical Appraisal of Randomized Controlled Trials,"** Kuopio, Finland. Information: e-mail: [saila.laaksonen@uef.fi](mailto:saila.laaksonen@uef.fi); internet: <http://www.puijosymposium.org>

June 28-July 2

**6th International Workshop on Advances in the Molecular Pharmacology and Therapeutics of Bone Disease**, Oxford, UK. Information: internet: <http://www.oxfordbonepharm.org>

June 30-July 2

**Physiology 2014**, London, UK. Information: internet: <http://www.physiology2014.org>

July 1-4

**SEB Manchester 2014**, Manchester, England. Information: internet: <http://www.sebiology.org/meetings/Manchester/Manchester.html>

July 3-5

**XIX Biennial International Conference on Infant Studies**, Berlin, Germany. Information: Amy D. Glaspie, Meetings Manager; Tel.: 734 926-0614; fax: 734 926-0601; internet: <http://www.isisweb.org/view/0/ISISconference2014.html>

July 3-5

**XIX Biennial International Conference on Infant Studies**, Berlin, Germany. Information: Amy D. Glaspie, Meetings Manager; tel.: 734-926-0614; fax: 734-926-0601; internet: <http://www.isisweb.org/view/0/ISISconference2014.html>

July 10-12

**International Symposium on usher Syndrome and Family Conference**, Boston, MA. Information: Krista Vasi; e-mail: [k.vasi@usher-syndrome.org](mailto:k.vasi@usher-syndrome.org); internet: <http://www.cvent.com/d/q3qm4x>

July 23-26

**Nicotinic Acetylcholine Receptors 2014**, Cambridge, UK. Information: internet: [https://registration.hinxton.wellcome.ac.uk/display\\_info.asp?id=407](https://registration.hinxton.wellcome.ac.uk/display_info.asp?id=407)

August 2-6

**1st Pan-American Congress of Physiological Sciences**, Iguassu Falls, Brazil. Information: internet: <http://panam2014.com/>

August 3-8

**14th International Congress on Amino Acids, Peptides and Proteins**, Vienna, Austria. Information: no additional information provided.

August 17-20

**8th International Congress of Neuroendocrinology 2014**, Sydney, Australia. Information: internet: <http://www.neuroendocrinology2014.org>

August 25-29

**7th World Congress for Psychotherapy**, Durban, South Africa. Information: Janie Koeries, Paragon-Conventions, Milnerton Mall, Loxton Rd., Milnerton, Cape Town, South Africa. Tel.: 021 552 8679; e-mail: [jkoeries@paragon-conventions.com](mailto:jkoeries@paragon-conventions.com); internet: <http://www.wcp2014.com>

September 1-5

**76th Harden Conference: Total Transcription**, Hinxton, Cambridge, UK. Information: internet: <http://www.wellcome.ac.uk/conferences>

September 2-6

**Society of General Physiologists 68th Annual Symposium, "Sensory Transduction,"** Marine Biological Laboratory, Woods Hole, MA. Information: Emily Liman and Miriam Goodman, Organizers; internet: <http://www.sgpweb.org/symposium2014.html#papers>; e-mail: [sgp@mbi.edu](mailto:sgp@mbi.edu)

September 5-6

**4th Annual North American Artery Meeting: Arterial Stiffness: If You Don't Measure It, You Can't Manage It**, Chicago, IL. Information: internet: <http://naartery.org/Events>

September 7-11

**11th International Symposium on Resistance Arteries (ISRA 2014): From Molecular Machinery to Clinical Challenges**, Banff, Alberta, Canada. Information: Suzanne Brett Welsh; tel.: 011 403.836.5631; e-mail: [info@isra2014.org](mailto:info@isra2014.org); internet: <http://www.isra2014.org>

September 10-12

**Obesity – A Physiological Perspective**, Newcastle United, UK. Information: internet: <http://physoc.org/non-society-meetings>

October 5-8

**2014 APS Intersociety Meeting: Comparative Approaches to Grand Challenges in Physiology**, San Diego, CA. Information: internet: <http://www.the-aps.org/mm/Conferences/APS-Conferences/2014-Conferences/Comparative>

November 5-8

**25th International Symposium on the Autonomic Nervous System**, Rio Grande, Puerto Rico. Information: Anita Zeller, AAS Executive Secretary, American Autonomic Society, 18915 Inca Ave., Lakeville, MN 55044; tel.: 952-469-5837; fax: 952-469-8424; e-mail: [zeller.anita@mayo.edu](mailto:zeller.anita@mayo.edu); internet: <http://www.americanautonomicsociety.org>

## 2015

March 18-22

**AD/PD 2015**, Nice, France. Information: internet: <http://www2.kenes.com/adpd/Pages/Home.aspx>

March 28 to April 1

**2015 Experimental Biology**, Boston, MA.

## Continued from page 117: D.O.A.

about political strategy as substance. The message from Congress: the President's budget proposal is D.O.A. – dead on arrival!

For those dependent on federal largesse to support research, the message is not good. There is no agreement on how much should be allocated to support the research budgets of the National Institutes of Health, National Science Foundation, and countless other federal research agencies. One would have hoped that President Obama's budget would have reflected his support for research investment, yet his proposal for NIH was only for \$30.4 billion, an increase of just \$200 million from the current year, or a 1% cut when accounting for inflation. Sen. Benjamin L. Cardin (D-MD) expressed his displeasure by stating, "I am extremely disappointed in the lack of investment in overall funding for the National Institutes of Health." On the other hand, NSF is slated to get a modest increase, raising its budget to \$7.3 billion.

It is hard for any of us to accept what has happened to research investment since the doubling of the NIH budget ended in 2003. Granted, the ARRA funding helped for a couple of years, and the proposed doubling of the NSF budget generated considerable interest and excitement, but the reality has been far from satisfying. Recently, *The Chronicle of Higher Education* published an article, "Strapped Scientists Abandon Research and Students," describing the woes experienced by the research community as they strive to sustain their research programs. Each of you APS members has a similar story to tell, stories of abandoned research programs, lost students and postdocs, efforts to leave academia, and departure to foreign shores. The brain drain resulting from the short-sightedness of our elected leaders will prove catastrophic to the economic well-being of the United States and our ability to develop treatments and cures for disease.

Many APS members, as well as those in other FASEB societies, are in survival mode, writing vigorously, trying to get proposals funded to maintain research laboratories, to support students, indeed even to pay one's own salary. It is not what any of you expected to be doing when you received your PhD degrees. Science was supposed to be fun, and hopefully it will be again in

the future. In the meantime, what can one do to educate the individuals who might be able to be of assistance? What can one do to educate the apparently uneducable, our elected leaders? I wish I had a magic bullet or a fail-safe pill to make it happen, but just as getting funded takes hard work, educating our elected leaders requires the same effort.

APS and FASEB make an effort to be your voice on Capitol Hill, but our voice is small. We live in Maryland, Virginia, or the District of Columbia, and we can readily meet with representatives from those states and tell them how important support for research is. We try to broaden our voice by bringing in APS and FASEB leadership to meet with Congressional representatives from multiple states and districts. Indeed, FASEB held a Hill day on March 5, and a number of APS leaders participated in that effort. Such outreach helps, but we still need each APS and FASEB society member to take the time to get to know their elected leaders. You need to tell them what you do, why it is important, and the impact that budget cuts and budget stagnation is having on your ability to advance knowledge for the benefit of humankind. Although APS and FASEB can help you, it is up to you to do the "heavy lifting" to accomplish the goal of an informed legislator.

Around the time the President released his 2015 budget, FASEB issued its budget recommendations for a number of research agencies (<http://bit.ly/1fAmEmB>). Specific recommendations for the five agencies included in the report are:

**NIH:** As a first step toward a multi-year program of sustainable growth, FASEB recommends a minimum of \$32.0 billion for NIH in FY 2015.

**NSF:** FASEB recommends a minimum of \$7.6 billion for the NSF in FY 2015 for its research and education programs covering a wide range of science, engineering, and mathematics disciplines.

**Department of Energy Office of Science (DOE SC):** To promote sustainability of the critical DOE research programs and maintain the unique system of national laboratories, FASEB recommends a minimum of \$5.4 billion for the DOE SC in FY 2015.



**Veterans Affairs Medical and Prosthetic Research Program (VA):** FASEB recommends funding the VA Medical and Prosthetic Research Program at a minimum of \$621 million in FY 2015 to address the unsolved health care problems of the growing veteran population.

**United States Department of Agriculture (USDA):** FASEB recommends a minimum of \$335 million for the USDA Agriculture and Food research Initiative (AFRI) in FY 2015 as part of a sustained commitment to investment in agricultural research.

The FASEB recommendations are a good starting point for your advocacy efforts. Indeed, the FASEB Policy & Government Affairs website (<http://www.faseb.org/Policy-and-Government-Affairs.aspx>) has a wealth of information that will help you to become an advocate. Similarly, the APS Science Policy page (<http://www.the-aps.org/mm/SciencePolicy/Advocacy/Advocacy-Resources>) also

provides information relevant to your efforts to interact with elected officials who have an influence on the Congressional appropriation process. One of the most important things you can do is sign up for the FASEB e-action list (<http://www.capwiz.com/faseb/mlm/signup/>) to receive important e-mail alerts on major public policy issues.

We need you to help breathe life into the budget process. Using your knowledge of the role your research contributes to the war on disease and drawing on materials available on the APS and FASEB websites, you can make a difference. You can contribute to the resurrection of federal support for science. You can make sure that the budget numbers we want for the research agencies are not dead on arrival. ●

Martin Frank



## APS Intersociety Meeting: Comparative Approaches to Grand Challenges in Physiology San Diego, CA • October 5-8, 2014

Please join us for the 2014 APS Intersociety Meeting. The theme of the meeting will be "Comparative Approaches to Grand Challenges in Physiology." Comparative physiology takes advantage of the diverse evolutionary histories and ecological settings of animals. By definition, comparative physiology is broad, spanning a variety of animal taxa occurring in diverse environmental settings, and studied at many levels of biological organization (from molecular physiology to physiological ecology). This breadth allows comparative physiology to (a) understand basic physiological processes and (b) identify novel mechanisms used by animals to solve specific physiological challenges.

This meeting will draw comparative and evolutionary physiologists from around the world to present and discuss recent advances in animal physiology. The three and a half day meeting will feature 15 symposia, 2 plenary lectures, 2 workshops, and multiple sessions for contributed abstracts as oral or poster presentations. This meeting will include the 2014 Scholander Award competition for young comparative physiologists, plus other trainee awards and activities.



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

## Continued from page 117: The Secret to Getting Your Foot in the Door

the contents or storyline. The synopsis for a book is most likely the catalyst that “sells” you on the purchase of a particular book or novel. This brief synopsis to sell a book is the underlying principle behind the cover letter. So in regard to name recognition, if you maintain an active presence at scientific meetings by presenting your work in poster and especially oral formats, if you participate in workshops and attend small conferences, if you are an active member in your professional societies like the APS that provide wonderful opportunities to actively network with senior and other investigators, and if you have established a strong publication record in your field, your name may be known to the department that is potentially recruiting you. Thus, “name recognition” may greatly facilitate “notice” of your application. However, your cover letter should serve as the catalyst (aka the blurb on the back cover) that will make prospective employers want to look at other components of your portfolio. Therefore, it is important to consider what constitutes a strong cover letter. The answer is the content and packaging.

The cover letter should be one to two pages maximum and should be written on a letterhead from your current institution. It should be formal and professional. It should not simply point out accomplishments that are listed in your CV, but rather it should provide a summary of your qualifications and specifically explain how they “fit” with the advertised position. The letter should be formatted to include the date, followed by the name and contact information of the person in charge of the search committee. It should be written as though you are a *colleague*, not a *trainee*, and it should consist of five concise paragraphs. Start with an *introductory paragraph*: Clearly state your intentions and clarify that you are responding to a specific posted position. For example: “I am applying for the tenure-track position of Assistant Professor of Physiology announced in the February 8th issue of *Science*.” Provide a brief statement regarding your area of expertise (vascular dysfunction and stroke research), your current place of training (postdoctoral fellow in the Department of Physiology at Medical College in Big City, State), degree status (I received my PhD in physiology at the State University in Town, State), and express your interest in the position, department, and institution. If you are a graduate student applying for a postdoctoral position, state your expected date

of defense and graduation. The second paragraph should state your research or teaching interests: This should be a brief, clear *summary of your research/teaching interests*. Emphasize the relevance of your research, its contribution to the field, and your effectiveness as a teacher. The third paragraph should provide your *future goals and plans*: Describe your short- and long-term research and career goals and provide a brief summary of how you plan to fulfill these goals. State your plans to procure funding and your timeline. The next paragraph should emphasize your *unique capabilities*: Describe how your qualifications match the aims of the posted position. This section should be tailored for each specific advertisement and position, and it should also fit with the type of position being sought. Thus, if it is primarily for a research faculty position at an academic medical center, then tailor your qualifications toward your research strengths. However, if you are applying primarily for a teaching position, then you will need to emphasize your commitment to teaching. Do your homework. Clearly state how your research or teaching will benefit their department. If your information comes across like a form letter, it may damage your chances of being noticed. Your final paragraph should include your *closing and enclosures*: It should express your interest in an interview, provide your contact details (phone number/e-mail), list enclosures (CV, research statement, teaching philosophy, and references), and state that additional information can be provided upon request. It is very important that you do NOT exceed the 2-page limit. A search committee may receive hundreds of cover letters, so their time spent on each one is limited. You may have majored in science, not marketing, but your cover letter may be your only chance to “sell” your capabilities and potential to succeed, and, importantly, your potential to become an invaluable member of their department. Thus the cover letter is *the most important* part of your academic job search portfolio. Carefully spell check and have others proofread and check for clarity.

The curriculum vita (CV) highlights your qualifications for a position, and it should reflect your abilities as a researcher, teacher and, publishing scholar within your discipline. A CV should include the following components and address the three major elements of an academic position: research, teaching, and service. The format provided below is a breakdown of a typical

academic CV. Also included are examples that are relevant to a senior-level postdoctoral trainee.

- **Basic information.** This section will include your contact information (name, department, address, institution, phone, fax, and e-mail).
- **Education.** This section will include only undergraduate and postgraduate education. List your educational training in reverse chronological order. For graduate students seeking a postdoctoral position, include the title of your thesis and/or dissertation and the chair of your committee.

2011: (PhD) State University, Big City, State (Physiology)

2007: (BS) State College, Small Town, State (Biological Engineering)

- **Professional experience.** This section will include academic and related employment (internships, fellowships, teaching positions, research positions, and faculty positions). This should be put in reverse chronological order.

2011-present: Postdoctoral fellow, Department of Physiology, Medical College, Town, State

2011-present: Teaching Assistant, Department of Physiology, Medical College, Town, State

- **Service.** This section highlights your service on committees and your leadership positions at your institution and within your professional societies. You can break this into categories as you expand your CV.

#### **Departmental:**

2013-current: Co-Director, Trainee Journal Club, Department of Physiology, Medical College

#### **Institutional:**

2005-2007: Member, Graduate Advisory Board, State University

2012-current: Trainee member, Research Advisory Committee, Medical College

2014-current: Trainee member, Professional Diversity Committee, Medical College

#### **Professional Consultation and Service:**

2009-current: Judge, Bruce Undergraduate Awards for the American Physiological Society

2011-current: Judge, Graduate Research Day Poster Competition, Medical College

#### **Journal Reviewer:**

*American Journal Physiology: Circulation Physiology*

*PLOS ONE*

#### **Professional Scientific Society Service:**

2012-current: Trainee member, Communications Committee, American Physiological Society

#### **Community Outreach:**

Participant: Physiology Understanding Week, 2011, 2012, 2013

- **Teaching/mentoring.** This section includes any courses or lectures that you have taught and/or any students that you have mentored. You can break this into categories as you expand your CV.

#### **Courses:**

2011-current: Teaching Assistant, ID 545 Physiological Methods, School of Health Related Professions, Medical College

2013-current: Lecturer, ID 757 Physiological Concepts, Medical College

#### **Mentoring:**

Summer Undergraduate Student Research Program, Sponsored by the School of Graduate Studies, Medical College

2012: John Doe

2013: Sally Brown

High School Research Experience sponsored by the Joint Outreach Program Fostering Science and Education, Medical College

2013-current: Mary Smith

- **Research.** This section highlights your research accomplishments, including publications, funding, presentations, and participation at scientific conferences, such oral presenter or chair of a featured topic session or symposium. Publications would include abstracts, review articles, editorial commentaries, research papers, and book chapters. Your listed abstracts should be distinguished from your other publications. As your career progresses and your publications accrue, you can also consider distinguishing different types of publications (editorial commentaries, reviews, etc.). The research section also highlights your participation at scientific conferences and workshops, and it also indicates when your

abstracts were selected for an oral presentation over and above a poster format presentation. This section also allows you to list invited seminars from other departments, which would include those acquired during your interview process for postdoctoral and faculty positions.

**Professional Memberships:** (List your memberships and you can include the year you joined.)

2008: American Physiological Society

2009: American Heart Association, Stroke Council

**Honors and Awards:** (This can include travel awards to meetings, honors from your institution related to academic achievements, honors garnered at scientific meetings, and receipt of training grants or early career stage grants, if applicable, that provide financial support during your training or your early career progression.)

2009-2011: American Heart Association, Predoctoral Training Grant

2010: Caroline tum Suden/Frances A. Hellebrandt Professional Opportunity Award,

American Physiological Society

2010: Best Oral Presentation, Graduate Research Day, State University

2011: Travel Award, APS Conference on Cardiovascular Risk and Stroke

2012-current: NIH, NRSA Postdoctoral Grant

2012: Travel Award, FASEB Sponsored Summer Conference, Vascular Biology, Role of Oxidative Stress in Stroke

2013: Research Recognition Award, Cardiovascular Section, American Physiological Society

2013: Travel Award, APS Professional Skills Course, Scientific Writing

**Funding:**  
Current.

National Service Research Award, National Institutes of Health, Sex difference in cerebral vascular function, 2011-2014

Previous.

Predoctoral Fellowship, Southeast Affiliate American Heart Association. Role of oxidative stress in cerebral ischemia mediated injury. 2009-2011

**Oral Presentations and Invited Participation in Scientific Meetings:**

Chair and Organizer: Symposium, Cardiovascular Section, Experimental model of cerebral ischemia, Experimental Biology, 2014

Oral Presentation: Featured Topic, Cardiovascular Section: Vascular Dysfunction and Chronic Disease, Experimental Biology, 2013

Chair: Oral Session IV: Experimental Models, Annual Fall Conference and Scientific Sessions of the Stroke Council, 2013

Oral Presentation: Concurrent Session II: Oxidative Stress, Annual Fall Conference and Scientific Sessions of the Stroke Council, American Heart Association, 2012.

**Invited Seminars:**

Department of Pharmacology: "Endothelial cell dysfunction in cerebral disease: role of oxidative stress." University Medical School, Town, State, April 11, 2014.

Department of Physiology: "Oxidative stress: How does it affect cerebral vascular function?" State Medical School, Town, State, March 5, 2014.

**Publications:** (List your published works in reverse chronological order according to publication date.)

**Book Chapters:** (List book chapters separate from publications.)

**Abstracts:** (As stated above, list abstracts separate from publications. Include abstracts selected for oral presentations although they are also highlighted in the section entitled "Oral presentations and participation in scientific meetings.")

An academic CV, unlike one for industry, does not provide an objective defining what type of job you want or a summary statement that provides a brief description of your most important qualifications. An academic CV is not the same as a resume; therefore, an academic CV should not contain personal information (spouse or children, although many do), hobbies, or technical skills such as a listing of your abilities to



perform a Western blot, instrument a rat with an arterial catheter, etc. In general, there is no set format. Although there is also no set length, you should not double or triple space to make your CV appear longer than it is. Also, if you are applying for an academic position in the U.S. and you are not a U.S. citizen, you may want to clarify your visa status. Finally, ask your mentor and other faculty members to share their CVs to see how they organize their service, teaching, and research accomplishments. An additional consideration involves keeping a “year-to-year” CV. Yearly updates are often required for departmental reports and for yearly faculty evaluations. A year-to-year CV will help you track your progress and take notice of areas on your CV that may require attention. Importantly, keep your CV up-to-date and spell check!

A research statement is an essential component for academic faculty positions at research institutions. The purpose of a research statement is to provide a sense of appropriateness of your fit within a department and to also acquire an understanding of your research potential and goals. It will detail whether your research interests and goals will enhance and complement the research endeavors of a department, and thus it should be department specific. A research statement is not the same as a grant proposal. It should be 1-2 pages long, it should be written in the first person, it should not repeat your CV, but instead it should provide an overview of your current research projects, your future or potential research aims, and include statements that outline the research questions you will ask and the path you will take to fund these interests. Your research statement can be divided into several different parts. A paragraph highlighting your *current research* should include your current research aims, questions asked, methodologies you used, what you learned, and clinical relevance (if applicable). The next section should detail your *independent and future research*. This paragraph should detail your future research aims and what questions you will ask. It should clarify how your research will differ from that of your mentor’s work, and it should outline your 5- and 10-year research goals. Another paragraph should discuss your ideas for *potential funding*. This section can discuss any transition grants you currently hold, if applicable (NIH K99, American Heart Association Scientist Development Grant, etc.). It should also include the list of specific granting agencies, application types, and your potential timeline for preparation and submission for future grant submissions (AHA SDG, NIH R01, etc.). The final paragraph should include discussion related to *potential*

*collaborators*. This section should include discussion of faculty members that are a natural fit with your research interests and highlight any facilities or research cores within the department or institution that will facilitate your research interests and goals. This section will demonstrate that you have done your homework.

Considerations during the preparation of your research statement include: Do you sound like an independent investigator? Are you excited about your research interests? Do you have a clear plan for acquiring research funding?

What should a potential employer learn from your research statement? Your research statement should provide a clear indication of your ability to succeed as an independent, extramurally funded principle investigator. It should provide a concise overview of your research focus and goals. It should clarify whether you are compatible with their department and whether there will be opportunities for collaboration with existing faculty members.

In conclusion, ask to see research statements written by others. Always tailor your research statement to a specific position in a specific department at a specific institution. In other words, *do not use the same research statement for every job application*. If you take the time to personalize your research statement for each advertised position, it will demonstrate your interest in their department, indicate that you have considered whether you think you are a good fit for them, and illustrate that you have considered whether they are a good fit for you. Proof read, spell check, and always ask others for their input.

The teaching philosophy statement highlights your beliefs about teaching and how you put your beliefs into practice by discussing concrete examples of what you do or anticipate doing in the classroom. This statement should also be 1-2 pages long and should reflect your individuality. It should be written with a specific audience in mind, should not repeat your CV, should be written in first person, present tense, and should be specific, not abstract. Use concrete examples to illustrate your points. Considerations during the preparation of your teaching philosophy should include: Who is your audience? What type of institution is it (liberal arts institution or an academic medical center)? Does it serve undergraduate, postgraduate, and/or professional students? What careers are you preparing students for, and what is the mission of the school? In addition, you

may to include information as to how you will teach in large or small class sizes and how you will handle a diverse and/or adult student population. Finally, you may consider how you will incorporate research into your teaching. To tailor your teaching philosophy to a specific institution, consider the following points: What courses are you interested in teaching that are already offered? If it involves courses that are team taught, which sections are you prepared to teach or willing to teach? Don't limit yourself to courses specific to your area. What new courses might you add to their curriculum? Also, consider trainees in your research program. For example, what are your expectations for trainees? Are you interested in working with undergraduate researchers, graduate and/or postgraduate trainees? How will you incorporate them into your research program, and how will you facilitate their training and career goals?

There are two main components that you need to address in your philosophy of teaching statement. These include your *philosophy of learning*: How do you think people learn? What goals do you have for your students? What actions will you take to achieve your goals? In addition, include your *philosophy of teaching*: What constitutes an "effective" teacher? How will you facilitate the learning process? How will you motivate your students? How will you deal with students that are frustrated? How will you accommodate different abilities? How do you plan to conduct classes, mentor students, develop instructional resources, and handle grade performance? How will you assess your effectiveness as a teacher? Are you willing to learn, adapt, listen, and change? How will you put your philosophy of teaching into practice?

What if you have limited, or no, teaching experience? Consider professors that have been effective teachers during your years as a student. What distinguished them as "great" teachers? How did they motivate you? What did they do to encourage and facilitate your learning experience? Use experiences from both the effective and the not-so-effective teachers in your life. However, it is important to be positive. Provide concrete examples and use your own experiences as a teacher or a student (or mentor to others in the laboratory) to express your philosophy of teaching statement. Ask others to proof and comment; always spell check.

References are a very important part of your academic job search portfolio. Your references represent individuals that have worked closely with you during your graduate and postgraduate training. These can include your major professor, members of your graduate committee,

your fellowship mentor, and departmental chairs during your training years. You can also include other well established investigators/professors who are familiar with your scientific abilities. These would include individuals whom you have worked in collaboration with or that work directly in your area of research and have followed your career via interactions at scientific conferences. It could also include well established investigators/professors who have served as your table leader at a small workshop or served with you on a professional society committee or other professionally related scientific programs. Always ask their permission before submitting their name. Also, discuss your career and research goals with them. Make sure that they have your most current CV and ask whether they need any additional information. It can be very helpful to provide a draft for a reference letter that highlights your training details and lists your accomplishments. This is always appreciated by individuals who may be requested to write a letter of recommendation on your behalf. It is your responsibility to ensure that they have all the information needed to provide a strong letter of reference for you for the position that you are seeking. Importantly, make sure that they have your current contact information.

**Final thoughts:** Carefully check for proper syntax and spelling errors in *all components* of your academic job search portfolio. Always get someone else to read and critique your documents and don't wait until the last minute. Tailor each component of your academic job search portfolio to each specific job application. Lastly, as you read this synopsis of what constitutes a professional and effective academic job search portfolio, regardless of your career stage, think how you can strengthen, expand, and enhance your own portfolio for the next phase of your career! ●

*Thank you to Michael J. Ryan for additional comments and review.*

### Additional Resources:

1. *Basics of Writing a Cover Letter*. Richard M. Reis (<http://chronicle.com/article/The-Basics-of-Cover-Letter-/46259/>).
2. *Writing an Effective Academic CV*. Elsevier (<http://www.elsevier.com/connect/writing-an-effective-academic-cv>).
3. *Tips for a Successful CV*. Sarah A. Webb ([http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2006\\_10\\_27/nodoi.10341484552738357724](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2006_10_27/nodoi.10341484552738357724)).

4. *Writing a Research Plan.* Jim Austin ([http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2002\\_07\\_26/nodoi.4611149009600202486](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2002_07_26/nodoi.4611149009600202486)).

5. *Research Statements.* Cornell University Career Center (<http://www.gradschool.cornell.edu/career-development/put-your-qualifications-writing/research-statements>).

6. *Research Statements.* University of Washington Career Center ([http://careers.washington.edu/ifufiles/allfiles/docs/gradstudents/pdfs/AcademicCareers-Research\\_Statements\\_07-08.pdf](http://careers.washington.edu/ifufiles/allfiles/docs/gradstudents/pdfs/AcademicCareers-Research_Statements_07-08.pdf)).

7. *Writing the Teaching Statement.* Rachel Narehood Austin ([http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2006\\_04\\_14/writing\\_the\\_teaching\\_statement](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2006_04_14/writing_the_teaching_statement)).

8. *Writing a Teaching Philosophy Statement.* Lee Haugen (<http://www.celt.iastate.edu/teaching/philosophy.html>).

Barbara T. Alexander is an associate professor in the Department of Physiology and Biophysics at the University of Mississippi Medical Center. She received her B.S. in zoology from Mississippi State University, her PhD in biochemistry from the University of Mississippi, and completed her postdoctoral training in Mississippi at the University Medical Center. Her research interests involve the developmental origins of health and disease, with an interest in sex differences and renal mechanisms of hypertension. She is an active member of the APS. She is a member of the Women in Physiology Committee; she has served as the secretary/treasurer of the Water and Electrolyte Homeostasis Section, and is an annual participant in Physiology Understanding Week activities. She is also a newly elected member to the Council of the APS. Barbara has a strong interest in mentoring and has served as a mentor for numerous high school and undergraduate student researchers, graduate students, medical student researchers, and postdoctoral fellows.

## Introducing “physiology for the public”

