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The Physiologist

INSIDE

Peer Review at NIH

Rebecca C. Osthus, APS Science Policy Analyst

In response to falling success rates and rising numbers of grant applications, the National Institutes of Health (NIH) has undertaken several initiatives aimed at overhauling and improving the peer review system.

The problem of declining success rates for NIH grant applications has been recognized for some time. Contributing factors include a rapid increase in the number of applications submitted to NIH, an increased number of researchers seeking grants, and a budget that has been declining in inflation-adjusted dollars since it peaked in 2004. Those factors coupled with the reality that many grant applications are not funded until after the first or second amendment have caused significant challenges for the review system. More applications have meant a larger workload for reviewers, causing them to devote more time away from their own research programs in order to participate in grant review. The increasingly complex and interdisciplinary nature of biomedical research poses yet another challenge in obtaining appropriate expertise on review panels.

Integrated Review Group and Study Section Alignment

The most recent examination of the peer review system took place when the NIH Panel on Scientific Boundaries for Review restructured the integrated review groups (IRGs) within the Center for Scientific Review (CSR). Completed in 2004, the Panel's goal was to revise the IRG structure to achieve a systems and disease based focus that would enable more translational research.

This year, CSR has again undertaken a review of the IRG alignment, holding a series of Open House workshops where members of the extramural community are invited to participate in a discussion with NIH officials focusing on two main questions:

Is the science of your discipline, in its present state, appropriately evaluated within the current study section alignment?

What will be the most important questions and/or enabling technologies you see forthcoming within the science of your discipline in the next 10 years?

As the Open House workshops are held and reports are generated, information will be posted to the NIH website (http://cms.csr.nih.gov/AboutCSR/Openhouses.htm). The APS has participated in these workshops and has provided the NIH with information collected through online member surveys. These surveys collected information on the two questions posed above, as well as a number of other aspects of the peer review system including streamlined review and service on study sections. The results indicate that 55-60% of APS members in the sections surveyed feel that the science of their discipline is appropriately evaluated within the current study section alignment. Interdisciplinary research and integrative physiology were the areas most often identified as underserved in the current system, but also as areas that will be vitally important to moving science forward in the next 10 years.

In addition to the Open Houses, CSR

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plans to carry out ongoing internal reviews by examining one IRG per month. With 24 total IRGs, each one is reviewed within NIH every two years.

Other reforms under consideration

In addition to examining the alignment of IRGs and study sections, NIH has also been considering a number of other initiatives aimed at speeding and improving grant review. These include changing the requirements for grant appendix materials, shortening the review cycle for new investigators to allow them to submit revised applications in consecutive cycles, moving to electronic grant submission, and considering shortening the R01 grant application from the current 25 page limit. In addition to electronic grant submission, CSR is developing a system that will automatically refer grants to IRGs based on a sophisticated computer search that extracts referral requests from cover letters and analyzes text.

CSR is also experimenting with alternative formats for reviews, including asynchronous electronic discussions (secure online chatrooms where reviewers can post comments) and video enhanced discussions, where reviewers meet via a computer based videoconferencing system. The goal of the alternative review formats is to facilitate recruitment of reviewers with appropriate expertise by eliminating barriers to participation in face to face meetings, such as travel and time away from lab and clinical responsibilities.

Overhauling peer review

Given the large number of factors involved, officials at NIH have decided to undertake a much more comprehensive look at the peer review system. Two working groups of the Advisory Committee to the NIH Director were established to examine the peer review system, and those working groups issued a request for information (RFI) in July 2007. The RFI asked for "creative, concrete suggestions" in six major areas: challenges of the NIH system of research support and the peer review process, solutions to those challenges, core values of the peer review process that should be enhanced or maintained, whether the peer review process uses appropriate criteria and scoring procedures, and whether there is adequate support for investigators at different stages in their career paths.

The APS response to the RFI was prepared by the Public Affairs Committee and members of the APS Council. The response focused on key areas that were of greatest concern, including:

Modifying the practice of streamlined review—the APS recommends that grants receiving disparate reviews always be discussed, every grant should get a score, and that applications from new or first-time investigators be exempt from streamlining.

The absence of unmentored entry level grant opportunities for new investigators – the APS recommends that NIH consider reviewing applications from new investigators in separate study sections that will focus their reviews on the quality of the PI's training, research environment and support, merit of the research questions being posed in the application, feasibility of the experiments proposed and probability of success, past productivity and potential for future productivity.

Shortening the review cycle – the APS commends the NIH for shortening the review cycle for new investigators, and recommends that NIH work toward the goal of reducing the review time for all grant applications.

The APS also recommends that any major reforms to the peer review process be focused on clearly defined problems, and that implementation of new initiatives include specific plans for evaluation and measurement of success or failure. The Society's response can be viewed in its entirety on the APS Science Policy website (http://www.the-aps.org/pa).

In conjunction with the RFI, NIH officials are meeting with the scientific community to gather input directly. Working group representatives met with scientific societies on July 30, 2007 in Washington, DC. The APS was represented at that meeting by John Chatham, a member of the Public Affairs Committee, who was selected to give a statement on behalf of the Society. APS will also have representatives at a series of regional meetings with NIH officials in San Francisco, Chicago and New York.

The stated goal of the working groups is to gather input until the end of 2007, at which time pilot projects will be implemented and evaluated. To keep the scientific community up to date and informed on peer review initiatives, NIH has created this website: http://enhancing-peer-review.nih.gov/. ❖

New Regular Members

***Transferred from Student Membership**

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Ahmed Regab Gaber Ahmed
Beni-Suef Univ., Egypt
Khaled Al-Qattan
Kuwait Univ., Safat, Kuwait
Alessandra Angelucci
Univ. of Utah, Salt Lake City
Manny Azizi
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Yan Bai
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Klaus Ballanyi
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Bodo Univ. Coll., Nordland, Norway
Juan Fuentes
Center of Marine Sciences, Portugal
Jiro Fujimoto
Hyogo College of Med., Japan
Xue Gao
Texas A&M Univ.
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Johns Hopkins Hospital, MD
Sudip Kumar Ghosh
Northwestern Univ., IL
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Emory Univ., GA
Andras Hajnal
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West Virginia State Univ.
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Michael Wiggs
Texas A&M Univ.
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Edward S. Hyman
New Orleans, LA
Campbell Moses
Upper Saddle River, NJ
Cesar Timo-Iaria
Sao Paulo, Brazil
Bertis A. Westfall
Columbia, MO
Tsai-Fan Yu
New York, NY

Council Meets in Bethesda

The APS summer Council meeting was held in Bethesda, MD, July 12-14, 2007. At this meeting, APS committee chairs presented their annual committee status reports. Highlights of several of the committee reports are listed below. Full text of committee reports can be found beginning on page 205.

The Chinese Association of Physiological Sciences has invited APS to participate in the Beijing Conference for Physiological Sciences, to be held in the Fall 2008. The Physiological Societies of Australia, Canada, China, and the United Kingdom will also participate in this conference. Council appointed APS members Shu Chien and President-elect Irving Zucker to the Organizing Committee.

Final reports from the Finance Task Force, the Governance Task Force, and the Meetings Task Force were presented to Council. The Finance Task Force recommended that APS hire a development consultant to help the Society identify development possibilities such as individuals, corporations, and foundations. Council approved this recommendation.

One of the charges to the Governance Task Force was to examine the Society's committees, including relevance of each committee's charge, and committee composition with regard to each committee charge. After carefully reviewing not the charges of the Society's committees and the structure and functions of the Society's sections, the Task Force recommended that the Long Range Planning Committee could be eliminated since each individual committee and section conducts its own long range planning at their meetings. Council accepted this recommendation and the committee will be eliminated effective January 1, 2008.

The Governance Task Force was also charged with reviewing the Society's chapter program. The Task Force recommended that a similar committee as the Section Advisory Committee (SAC) be established for chapters. Council agreed to establish a Chapter Advisory Committee (CAC) and also agreed to increase the start-up funds for new chapters to $1,000.

Council approved a recommendation from the Awards Committee to make five Research Career Enhancement Awards and one Teaching Career Enhancement Award. The recipients are: Research Career Enhancement Awards: Nicholas Da Silva, Massachusetts General Hospital-Harvard Medical School; Lara Roberts DeRuisseau, SUNY, Medical University, Syracuse, NY; Dexter L. Lee, Howard University, Washington, DC; Kei Sakamoto, University of Dundee, College of Life Sciences, Scotland, UK; and David Walter Wray, University of California, La Jolla, CA. The Teaching Career Enhancement Award was given to William H. Cliff, Niagara University, NY.

The Careers Committee reported that it is working with organizers of APS conferences to include career development sessions and/or activities at APS conferences. At the APS Conference, "Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology," held August 9-12, 2007, the Career Opportunities Committee presented two two-hour workshops using the materials from the Professional Skills Courses. The first workshop, "Making a great impression at a scientific meeting: Presenting your poster, presenting yourself," focused on how to effectively present a poster and how to introduce oneself at a scientific meeting. The second workshop, "Writing your first papers: The 'ins' and 'outs' of authorship," focused on how authorship on manuscripts is determined and will engage participants in an authorship case study.

The Communications Committee reported that the Endocrinology and Metabolism Section completed the first

APS Council: Back Row: J. Michael Wyss, Kim Barrett, William Talman, Irving Joshua, Thomas Pressley, Barbara Goodman, Curt Sigmund, Ken Baldwin, Gary Sieck, James Hicks, Michael Portman, Peter Wagner. Front Row: David Pollock, Sue Barman, Irving Zucker, Hannah Carey, Dale Benos, Dee Silverthorn, Joey Granger.

sectional timeline. The timeline has been posted on the APS website at http://www.the-aps.org/press/endotime/index.htm. Other sections have been encouraged to develop Section Timelines for their specific disciplines.

The Education Committee reported that, through a joint project with the ACDP, an online resource site for medical physiology course directors (http://www.the-aps.org/education/course_director1/) has been created. Resources available at this site include information on faculty evaluation, course evaluation, curriculum issues, and instructional options.

The Committee reported that at EB '07, undergraduate students who were first authors on abstracts submitted to APS sessions were invited to present their posters at a special APS Undergraduate Poster Session. Of the 109 undergraduate students invited, 93 participated. Approximately 200 APS members attended these sessions and discussed the posters with the students.

The Education Office has developed materials for a live short course focused on basic presentation skills and poster development. Two live short courses were held in 2007 to field test the materials (January, Orlando; March, Bethesda). Numerous APS members volunteered to be speakers and small group leaders at the first course, and to provide feedback on the draft materials. Several of the small group leaders asked to serve at the second course and in future courses. The Education Office will work to develop the live short course materials into an interactive, online course, as well as prepare the live short course materials for easy download and course replication. In addition, the Education Office will be offering the professional skills courses in January 2008 in Orlando for the next three years.

The Liaison with Industry Committee sponsored its seventh symposium at EB '07 entitled, "Stem Cells in Physiology and Drug Discovery." The symposium included topics on stem cells and new medicines, pharmacology applications for stem cells in drug discovery, manipulating stem cells physiology for neurodegenerative disease therapy, as well as protein C pathway in human endothelial progenitor cells isolated from cord blood. The Committee will be sponsoring the symposium "Recent Advances in the Renin-Angiotensin-Aldosterone System for the Investigation and Treatment of Hypertension" at EB '08.

The Publications Committee reported that journal issues will now be mailed during the issue month instead of the prior month. The Committee reported that they have made the decision that theses posted to the web will not be considered prepublication because theses had always been available on microfilm. They also reported that the policy APS had that considered meeting presentations disseminated beyond meeting attendees as prior publication has been reversed. The policy will now allow authors to have their presentations disseminated without fear of precluding eligibility for submission of their articles to APS journals. The Committee also reported on the new Author's Choice program to make journal articles available immediately online.

The Committee also reported that the Journal Impact Factors made a strong showing in 2006; and that *Physiological Reviews* ranked first and *Physiology* ranked third in the physiology field based on impact factors.

The Public Affairs Committee (PAC) reported that delegates at the congress of the UK's University and College Union (UCU) passed a motion calling on their members to consider a boycott of Israeli academics and institutions. APS reaffirmed its support of the International Council of Scientific Unions (ICSU) principles of the Universality of Science and is urging members of the UCU and all other academic societies to show similar support by voting against this motion or any similar motion.

The Committee reported that APS continues to be involved in a coalition of groups that came together to sponsor polling on attitudes about evolution and science education. The data resulting from these polls has been compiled and has been submitted for publication in *Science*. The Committee also reported that NIH is seeking input on the Peer Review process. The Center for Scientific Review (CSR) is holding a series of open house workshops that focus on integrated review group (IRG) alignment. Each open house examines several IRGs that are grouped by topic. The PAC is gathering information concerning the peer review process from APS sections through the use of surveys. The data from these surveys will be presented to the CSR.

The Trainee Advisory Committee (TAC) held their second Trainee Symposium at EB '07 entitled, "Multiple Career Paths for a Physiologist: Understand Your Options and How to Get There." The session was well attend-

APS Committee Chairs: Back Row: Lisa Harrison-Bernard, Angela Grippo, Tim Musch, Greg Florant, John Williams. Front Row: Nansie McHugh, Chahrzad Montrose-Rafizadeh, Siribhinya Benyajati, Patricia Molina, Frank Belloni.

ed and the presentations received very high ratings from the participants. The 2008 Trainee Symposium will be titled, "Marketing Yourself on Paper for Academic Positions."

The Committee also reported that that they are now sending out a trainee email newsletter to keep all trainees advised of relevant APS news, notice of award opportunities, postdoctoral position openings, articles of special interest to trainees, etc. The newsletter is sent out on a monthly basis and has a topic focus, such as fellowships and awards. The TAC also issues a special e-newsletter issue containing a list of all relevant career sessions for trainees at the EB meetings. The Committee was also given approval to initiate an Early Career Award. This award will honor an early career stage (graduate student, Postdoctoral fellow, Assistant Professor or equivalent position) member of the American Physiological Society who is judged to have made outstanding contributions to the physiology community and demonstrated dedication and commitment to furthering the broader goals of the physiology community whether by serving on professional committees, participating in K-12 education, participating in scientific advocacy and outreach programs, or by otherwise strengthening and promoting the physiology community. The awardee will receive $1,000 and complimentary registration to the EB meeting.

The Women in Physiology Committee reported that the fourth Bodil Schmidt-Nielsen Distinguished Mentor and Scientist Award was presented to Barbara A. Horwitz, University of California, Davis at EB '07. Horwitz gave a 30-minute lecture on mentoring entitled "Mentoring: Lessons Learned."

The Committee also reported that the APS Career Mentoring Website continues to be a valuable resource all trainees who are looking for information and assistance in developing and maintaining a good mentoring relationship with more senior and junior scientists. It has been cited by a national publication as being an excellent resource for mentoring.

The Women in Physiology Committee and the ASPET Committee on Women in Pharmacology co-sponsored a workshop at EB '07 entitled, "Being Heard: The Microinequities That Tilt the Playing Field." The 2008 symposium will be titled, "Gainfully Employed: From Launching a Job Search to Navigating Negotiations," and will complement the Trainee Symposium topic of "Marketing Yourself on Paper for Academic Positions."

Other committees that submitted reports to Council include Awards, Committee on Committees, Finance, International Physiology, Joint Program, Membership, Perkins Memorial Fellowship, Porter Physiology Development, Section Advisory, and Senior Physiologists Committees. ❖

Carey Thanks APS Staff

APS President Hannah Carey hosted a staff appreciation reception for the Society's employees on Friday, July 13. The event was attended by the APS staff, Council and Committee chairs. APS Executive Director Martin Frank and President Carey, on behalf of the Council and chairs, thanked the staff for their efforts over the past year. Carey said it was a pleasure to work with the APS staff, and that their devotion to their jobs and to APS helps to motivate her, and the rest of the Council.

During the appreciation reception, a ceremony is held to recognize those staff members who have served the Society. This year, Carey presented 20-year certificates to Alice Ra 'anan (Director, Government Relations/Public Policy); and Mona Trang (Peer Review); a 15-year certificate to Eric Pesanelli (Art Editorial Manager); 10-year certificates to Dell Pillers-Cline (Accounting Manager), Sue Sabur (Marketing Manager); and a five-year certificate to Gil Ebner (Peer Review Manager). Carey thanked the employees for their years of service. ❖

APS President Hannah Carey and APS Executive Director Martin Frank presented appreciation certificates to Dell Pillers-Cline, Alice Ra'anan, Mona Trang, Eric Pesanelli, Sue Sabur, and Gil Ebner (not pictured).

Introducing Thomas A. Pressley

In January 2007, Thomas A. Pressley succeeded Robert G. Carroll as Chair of the Education Committee. Pressley has been deeply involved in the educational activities of the APS since joining the committee in 2002, organizing a Student-Teacher Workshop during the 2004 Experimental Biology meeting in Washington, participating in the Explorations in Biomedicine Retreat at Little Big Horn College in 2003, and serving as the Physiologist-in-Residence at the 2006 Science Teaching Forum. He has also served as a host for a Frontiers in Physiology Research Teacher in 2000. A member of APS since 1996, his primary affiliation is with the Cell and Physiology Section, although he also participates in activities of the Renal Physiology and Endocrine and Metabolism Sections, as well as the Epithelial Transport Group. He currently serves on the Editorial Board of the Heart and Circulatory Section of the *American Journal of Physiology*.

Pressley makes his home in Lubbock, TX, where he is a Professor of Physiology at the School of Medicine, Texas Tech University Health Sciences Center. He earned his BA degree in Earth and Planetary Sciences from the Johns Hopkins University in 1977, specializing in ecology. He then moved to Charleston and the Medical University of South Carolina, where he worked with James S. Graves on salinity acclimation in blue crabs. After completing his PhD degree in biochemistry, Pressley moved to the College of Physicians and Surgeons at Columbia University for postdoctoral training with Isidore S. Edelman. It was there that he developed his interest in active transport, focusing on the Na, K-pump. He was eventually promoted to the position of laboratory chief, an experience that he credits as a finishing school for learning the administrative side of science. In 1987, he was recruited as an Assistant Professor by the Department of Physiology and Cell Biology at the University of Texas Health Science Center in Houston. There he pursued the regulation of membrane transport and the physiological significance of enzyme heterogeneity. In 1995, Pressley joined the Department of Physiology at Texas Tech, where he has continued to work on the Na, K-pump and its diversity. In conducting this research, he gratefully acknowledges the support that he has received over the years from the National Institutes of Health. In an attempt to give back to the community, he serves on peer review panels for the American Heart Association, the National Science Foundation, and the National Institutes of Health, as well as various international funding agencies.

Thomas A. Pressley

Outside the laboratory, Pressley is active in the aviation community. While in Houston, he obtained his private pilot license in gliders, and he recently became a flight instructor. The Lubbock area of West Texas is world-famous for conditions that are friendly to gliders, and pilots come from around the globe to fly there. He is also a computer enthusiast and has become his department's unofficial software expert, offering advice on programs and equipment. Each summer, he combines his interests in computers and gliding by working as a scorekeeper at various glider competitions around the country. He is also the official record keeper for the state of Texas, and pilots who think they have achieved a new state record must submit all their flight documentation to him for evaluation. Pressley is also interested in international relations. He and his family spent five months in France in 2002, learning about the education system and advising students on the opportunities for study and research in the US. His family has also been the host for high school exchange students from Germany, South Korea, and Uruguay.

As chair of the Education Committee, Pressley inherits the strong set of programs developed by past-chair Rob Carroll and Education Director Marsha Matyas. These include efforts targeting all stages of physiology education, from lesson planning in grade school to career development for APS membership. A new initiative of the committee is Physiology Understanding Week, which encourages APS members to visit local schools to talk with students about career opportunities. Consistent with the recent emphasis of the society's Strategic Plan on undergraduate studies, the Education Committee has also undertaken a major effort to evaluate physiology in the college setting, with the expectation that the APS can partner with undergraduate institutions for better support of teaching and research programs. ❖

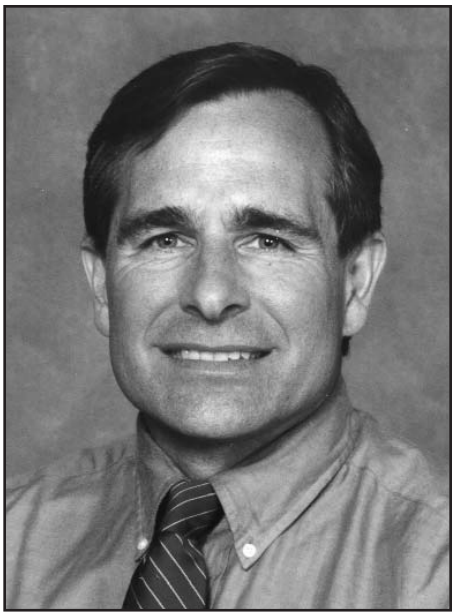
Moving?

If you have moved or changed your phone, fax or Email address, please notify the APS Membership Office at 301-634-7171 or Fax to 301-634-7241. Your membership information can also be changed by visiting the Members Only portion of the APS Website at http://www.the-aps.org. ❖

Introducing Michael N. Sawka

On May 2, 2007, Michael N. Sawka succeeded Ronald L. Terjung as Chair of the Environmental and Exercise Physiology Section. An APS member since 1979, he was on the Environmental & Exercise Physiology (EEP) Section Advisory Committee, as Thermal Physiology Councilor (1999-2002), served as Secretary/Treasurer (2000-2002), and EEP representative on the Joint Program Committee (2003-2005). He serves on editorial boards of *Journal of Applied Physiology* (since 1999) and *American Journal of Physiology* (since 2001) and was Guest Editor (2002) of "Highlighted Topic: Molecular Biology of Thermoregulation" for *Journal of Applied Physiology*. He organized an APS Special Session: "Genomics & Molecular Basis of Exercise & Environmental Physiology" that was a full day meeting at EB 2001. He was a contributor to the *Handbook of Physiology: Environmental Physiology*. In addition, he is active in the American College of Sports Medicine and served on numerous panels including those for National Academy of Science's Institute of Medicine, National Institutes of Health, and United States Anti-Doping Agency.

Sawka currently holds the position of Chief, Thermal and Mountain Medicine Division at the US Army Research Institute of Environmental Medicine (USARIEM) in Natick, MA. He was raised in eastern Pennsylvania and northern New Jersey and earned his BS and MS degrees from East Stroudsburg University and his PhD degree from Southern Illinois University. After completing postdoctoral training at Dayton VA Medical Center and serving as Assistant Professor of Physiology at Wright State University School of Medicine he joined USARIEM as a Research Physiologist in 1980. His research interests include adaptation and maladaptation to environmental (heat, cold, terrestrial altitude) stress, human performance at environmental extremes, thermoregulation, fluid/electrolyte balance and blood volume control. His laboratory not only conducts basic and applied research in the above areas, but translated scientific information into medical doctrine for military operations at environmental extremes.



Michael N. Sawka

As Chair, Sawka hopes to continue and build on the EEP Section's tradition of being responsive to its members, providing high-quality programming and numerous award opportunities. His priorities will be to: *1*) challenge membership to increase their participation in EEP governance and APS activities; *2*) recruit new EEP members from physiologists not currently members of APS; *3*) expand financial resources to provide programming, awards and other services to section members; *4*) foster strong alliances with other APS Sections and Groups to increase programming of interest to EEP members; and *5*) update the Section Operating Procedures. His approach will be to develop subcommittees for each initiative that include both Steering Committee and other EEP members wanting to become more active. He challenges EEP members to become more active for the benefit of the Section. ❖

2006 APS Impact Factors Are Published by Thomson/ISI

Thomson/ISI has released its 2006 Science Edition of the Journal Citation Reports, which gives journal impact factors and rankings of 6,164 science journals. The 2006 impact factors of the journals of the APS, along with a comparison of the past three years, are given in the table below. The table also shows the rank of APS journals in the physiology category, and each journal's rank in its related field, as well as each journal's cited half-life. ❖

Table 1. APS Journal Impact Factors and Rankings.

Journal	2003	2004	2005	2006	2006 Cited Half-Life	2006 Rank, Physiology (out of 79)	2006 Rank, Related Field	Related Field
PRV	36.831	33.918	28.721	31.441	7.2	1		
Physiology			2.113	6.268	2.0	3		
NIPS	3.682	3.306	3.949	5.241	5.7	5		
AJP-Cell	4.103	3.939	3.942	4.334	6.0	10	46/156	Cell Bio
AJP-Lung	3.735	4.051	3.939	4.250	5.3	11	5/34	Respiratory
AJP-Renal	4.344	4.354	4.263	4.199	5.9	13	5/55	Urol & Nephr
AJP-Endo	3.828	4.431	4.456	4.123	6.1	14	20/93	Endo & Met
Phys Gen	4.368	3.855	4.636	3.789	3.3	16	51/156	Cell Bio
							41/131	Genet. & Heredity
AJP-Heart	3.658	3.539	3.560	3.724	6.0	17	10/74	Cardiac & Cardiovasc.
							13/52	Peripheral Vascular
AJP-Regu	3.627	3.405	3.802	3.685	6.7	18		
AJP-GI	3.421	3.479	3.472	3.681	6.3	19	10/48	Gastro & Hep
JN	3.876	3.592	3.853	3.652	8.4	20	53/199	Neuroscience
JAP	3.027	2.824	3.037	3.178	>10.0	25	2/73	Sport Sciences
Advances	0.755	1.291	1.043	1.260	4.5	58	4/22	Education

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Fifteen Teachers Attend and Celebrate the 17th Annual APS Science Teaching Forum

As part of the year-long 2007 Frontiers in Physiology Fellowship program, 15 science teachers from across the nation took a week-long break from their summer research experience in APS members' research laboratories at the end of July. The research teachers (RTs) convened for an intensive workshop week known as the "APS Science Teaching Forum" at the Airlie Center in Warrenton, VA.

Three APS members served as Physiologists-in-Residence, and included 2007 K-12 Outreach Fellows, Jessica Clark (Washington Univ. School of Medicine) and Clintoria Richards-Williams (Univ. of Alabama at Birmingham), and APS Education Committee member, Joseph Benoit (Univ. of North Dakota). Additionally, three former RTs led the instruction as Mentor/Instructors, and included Margaret Shain, from the Our Lady of Perpetual Help Junior High School in New Albany, IN, Tonya Smith, from Maywood Middle School in Sumter, SC, and Charles Geach, from the El Paso Independent School District in Texas.

The teaching team facilitated sessions using APS curriculum units for middle and high school students. Additionally, the RTs explored inquiry-based teaching strategies, integrating technology, and addressing equity, diversity, and learning styles in the classroom. The RTs participated in numerous hands-on laboratory and web-based activities, shared their summer research experiences, evaluated their current teaching techniques, and collaboratively developed strategies to implement teaching methods promoted both by the National Science Education Standards and each of their own respective state standards.

Mentor/Instructors (M/I) and APS member Physiologists-in-Residence (PIR) led the workshop and provided the scientific background of the instructional sessions. From left to right: Jessica Clark (PIR), Margaret Shain (M/I), Clintoria Richards-Williams (PIR), Tonya Smith (M/I), Joey Benoit (PIR), and Charlie Geach (M/I).

Additional guests included Robert Dozier of the Mid-Atlantic Organized Betta Breeders chapter, who discussed the behavior and reproductive physiology of the Siamese fighting fish, Betta splendens; Alecia Riley, Application Scientist for ADInstruments, Inc., who demonstrated LabTutor® software for life science laboratory teaching; David Hanych of the National Science Foundation, who observed the workshop activities; Donna Krupa, APS Director of Communications, who previewed the APS Life Lines podcasting initiative; and Martin Frank, APS Executive Director, who welcomed and congratulated the research teachers for participating in the Frontiers Fellowship.

Fifteen Research Teachers from across the country participated in the 2007 Science Teaching Forum as part of the year-long Frontiers in Physiology Fellowship program.

As part of the fellowship this fall, the RTs are developing, refining, and field testing their own inquiry-based lab activity that can be used in the science classroom. They continue to be mentored by their Mentor/Instructors. Some RTs will also be inviting their research host into their classroom sometime during the first week in November for a Physiology Understanding (PhUn) Week 2007 event (visit: http://www.PhUnWeek.org). The fellowship con-

Norm Leonard (Indiana), Latasha Seay (Florida), and Debbie Frankel (Oregon) designed and performed an experiment on the relationship between viscosity and flow rates.

cludes with the RTs attending and participating in EB 2008 this coming April.

Follow the progress of the 2007 fellowship year at: http://www.the-aps.org/education/2007rts/index.shtml.

The Frontiers in Physiology fellowship program has been sponsored by the APS over the last 17 years, impacting more than 400 teachers and APS members who have volunteered as research hosts and/or Physiologists-in-Residence. The program has also received funding from the National Center for Research Resources (NCRR) Science Education Partnership Award (SEPA), and the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) at the National Institutes of Health.

Marshan Jefferson (Washington, DC) and Nancy Buehner (South Dakota) explored and evaluated websites to incorporate into classroom labs and lessons.

For additional information about the fellowship, visit the program's website at: http://www.the-aps.org/education/frontiers. ❖

Mentoring Forum

Balancing Work and Family: Viewpoints from Different Careers

Women in Physiology Committee
Career Opportunities in Physiology Committee
Education Committee

The APS Undergraduate Summer Research Fellowship (UGSRF) Program supports 24 undergraduate students in the labs of APS members for 10 weeks in the summer. This year the UGSRFs discussed possible career choices and the pros and cons of various careers.

One topic of recurring interest was that of balancing a demanding and highly satisfying job with having a family and life away from work. Here are a couple questions that were asked:

"My main concern with this type of [surgeon] position is the lifestyle that comes with it. Only 8% of surgeons are women and I believe this is due to the additional responsibility of childbearing that women face in a relationship. I am wondering if it is possible to have both the life of an overworked surgeon and that of a loving wife. Would it be possible to balance your life well enough to fit a child into the equation or will one end of the spectrum ultimately suffer?

"I had the chance to shadow a cardiothoracic surgeon and even had the opportunity to ask him about his personal life. He described the difficulties he had in balancing his work with family, but stated that it was in fact his wife that was always there to take care of family responsibilities. Is it okay, or even possible for me to expect that situation in reverse?"

Response 1: Balancing Work and Family: A Physiologist's View

Christin Carter-Su, Department of Physiology, University of Michigan

(*Excerpt from "Mentoring for Success in Physiology" by Christin Carter-Su, Professor of Physiology, University of Michigan, 2005 Recipient of the Bodil Schmidt-Nielsen Distinguished Mentor and Scientist Award, published in* The Physiologist *48(4: 167, 172-178, 2005)*

Being a successful woman with a husband and two children, I probably get asked most for advice about balancing work and family. This is the advice I give women, but most of it applies to men as well as women:

Family gives women happiness; Work gives women self-esteem. For this reason, it is important to keep a balance in your life. You should not feel guilty for working and you should not feel guilty for having a family and wanting to spend some quality time with them. But there are ways that you can make your life easier.

Choose your mate carefully. It is difficult and time-consuming to work full-time and have a family. It is virtually impossible if you are expected to work full-time and handle all the traditional female roles of wife, house-keeper, caregiver and cook. It is best to find a mate who values your job equally with his/hers and will share willingly and equally in household responsibilities.

Get lots of outside household help. If

both you and your spouse are working, you need to think of it as 1 and 1/2 incomes, not as two. You need to plan on spending at least 1/2 of an income on help. Hire someone to clean your house for you. Hire the best daycare provider possible, preferably someone who will come to your house and will also do the laundry and other household chores. Hire someone to mow the grass. In essence, hire someone to do those jobs that you do not like doing so that you will have time to do the things that you do want or need to do, such as spend quality time with your children and spouse or write up another paper for publication.

Build a strong support network. If like me, you do not have family in the area who can help when emergencies arise, you need to build a strong support network. When my children were young, my husband would ask every teenage girl he saw in our neighborhood whether she babysat. We made arrangements ahead of time with other friends and neighbors who had childcare to cross cover for each other if our childcare fell through. We paid for our children to attend before and after-school programs even when we had after-school childcare at home just so we could send our kids to those programs on those days we did need it, such as when I had to give an 8 am lecture, the childcare giver called in sick, or the teachers were having one of their many in-service training or reporting days. We got the phone numbers of our friends' current and former caregivers, graduate and undergraduate students who were willing to baby-sit in a pinch, preschool student helpers, anyone who might be able to take care of our children on snow days, when our children were sick, or when our caregiver was unable to come for whatever reason.

Form friendships with other working families. And as a corollary, try not to live in a neighborhood or send your child to a preschool where all the other families have a stay-at-home parent. Our daughters went to a preschool where a requirement was that both parents had to have at least a half time job. Until they were five and went to public kindergarten, our children did not realize there was such a thing as a stay-at-home mom. Our children's preschool did not ask you to contribute food and help serve a Thanksgiving dinner—they prepared it and served it to you! Other working families can provide valuable information and emotional support. This is true for both men and women. It was one of my husband's male colleagues who helped persuade us of the benefits of having at-home care for our newborn. Other working families can tell you how and where to find good help, the best preschools and summer camps for working families, how to cope with having one spouse out of town, where to buy the best "home-cooked" food to bring to school events, which sports teams have the best coaches and more importantly, the most convenient practice times, locations and car pools.

Forget about domestic perfection. There are times in your life when it is impractical to have the perfect house, the kind of house many of us grew up in. You need to make priorities. My husband's and my priorities are to spend time with our children and each other rather than to spend time straightening the house, cooking gourmet meals or having a *Sunset* magazine garden. For quite a few years, we entertained at home only those friends we knew well enough to have over without straightening up the house.

Delegate. Learn how to delegate. This goes for the home as well as work. There was one year when it became obvious that I was not going to be able to get my grant application out doing it primarily by myself as I had usually done or even by getting help from just those people in my laboratory whose work was funded by that grant. In desperation, I announced to the laboratory that I needed everyone to stop working on his/her experiments and help with the grant. I had people looking up techniques, proof reading, shortening the text, checking references, working on figures, and buying food for everyone working on the grant. What was enlightening to me was finding out afterwards that no one really minded helping, despite some very long days and nights. Some in fact told me they really enjoyed it because it made them feel an important and integral part of the laboratory. They learned a lot about the science going on in the entire laboratory, and about what it takes to put together a grant application. I have never looked back!

Response 2: Balancing Life as a Surgeon With Home and Family

David I. Soybel, Associate Professor of Surgery, Harvard Medical School Division of General and Gastrointestinal Surgery, Brigham & Women's Hospital

Many female students today would like a medical career but are concerned whether they can manage both a demanding career and a family. Being a surgeon (general and GI), I wanted to give you some insight into how I and my colleagues are balancing work, home and family.

The proportion of women in surgical specialties is increasing. Right now about 50% of each entering class in medical school are women. In many surgical residencies— especially the most competitive ones—50% are now women.

Surgical residents are not overworked compared to other residents— all are now mandated for training in an 80 hour per week time frame. Training Programs that fail to adhere to these standards can lose accreditation—and have been put on probation quite readily when they showed a lack of sincerity in addressing the work hour limits on residents. In our surgical residency at Brigham and Women's Hospital in Boston, which is affiliated with Harvard Medical School, five of the seven incoming interns are women and the overall proportion of women in the residency is about 35 to 40%. The percentage of women on the Staff of General Surgery is about 20% and increasing each year with new recruitments.

Many of the women on our staff are married and have children or, if they are in the early stages of their careers, they plan to have children when the time is right. Several of these women have important or time-consuming leadership positions and practices that are high profile or involve complex clinical problems.

The solutions that each family finds for taking care of itself are quite varied, and many people figure it out. It isn't easy but they take it as a challenge and work on it— with their partners/spouses. Some don't, but there are just as many men who don't figure it out either. Certainly things are changing. Many surgical residents who are husbands are routinely taking paternity leave, something that was not offered, in fact unthinkable, when I was training in surgery 20 years ago. Many of our best residents who are men and women have signaled the older generation that they want to be surgeons but they are not willing to live in the hospital their whole lives just for the privilege. The principles on which they plan their careers are as follows:

1. You might be able to do it all,

but not all at the same time. Pick and choose, for each phase of career and life, the things that are most important.

Many young surgeons plan specialty training, which limits the kinds of surgeries they do, but also limits their activities within that specialty. Choosing a specialty is like building a fence. It limits what you can do, but it can also keep out the riff-raff.

2. You are not the only person who can do what you do. If you have good coverage of your practice, then your patients will get good care for their unexpected problems whether you are there or not. So you can sign out on weekends and take your turn to cover only when scheduled. A well-oiled practice and group of colleagues/partners who work well together can provide coverage in a way that makes patients feel safe and respected. So by the time you want to go into practice, you will see this idea as the standard, not the vanguard.

3. It is important for both parents to get to important events in kids lives. So both have to help each other get there and not burden the other with tasks that may make it harder, not easier, to spend time with the kids at times that count. The family chooses priorities and then uses resources (i.e., its income or social/family networks) to get both parents to the recital or the soccer playoff.

I think these principles of choosing are not unique to surgeons; we have just been a little slower to adapt them than other specialties.

Response 3: Additional Comments from a Woman's Perspective
E. Lisa Breen, Director of Anorectal Physiology Laboratory Associate Surgeon, Brigham and Women's Hospital

***1)* Numbers are changing and women are choosing surgery.** I think the statistic I just read was that in 2006, 42% of first year surgical residents nationally were women. When I saw that graph at ASE (Association for Surgical Education), it looked like 2006 was a big jump up and was only one year, but I would say trends are positive.

***2)* The challenge/concern most women express (although I suspect equally applicable to many young men) is the ability to combine a career in surgery with a meaningful role as a parent.** I would say that various strategies employed by women, men and couples are emerging. The couple needs to define between themselves what role each will have in parenting their children (predominately the mother, the father or a split) and then structure their career to accommodate their other job- parenting. Parenting demands also change as children grow and your need to be home and available may change during the time of your career.

a) For those who opt to do less parenting, all models of a career are open to them—the traditional long hours, lots of emergency coverage to one of the "newer" models.

b) For those who want to do more parenting, the biggest variable seems to be to decrease the unpredictability of their schedule as much as possible and likely the total amount of work they agree to do.

c) Unpredictability is most often generated by patient care. Strategies to control this include: subspecializing, so you feel you are an expert in a smaller amount of material and can better predict how your patients will do; sharing care of your patients with trusted colleagues (a call group where you can depend on being "off call" in turn for caring for other's patient like they are your own at other times); dividing your career between clinical care and other non-patient care activities (research, teaching, administration); taking on less work will free you up to go home and parent. My concerns here, however, are: in some competitive patient environments surgeons who are viewed as less available will get less referrals and then not even be able to keep up the volume they feel they can handle; the amount of income generated while doing less work may not be enough to pay the bills (nannies, housekeeper, household manager, etc.)

Overall, I feel positive. I think numbers are increasing and as more women (and "modern men") join the ranks of surgeons more solutions and strategies will evolve. The job, however, is no doubt demanding of time and stressful. Most of us would say that we get to the hospital earlier in the morning than our medical colleagues and often stay later. Luckily, the rewards are high and with some planning you can find a way to combine a career as a surgeon and a family.

For additional comments, please see: http://www.the-aps.org/careers/careers1/mentor/balancing.htm. ❖

Science Policy

The American Physiological Society Objects to Proposed Boycott of Israeli Academics

On June 29, 2007, delegates at the congress of the UK's University and College Union (UCU) passed a motion calling on their members to consider a boycott of Israeli academics and institutions. The American Physiological Society posted a statement on the website reaffirming strong support of the principles of the International Council of Scientific Unions (ICSU) as stated in Statute 5 of the "Statutes and Rules of Procedure" approved October 2005, and urging members of the UCU and all other academic societies to show support by voting against this or any similar motion, which violates these principles:

> "The principle of the Universality of Science is fundamental to scientific progress. This principle embodies freedom of movement, association, expression and communication for scientists, as well as equitable access to data, information and research materials. In pursuing its objectives in respect of the rights and responsibilities of scientists, the International Council for Science (ICSU) actively upholds this principle, and, in so doing, opposes any discrimination on the basis of such factors as ethnic origin, religion, citizenship, language,

political stance, gender, sex or age. ICSU shall not accept disruption of its own activities by statements or actions that intentionally or otherwise prevent the application of this principle."

America COMPETES

On August 9, 2007 the President signed H.R. 2272 into law, a package of legislation called the *America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act*.

The America COMPETES Act is the culmination of multiple efforts to implement the recommendations issued in the National Academies 2005 report "Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future." The report focused on the effect of the increasingly global marketplace and economy on US prosperity, and the recommendations are aimed at helping the US maintain its competitive edge through improved science and education programs.

The Act sets aside nearly $34 billion to enhance science, technology, engineering, and mathematics (STEM) education over the next three fiscal years, authorizes multiple grant programs aimed at creating more math and science teachers, and authorizes budget doublings over the next ten years at the National Science Foundation, National Institute of Standards Technology, and the office of science in the Department of Energy. The extent to which the goals of the Act are achieved will depend on how much money is actually appropriated to fund the initiatives. ❖

Communications

Spotlight on Sex and Gender in Austin, TX

Even during the dog days of summer, there was no lack of interest in physiology.

The Communications Department distributed 14 press releases during July and August, most of them related to *Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology,* our meeting that took place in Austin, TX, August 9-12. The Communications Department's efforts concentrated on getting coverage for this conference, our final meeting of 2007.

Our tracking service logged more than 215 articles in print and online media that picked up on these releases. Some of these outlets were:
ABC Online (Australia)
Atlanta Journal Constitution
Austin American Statesman
CBC News (Canada)
Chicago Daily Herald
China Post (Taiwan)
CNN.com Health
Courier Mail (Australia)
Daily India
Forbes
Gulf News (United Arab Emirates)
Independent Online (South Africa)
Indianapolis Star
Irish Independent
Milwaukee Journal Sentinel
MSNBC
New York Post
New Zealand Herald
Reuters
Reuters UK
San Diego Tribune
Scientific American
Vancouver Sun
Windsor Star (Canada)
Yahoo! News

In addition, our video monitoring service picked up coverage in major markets, including
Fox (New York City, Cleveland)
ABC News (Chicago, Detroit, Los Angeles)
NBC (St. Petersburg; Philadelphia)
CBS (Portland, Oregon; Columbus)

The titles of the press releases are below. If you are online, you can click on the titles and see the releases. If you are not, you can go to: http://www.the-aps.org/press/journal/index.htm to see the complete list and read the releases.

"Gender, Coupled With Diabetes, Affects Vascular Disease Development"

"Does the Desire to Consume Alcohol and Tobacco Come From Our Genetic Makeup?"

"The 'Female Advantage' In Kidney Disease Does Not Extend To Diabetic Women"

"Sex And Gender: Why Do Men And Women Respond Differently To The Same Disease?"

"Acute Sleep Deprivation Leads To Changes In Nighttime Urine Production For Men And Women"

"Study Finds Gender Differences In Renal And Other Genes Contributing To Blood Pressure"

"Cardio Exercise Benefits In Male Vs. Female Hearts"

"Study Suggests Estrogen Deficiency Can Lead To Obesity-Induced High Blood Pressure Following Menopause"

"Testosterone Replacement Therapy: How Safe For Aging Men?"

"Sugar And Spice And Everything Nice: Health Differences In Newborn Girls And Boys"

"Female Gender Provides An Advantage In Renal Diseases'

"New Research Aims To Identify Markers For Menopausal Women At Risk For Deadly Blood Clot"

"Grapes, Soy And Kudzu Blunt Some Menopausal Side Effects"

"Exercise, Rest, Repeat: How a Break Can Help Your Workout." ❖

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Physiology InFocus: One Physiology

Organized by: Hannah V. Carey, Univ. of Wisconsin School of Veterinary Medicine, Madison

Physiology and Global Health
Hannah V. Carey

Physiological Basis of Ecosystem Health
Terrie Willliams

Global Physiological "Omics": Microbes to Medicine
Anne Kwitek

Physiology and Lifestyle
Helen Raybould

Societal Lectures

Physiology in Perspective—The Walter B. Cannon Memorial Award
Barbara A. Block

Henry Pickering Bowditch Award
Stephanie W. Watts

Walter C. Randall Lecture on Biomedical Ethics
Jerrold Tannenbaum

Microcirculatory Society Landis Award Lecture
TBA

Section Distinguished Lectureships

Robert M. Berne Distinguished Lectureship of the APS Cardiovascular Section
Michael Wolin

Hugh Davson Distinguished Lectureship of the APS Cell & Molecular Physiology Section
Douglas Eaton

Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
Eve Marder

August Krogh Distinguished Lectureship of the APS Comparative & Evolutionary Physiology Section
David Evans

Solomon A. Berson Distinguished Lectureship of the APS Endocrinology & Metabolism Section
David Wasserman

Edward F. Adolph Distinguished Lectureship of the APS Environmental & Exercise Physiology Section
Ronald Terjung

Horace W. Davenport Distinguished Lectureship of the APS Gastrointestinal & Liver Physiology Section
Raj Goyal

Carl Ludwig Distinguished Lectureship of the APS Neural Control & Autonomic Regulation Section
Patrice Guyenet

Carl W. Gottschalk Distinguished Lectureship of the APS Renal Section
Peter Aronson

Julius H. Comroe, Jr. Distinguished Lectureship of the APS Respiration Section
Stella Kourembanas

Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
TBA

Ernest H. Starling Distinguished Lectureship of the APS Water & Electrolyte Homeostasis Section
Joey Granger

Career Development Track

Publishing 101: Dos and Don'ts of Publishing in APS Journals
Kim E. Barrett
Gainfully Employed: From Launching a Job Search to Navigating Negotiations
Siribhinya Benyajati, Colleen Cosgrove Hegg, and Jelveh Lameh
How to Communicate with the Public Directly
TBA
Marketing Yourself on Paper for Academic Positions
Lacy A. Holowatz and Eric Berglund
Mid-Career Transitions: Choices and Challenges
Rolando E. Rumbaut and Nansie McHugh
What Every Scientist Needs to Know about Ethical Issues in Biomedical Research
Jane Reckelhoff

Cell Physiology Track

Calponin and the Smooth Muscle Thin Filament
Jian-Ping Jin
Caveolae and Caveolins in Cardiovascular Physiology and Disease
Hemal H. Patel and Paul A. Insel
Ciliopathies: Common Themes in Diverse Genetic Disorders
Lisa Satlin and Brad Yoder
Mechano-Sensing at the Vessel Wall in Regulation of Atherogenesis
Tzung K. Hsiai
Novel Microscopy Techniques for Imaging Single Molecules in Living Cells and Tissues: RICS/STICS and TIRF Meet PALM while Driving OCT CARS
Moshe Levi and Janos Peti-Peterdi
Cell Phenotype and Function in Response to Lung Injury and Disease
Michael Koval
Mechanotransduction Mediated by Primary Cilia
Carole M. Liedtke

Cell Signaling Track

Cardiac Intracellular Ca^{2+} Signaling in Health and Disease
Alicia Mattiazzi and Valeria Rettori
Cell-Cell Communication in Lung Stress Responses
Jahar Bhattacharya and Michael Koval
Extra-Nuclear Steroid Signaling, Roles in Modulating Disease and Physiology
Willis K. Samson and Ellis R. Levin
Newly-Emerging Signaling Pathways in the Renal Microcirculation
Rodger Loutzenhiser and Pamela K. Carmines
Role of Endogenous Hydrogen Sulfide Signaling in Health and Disease
David W. Krause and Jeannette E. Doeller
Hormones and Angiogenesis
Ellis R. Levin
Regulation of Epithelial Transporters and Signaling Processes
Michael J. Caplan
Signaling and Control of Skeletal Muscle Remodeling
Ruud Schilder

Channels and Transporters Track

The Controversy of Sarcolemmal and Mitocholdral K_{ATP} Channels and Cardioprotection
Colin G. Nichols
Hepcidin Regulation of Iron Transport (Cosponsored by the American Society of Nutrition)
Marianne Wessling-Resnick, James Collins, and Mitch Knutson
The Na^+ K^+ ATPase Pump: Regulation and Physiological Function in Cardiac and Skeletal Muscle
Jean-Marc Renaud and Ole B. Nielsen
New Insights into the Urine Concentrating Mechanism
Jeff M. Sands
Regulatory Mechanisms in Diseases of Epithelial Transport
Jerrold Turner and Asma Nusrat
Temperature Sensing by TRP Channels
Jie Zheng
Molecular Regulators of the Ins and Outs at the Apical Membrane of GI Epithelial Cells
Curtis Okamoto and Catherine Chew
Regulation of ENaC by Membrane Lipids
He-Ping Ma
Regulation of Epithelial Ion and Water Channels
Mark A. Knepper
Renal Section Young Investigator Award Featured Topic
Christine Maric
Role of TRP Channels in Respiratory Function and Disease
Mary I. Townsley and Wolfgang M. Kuebler

Education Track

Walter C. Randall Lecture on Biomedical Ethics
Jerrold Tannenbaum
Exercising the Metabolome
David G. Parkes and Alastair V. Ferguson
Mining the Metabolome
Willis K. Samson and Michael Hanley
Is Formative Assessment an Effective Way to Improve Learning?
Jonathan Kibble and Penelope A. Hansen
Novel Microscopy Techniques for Imaging Single Molecules in Living Cells and Tissues: RICS/STICS and TIRF Meet PALM while Driving OCT CARS
Moshe Levi and Janos Peti-Peterdi
Refresher Course in Respiratory Physiology
L. Britt Wilson and Robert W. Brock
Encouraging Unforgettable *Learning*
Mary Pat Wenderoth

Metabolism and Energy Track

Exercising the Metabolome
David G. Parkes and Alastair V. Ferguson
Mining the Metabolome
Willis K. Samson and Michael Hanley
Mechanisms of Metabolic Depression
Frank van Breukelen and Jason Podrabsky
Myriad Mechanisms underlying the Pathophysiology of Diabetes
Cuihua Zhang and Ann Marie Schmidt
Energy Balance and Circulatory Control: Central Pathways and Mechanisms
Gregory D. Fink and Joseph R. Haywood

Energy Balance, Cancer and Diabetes
Thomas M. Nosek
Gut Hormones in the Regulation of Body Weight and Metabolism: Are We Really What We Eat?
Helen E. Raybould
Impact of Obesity on Cardiovascular Function: Role of Inflammation
David Stepp and Jonathan Tune
Metabolic Syndrome: Molecular Mechanisms, Omics, and Physiology
Jules Griffin
Renal and Circulatory Physiology and Pathophysiology in Metabolic Syndrome
Carolyn Ecelbarger

Oxidative Stress Track

Leukocyte-Dependent Arteriolar Vasoregulatory Dysfunction in Inflammatory Conditions
Ronald J. Korthuis and Norman R. Harris
The Role of the Carotid Body in Oxygen Homeostasis
Sukhamay Lahiri
Skeletal Muscle Mitochondrial Function and Dysfunction with Age
David Hood
Cytokines, Inflammation and Autonomic Regulation
Michael Kenney and Robert Felder
Exercise, Oxidative Stress, and Endothelial Function
Shane A. Phillips
O2 Sensing in Pulmonary Vasculature in Health and Disease
Stephen Archer
Role of ROS and NO in Contraction-Stimulated Glucose Uptake in Skeletal Muscle
Michael Reid
Wiggers Award Featured Topic: Neural Control of the Circulation: Angiotensin and ROS in Heart Failure and Hypertension
Irving Zucker

Translational Physiology Track

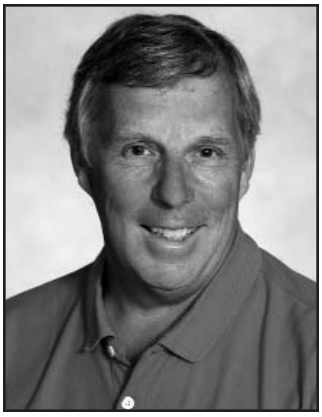
AFMR Translational Research Development Workshop
TBD
Acute Lung Injury and the Acute Respiratory Distress Syndrome (ALI/ARDS): Therapeutics on the Horizon
Timothy M. Moore and Brian William Fouty
Cardiac Hormones: For the Treatment of Acute Myocardial Infarctions, Congestive Heart Failure, Acute Renal Failure and Cancer
David L. Vesely
Chateau Resveratrol: Therapeutic Promise for Cardiovascular Disease
Dipak K. Das and Ronald J. Korthuis
Focus on the Fibroblast: Therapeutic Target for the Failing Heart?
Carlin S. Long
Genomic and Proteomics in Colon Cancer
John Carethers
IBS and Chronic Constipation: Mechanisms and Novel Treatments
Shaila Basavappa
Inhibiting Cyclooxygenase with Coxibs and NSAIDs: Efficacy versus Cardiovascular Risk
Allison B. Reiss and Edwin S.L. Chan
The Kidney: Aging, Apoptosis, Endocrine Sensitivity and the Kidney's Role in Hypertension
Michael Symonds
Microbial Infection, Inflammation and Intestinal Transport
Pradeep K. Dudeja and Didier Merlin
Novel Therapeutic Targeting of the Autonomic Nervous System in Heart Failure and Hypertension
Robert Foreman and Helio Salgado
Progress in Pharmacogenomics and Its Promise for Medicine
Burton E. Sobel and Charles A. Blake
Recent Advances in the Renin-Angiotensin-Aldosterone System for the Investigation and Treatment of Hypertension
Christine G. Schnackenberg and Joey Granger
Role of Cholesterol in Cardiovascular and Renal Pathology
Douglas C. Eaton
Roles of Oxytocin and Vasopressin in Clinical Disorders
Sudar Alagarsamy and Catherine Uyehara
Androgens and the Aging Male and Female
Melinda Sheffield-Moore
Smoking Babies Don't Breathe
Ronald M. Harper and Estelle B. Gauda

Additional Symposia

Computational Physiology
Peter J. Hunter and Poul Nielsen
Exercise Prescriptions for Prolonged Space Flight
Per A. Tesch
Hepcidin Regulation of Iron Transport
Marianne Wessling-Ressnick, James Collins and Mitch Knutson
Macromolecular Complexes in Endothelial Force Transduction
John A. Frangos and Anthony G. Passerini
MicroRNA: Functional Significance in Mammalian Species
Mingyu Liang
Microcirculatory Society President's Symposium
Cynthia Meininger
Microcirculatory Society Young Investigator Session
TBA
Neuronal Plasticity in Health and Disease
Ida J. Llewellyn-Smith and Kaushik P. Patel
Novel Optical Methods for Studying the Living Circulatory System and Lung
Claudette St. Croix
Plasticity in Airway Receptor Function: Sensors, Central Integration and Reflex Responses
Frank Powell and Lu-Yuan Lee
Recent Advances in the Neurobiology of State-Dependent Control of Breathing
Leszek Kubin and Richard L. Horner
Reverse Engineering Towards the Goal of Vessel Regeneration
Kevin Healy and J. Kent Leach
The Role of GABA and Glutamate on Adult Neurogenesis
Stefano Vicini
Systems and Computational Biology: A Direction for Physiology in the 21st Century
Peipei Ping and William Chilian
Using Nanotechnology to Answer Physiological Questions
Virginia M. Miller and John C. Lieske

Additional Featured Topics

The Antiquity of Exercise, Exercise Physiology, and the Exercise Prescription for Health
Charles M. Tipton and Suzanne M. Schneider
Arteriogenesis and Vascular Remodeling
Petra Rocic
Bacterial-Intestinal Interaction
Andrew Gewirtz
Cardiovascular Section Young Investigator Awardee Featured Topic: Intercellular Calcium Signaling in the Vasculature
Brant Isakson
Comparative Immunology: Using Non-Model Systems to Understand the Evolution of Immunity
Kendra J. Greenlee
Cyclooxygenases and Cardiovascular Diseases
Paul M. Vanhoutte and Michel Feletou
Diving Physiology of Mammals and Birds
Andreas Fahlman
Donald J. Reis Memorial Trainee Symposium
Javier Stern and Lara DeRuisseau
Hypertension: Integrated Mechanisms and Sequelae
Michae W. Brands
Muscle Fatigue
Jean-Marc Renaud
Neural Control and Autonomic Regulation Section Trainee Featured Topic
Jeff Potts and Weirong Zhang
Neurohypophyseal Hormones: Regulatory Control in Health and Disease
Thomas Cunningham and Catherine Uyehara
Out of the Shadows: Uncovering the Role of ACE2 and Ang-(1-7) in Cardiovascular Regulation
Eric Lazartigues
Plasticity of Respiratory Motoneurons
Carlos B. Mantilla and Albert Berger
Satellite Cell Regulation with Aging and Exercise
Thomas Hawke
Smarter Targeting of Genes for Cardiovascular Genomics
David Paterson and Julion Paton
Trainee Highlights in Respiration Physiology
Susan Marguiles and Judith Neubauer



Timothy I. Musch, Chair

Animal Care and Experimentation

The APS Animal Care and Experimentation (ACE) Committee met in Bethesda November 28-29, 2006 to establish priorities for the coming year. Regulatory red tape and the possibility of inappropriate legislative restrictions on the use of animals in research emerged as the areas where the Committee believed it could have the greatest impact. One initiative that emerged from this meeting was an APS letter to NIH Deputy Director for Extramural Affairs, Norka Ruiz Bravo, concerning confusing and contradictory guidance that has been issued by the Office of Laboratory Animal Welfare (OLAW) concerning compliance with the PHS Policy on Humane Care and Use of Animals. The APS urged NIH to be more open to input from the research community in terms of the practical implications of its guidance documents. As a result of the exchange of letters that took place, the ACE Committee has invited Patricia Brown, the new Director of OLAW, to its fall 2007 meeting.

There have been a number of legislative initiatives in 2007 that would make it difficult or impossible for researchers to obtain non-purpose bred dogs or cats for medical research. Such restrictions are ostensibly offered out of concern that lost or stolen pets are ending up in research laboratories. The ACE Committee and the APS Office of Science Policy (formerly the Office of Public Affairs) have been working to provide information to Members of Congress on the existing pet protection provisions of the Animal Welfare Act, as well as on the reasons why non-purpose bred animals are needed, particularly for translational and pre-clinical research. APS has collected a number of specific examples where non-purpose bred dogs or cats offer the best representation of the human patient population. These include research in areas such as heart failure, cardiac arrhythmias, hypertension, digestive diseases, Type 2 diabetes, insulin resistance, metabolic syndrome, and breathing disorders. In June, the Senate Appropriations Committee agreed to include language in the report accompanying the FY 2008 funding legislation asking NIH to report on the need for non-purpose bred dogs and cats in biomedical research, the frequency with which such animals are used in NIH-funded research and to "propose recommendations outlining the parameters of such use, if determined to be necessary."

The ACE Committee sponsored a symposium at EB 2007 entitled, "Alternatives to Animal Experimentation Revisited." The goal of the symposium was to explore that notion that good science often requires an interplay rather than a substitution of animal and non-animal models. Linda Toth chaired the session and provided an overview of this perspective. The other speakers were Mark Knepper from the NIH National Heart Lung Blood Institute, and Joseph Bielitzki of Inventure Holdings.

In 2006 the APS launched a partnership with the States United for Biomedical Research (SUBR) to develop public outreach training for physiologists. SUBR (www.statesforbiomed.org/) is a network of not-for-profit organizations throughout the country that is working to promote better public understanding and to increase appreciation for the value of biomedical research, including the humane care and use of research animals. SUBR conducted advocacy training workshops at the Univ. of Iowa (November 2006) and the Univ. of Pennsylvania (March 2007). The goal of these programs was to motivate and equip scientists with the training and support necessary to speak publicly about their research and the important role of animals in research, education and testing. The final assessment was that one-day workshops do not seem to provide sufficient information and skills training to support self-sustaining advocacy efforts.

In the coming year, the ACE Committee will continue to monitor emerging legislative and regulatory issues that may have an impact on animal research.

Council approved having the Public Affairs and Animal Care and Experimentation Committees jointly write a letter to Norka Ruiz Bravo, Deputy Director for Extramural Research, NIH regarding NIH peer review and study section policies.

Council approved the necessary funding to improve the effectiveness of APS advocacy on animal research issues by increasing scientists' participation in the animal welfare conferences.

Council approved increasing APS' contribution to SUBR from to $10,000 in 2008, and approved an increase of APS' annual contribution to the Foundation for Biomedical Research to $2,500.

Peter A. Friedman, Chair

Awards Committee

The Awards Committee's efforts focus on reviewing applications for six awards: APS Postdoctoral Fellowship in Physiological Genomics; Research Career Enhancement Award; Teaching Career Enhancement Award; Arthur C. Guyton Award for Excellence in Integrative Physiology; Shih-Chun Wang Young Investigator Award; and Lazaro J. Mandel Young Investigator Award.

The APS Awards portfolio includes the six prizes listed above. Based on the number of applicants, the Postdoctoral Fellowship in Physiological Genomics is overwhelmingly the most attractive, as it garners more applicants than the other five awards combined.

The number of applications for the Postdoctoral Fellowship in Physiological Genomics continues to grow and increased by a further 20% in 2006 from 30. This represents growth on top of 19% the preceding year. Other awards attract consistent but low numbers of applicants with the absence of visible growth.

The Committee tracks the gender distribution of applicants and recipients. Although there is understandable variability

in the numbers, there are approximately equal numbers of female to male applicants. This has resulted in a greater number of awards being made to females.

Review Criteria. Standardized review and scoring criteria are employed for all of the awards. Such standardization makes identification of outstanding applicants better grounded on objective and weighted factors, and facilitates the job of the Committee.

2006-2007 Award Recipients

Postdoctoral Fellowship Award in Physiological Genomics

The APS received 30 applications for the January 2007 deadline for the APS Postdoctoral Fellowship Program in Physiological Genomics. Fellowships are awarded in the amount of $36,000 stipend and $3,500 trainee allowance for the first year; and $38,000 second-year stipend with $3,500 trainee allowance. Two awardees were selected and two alternate candidates were identified.

The Research Career Enhancement (RCEA) and Teaching Career Enhancement (TCEA) Awards

Sixteen RCEA and 2 TCEA applications were received for the April and September 2006 deadlines. This represents an appreciable improvement for RCEA applications but still fewer than 2004, when a total of 33 applications were received. Eight awards were made.

Young Investigator Awards

The APS offers three Young Investigator Awards: the Arthur C. Guyton Award for Excellence in Integrative Physiology, the Shih-Chun Wang Young Investigator Award, and the Lazaro J. Mandel Young Investigator Award.

There were four applications for Arthur C. Guyton Award for Excellence in Integrative Physiology, which carries a $15,000 honorarium. The Committee selected Lena H. Ting, Emory Univ. and Georgia Tech, as the recipient.

Three applications were received for the Lazaro J. Mandel Award. The Committee recommended Heddwen L. Brooks, Univ. of Arizona College of Medicine, as the recipient. The award is accompanied by a $7,500 honorarium.

Seven applications were received for the Shih-Chun Wang Award. Ann M. Schreihofer, Medical College of Georgia, was recommended by the Committee. This Young Investigator Award carries a $7,000 stipend.

Nansie Anne McHugh, Chair

Career Opportunities in Physiology

Career Symposia at Experimental Biology

The 2006 APS Careers Symposium was entitled, "Navigating the Interview: How to Make it Work for You." The session was designed to provide potential interviewees with information about what to expect in the interview, the etiquette of interviewing, and possible pitfalls to be aware of in the interview process. The program focused on how to prepare for an interview, the similarities and differences between industrial and academic hiring processes, and the skill sets desired by industrial and academic employers. With support from the APS staff, the Committee developed the symposium presentations into a set of online resources that can be used by trainees and more senior physiologists on demand. These include a Macromedia flash version of the presentation, a downloadable PowerPoint file, and the corresponding article from *The Physiologist*.

In 2007 the Career Opportunities in Physiology, Trainee Advisory, and Women in Physiology Committees again coordinated the topics of their sessions to provide a complimentary set of career advancement sessions for early career physiologists. Committee members Douglas Johns of GlaxoSmithKline and Catherine Uyehara of Tripler Army Medical Center chaired the session, "Guide for successful collaboration: From the handshake to the collaborative research agreement." The symposium was well attended, with about 100 attending, and the majority staying for the entire symposium. As expected, the workshop drew a diverse group of attendees.

For 2008, the Committee will focus its EB symposium on the career development of more senior physiologists. The session is being organized by Committee member Rolando Rumbaut of the Baylor College of Medicine and is entitled, "Mid-Career Transitions: Choices and Challenges." It will feature speakers with experience in government, academia, and industry. Again, the Committee is coordinating with the Trainee Advisory and the Women in Physiology Committees to create sessions that complement each other.

Career Presentations at APS Conferences

For the 2007 APS Conference, "Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology," the Career Opportunities Committee presented two two-hour workshops using the materials from the Professional Skills Courses. The first workshop, "Making a great impression at a scientific meeting: Presenting your poster, presenting yourself," focused on how to effectively present a poster and how to introduce oneself at a scientific meeting. The second workshop, "Writing your first papers: The "ins" and "outs" of authorship," focused on how authorship on manuscripts is determined and will engage participants in an authorship case study. Presenters also shared an overview of the career development resources offered by the APS, including the new Professional Skills Courses.

Undergraduate Summer Research Fellowship Program

The APS Undergraduate Summer Research Fellowship Program supports 24 full-time undergraduate students annually to work in the laboratories of established investigators. The goal of the program is to excite and encourage undergraduate students worldwide to pursue a career as a basic research scientist. The program has measurable objectives to evaluate the program's impacts. Specifically, students participating in the program will:

learn to develop a hypothesis-driven research project, collect and analyze data, and write up the experimental results;

present at least one poster or oral presentation on their experimental results at a scientific meeting;

attend a national multi-society scientific meeting and interact with fellow undergraduate awardees;

express a strengthened commitment to a research career as a result of the summer program; and

enroll in a graduate or combined graduate/professional program to pursue a career in basic biomedical research.

The Committee continues to balance the selection criteria for the program so that a diverse group of outstanding applicants receive awards—from both four-year colleges and research universities, from diverse parts of the country, from minority and majority applicants, and from applicants with varying degrees of previous lab experience.

Careers Poster

Each fall a new copy of the poster is distributed to all US and Canadian undergraduate colleges and life sciences departments. The poster prominently displays the URL for the APS Web site, which is how most undergraduates seek information.

Career Outreach PowerPoint Presentation Package

This project provides downloadable PowerPoint files for use at the elementary, middle, and high school levels, as well as lower and upper undergraduate levels. Since the initiation of this project, these PowerPoint presentations have become important tools not only for use by APS members individually, but in both undergraduate and K-12 outreach programs, especially Physiology Understanding (PhUn) Week.

APS Careers Web Site

The APS Careers Web Site was developed by the Careers Committee in 2002 and launched in March 2003. It provides extensive resources for two major purposes: *1*) to assist students and new and experienced physiologists in the development of their careers; and *2*) to help the general public gain a better understanding of the work that physiologists do. The site includes separate sections and resources for elementary, middle/high school, undergraduate, graduate/professional, postdoctoral fellows, new investigators, established investigators, and the general public. Within each section, the user finds resource categories customized to their needs.

Links for this site of more than 1,500 pages are checked on an annual basis to assure that the resources can be easily accessed. A new addition to the resources is hyperlinks associated with each skill listed in the APS-ACDP List of Professional Skills. In addition, the audio/visual presentation captured during the EB Careers Symposium, Trainee Advisory Symposium, and Women in Physiology Committee workshop are available through the Careers Web.

Science Fair Outreach

Currently the APS provides monetary awards to outstanding student projects at the International Science and Engineering Fair (ISEF). These awards recognize the "best of the best"…projects that have won awards at local, regional, and state science fair to make it to the international competition. This is a highly successful program that not only serves to recognize outstanding student research, but also to raise awareness among the many ISEF participants of both physiology and the APS.

There are many local and regional fairs that feed into the ISEF. The ISEF network of affiliated fairs (those that include at least five high schools) includes more than 450 fairs in the United States. Many APS members participate in these fairs as judges. The APS Education Office receives several requests annually for APS to provide awards for local and regional fairs. However, the cost of providing monetary awards for these fairs would be prohibitive. In 2006, the Education Office responded to two requests from APS members to help support their local science fairs.

Ideas under Development

The Committee has a number of other initiatives under development, such as the undergraduate research programs. The APS has had great success with its UGSRF program. The Committee believes that the APS can act as a catalyst to both strengthen and expand other undergraduate research programs, especially those managed by other FASEB societies.

The Committee would like students to be able to come to the APS Career Web, provide information on their interests on an interactive webpage, and get information that will help them identify potential physiology-related careers that match their interests. This could be a simple pull down menu or might develop into an interactive checklist and an algorithm.

Council approved the initiation of an APS Science Fair Outreach Program and approved the necessary funding for up to 100 local awards per year.

Council approved the initiation of an EB Undergraduate Orientation Session and approved funds for up to $1,000 for refreshments and audio-visual charges per year for three years.

Susan Barman, Chair

Committee on Committees

The Committee on Committees (CoC) is composed of representatives elected by the 12 APS Section Steering Committees and two Councilors who serve as Chair and In-coming Chair. Its primary duty is to nominate individuals to serve on APS standing committees and on outside bodies where the APS is represented. CoC members are dedicated to the concept that their role is twofold: to identify and promote members of their section who might serve on committees, but then to set aside sectional affiliations to nominate the best-qualified individuals to serve the Society. CoC members also promote diversity and the involvement of young APS members in the committee structure. A recurring problem is that two sections (Comparative & Evolutionary and Respiration) have not sent a representative to the CoC meetings in April in the past few years.

Application and Selection Process

An APS member interested in serving on a committee must self-nominate by completing a Candidate Information Form indicating prior activities relevant to the committee on which he/she wishes to serve, a statement of interest, information about prior APS service, citations to two recent publications, a statement of academic interests, and contact information of their endorser. An Endorsement Form is completed by someone who knows the candidate and comments on their ability to

Table 1. Sectional Affiliation of the Applicant Pool over Past Three Years and 2007 Nominees for Committees.

Section	2005 Pool	2006 Pool	2007 Pool	2007 Nominees (Approved by Council)	APS Regular Members
Cardiovascular	30 (42%)	12 (30.5%)	24 (21.5%)	16 (25%)	21%
Cell & Molecular	8 (11.5%)	2 (5%)	6 (5.5%)	2 (3%)	11%
Central Nervous System	4 (5.5%)	5 (13%)	4 (3.5%)	3 (4.5%)	8%
Comparative & Evolutionary	0	1 (2.5%)	5 (4.5%)	4 (6%)	4%
Endocrinology & Metabolism	4 (5.5%)	0	9 (8%)	3 (4.5%)	7%
EEP	7 (10%)	0	11 (10%)	5 (8%)	7%
GI & Liver	1 (1.5%)	3 (7.5%)	12 (11%)	5 (8%)	6%
NCAR	2 (3%)	2 (5%)	6 (5.5%)	5 (8%)	4%
Renal	5 (7%)	6 (15.5%)	8 (7%)	7 (11%)	7%
Respiration	1 (1.5%)	0	7 (6.5%)	1 (1.5%)	9%
Teaching	2 (3%)	0	11 (10%)	4 (6%)	3%
Water & Electrolyte	7 (10%)	7 (18%)	9 (8%)	9 (14%)	2%
No Affiliation		1 (2.5%)	0		10%
TOTAL	71	39	112	64	

carry out committee responsibilities. Both forms are available on the APS website under "committees," along with a listing of committee vacancies for the upcoming year and links to the descriptions of each of the Society's standing committees. In addition to CoC members, the committee Chair also reviews the slate of nominees for that committee. At their meeting at Experimental Biology (EB), the CoC develops their recommendation for each committee vacancy, along with alternates, and submits this for approval by Council at their summer meeting. Approved nominees begin their term of appointment the following January. CoC members are instructed to only consider those applications containing both the Candidate Information Form and Endorsement Form. In addition, they are asked to pay attention to the applicant's response to the query on the Candidate Form as to whether they have attended an EB meeting within the last three years. This is particularly important for those committees which have a face-to-face meeting at EB.

The CoC is pleased that Council approved their request that beginning in 2008 Council will review the nominations submitted by CoC to fill committee vacancies at the end of the Spring Council meeting rather than waiting until Summer Council. This change is seen to have several benefits. One, the Chair of the CoC will be present for the discussion with Council as opposed to the situation now where every third year the CoC Chair has rotated off Council before the Summer Council meeting. Two, this will reduce the time between when the applicant applies for a committee and when they are notified as to whether they will serve on a committee. Specifically, candidates can be notified in early rather than late summer.

Characteristics of the 2007 Applicant Pool:

The CoC was pleased with the large pool of completed applications (112) for committee vacancies this year. This reflects an increase of 187% over last year and an increase of 58% over 2005 (see Table 1). Eleven of the 12 APS Sections had an increase in the number of their primary members who applied for committee vacancies; and four of the Sections (Cardiovascular, Environmental & Exercise, GI & Liver, and Teaching) had more than 10 candidates this year. Table 2 shows other characteristics of the applicant pool. Note that the percentage of the applicants that are under the age of 45 or women exceeded their respective representation of the regular active membership of the APS (i.e., not including student or honorary members).

The number of completed applications for each APS standing committee varied from zero (Senior Physiology Committee) to 27 (International Physiology Committee). Eight of the 15 APS standing committees had five or more applicants. There is a concern that some APS members who reside outside of the US thought that they were only eligible for the International Physiology Committee, as 19 of the 27 applications from this group were for this Committee. International members are eligible for all committees. However, in response to the large number of international applicants, the CoC recommended (and Council subsequently approved) that the composition of the International Physiology Committee be increased by three.

Results from 2007 CoC Meeting and Council Deliberations

The tasks of the CoC were to fill vacancies on committees, fill new positions as requested by several committee Chairs, select an alternate for each committee, and identify Chairs for nine committees. In addition, the CoC was asked to identify up to eight potential members for a new APS Conference Committee. Using input from the CoC, the APS Executive Cabinet later deliberated on final selection of the membership of this new committee.

During the deliberations at their meeting in April, the CoC sought to instill diversity in the committee structure on the basis of sectional affiliation, geography, gender, and seniority from the qualified group of applicants. The Chair of the CoC brought a slate of nominees to the APS Council for further discussion at their meeting in July. Council approved 64 APS members to serve on committees beginning January 1, 2008. Table 1 and Table 2 show the sectional affiliation and other characteristics of these individuals, respectively. Note that the proportion of nominees who were under the age of 45, women, and employed by industry is similar to that of the applicant pool.

Table 3 shows the sectional affiliation of the APS Standing Committee members over the past two years and in 2008. Table 4 shows the composition of the committees in 2007 and 2008 in terms of representation by members that are under the age of 45, women, residing outside of the US, and

Table 2: Other Characteristics of 2007 Applicant Pool and Nominees Approved by Council.

	Applicant Pool	Nominees (Approved by Council)	APS Regular Members
Under age 45	50 (44.5%)	26 (40.5%)	26%
Women	33 (29%)	20 (31%)	20%
Reside outside of the US	27 (24%)	9 (14%)	25%
Employed by Industry	3 (2.5%)	2 (3%)	2.5%

Table 3: Sectional Affiliation of APS Standing Committee* Members.

Section	2006	2007	2008	APS Regular Membership
Cardiovascular	21 (18.5%)	28 (23.5%)	36 (27%)	21%
Cell & Molecular	16 (14%)	13 (11%)	9 (7%)	11%
Central Nervous System	6 (5%)	10 (8.5%)	9 (7%)	8%
Comparative & Evolutionary	3 (2.5%)	3 (2.5%)	5 (4%)	4%
Endocrinology & Metabolism	8 (7%)	6 (5%)	6 (4.5%)	7%
EEP	19 (17%)	12 (10%)	10 (7.5%)	7%
GI & Liver	5 (4.5%)	8 (7%)	11 (8%)	6%
NCAR	8 (7%)	9 (7.5%)	7 (5%)	4%
Renal	10 (9%)	9 (7.5%)	11 (8%)	7%
Respiration	4 (3.5%)	4 (3%)	5 (4%)	9%
Teaching	4 (3.5%)	4 (3%)	6 (4.5%)	3%
Water & Electrolyte	9 (8%)	13 (11%)	18 (13.5%)	2%
Total	113	119	133	

*** Data do not include members of the Joint Program, Liaison with Industry, Section Advisory, and Trainee Advisory Committees which are selected by Section Steering Committees.**

Table 4: Other Characteristics of APS Standing Committee Members*

	2007	2008	APS Regular Membership
Under age 45	35 (29%)	46 (34.5%)	26%
Women	44 (37%)	42 (31.5%)	20%
Reside outside of the US	7 (6%)	12 (9%)	25%
Employed by Industry	5 (4%)	7 (5.5%)	2.5%

*** Data do not include members of the Joint Program, Liaison with Industry, Section Advisory, and Trainee Advisory Committees which are selected by Section Steering Committees.**

employed in Industry. The Tables also compare the relative proportions of these groups on committees and within the APS regular membership.

In 2008 there will be 133 APS members serving on APS standing committees. In addition, the Joint Program, Liaison with Industry, Section Advisory, and Trainee Advisory Committees each have a representative from the 12 APS Sections, allowing for participation of 48 additional APS members in committee activities. Also, each of the sections has a Steering Committee. Thus, there are many opportunities for APS members to become actively engaged in helping the Society achieve the goals it has set forth in its strategic plan.

Planning for 2008

The CoC hopes that many APS members will consider serving the Society as a member of one of its standing committees. Applications can be submitted via the APS website, and are due by January 15, 2008. Those candidates who were not selected to serve on a committee this year are encouraged to re-submit their credentials for consideration for the same or another committee in the next cycle. An individual who has been selected as an alternate for a committee will be re-considered next year without re-nomination.

Council approved the addition of a regular member to the Membership Committee.

Council approved the addition of a trainee member to the Public Affairs Committee.

Council approved eliminating the Long Range Planning Committee.

Council approved the recommendation to move Council approval of the slate of committee nominees from the Summer Council meeting to the last day of the Spring Council meeting.

Council approved the slate of nominees for committee vacancies with Council recommended changes.

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Francis Belloni, Chair

Communications Committee

During the past year, the Communications Committee held three conference calls, and met twice, once in March and once at the EB meeting in April. The Committee plans to continue this pattern of quarterly conference call meetings, plus our annual meeting at EB.

The March meeting was a 1½ - day strategy meeting in Bethesda. This meeting was planned because of the installation of a new Chair and a new Communications Director, and the appointment of several new committee members. The meeting was intended to allow the committee to discuss the communications program from a more strategic perspective, rather than within the constraints of an ordinary "business" meeting. It was also hoped that the meeting would provide an element of "team building" among this mostly new collection of individuals.

The Committee helped develop a concept for a Podcasting program and worked out the broad strokes of the committee's new statement of purpose.

Communications Symposium at EB-07

The Communications Symposium at EB-07 was entitled, "Making the Case for Federally Funded Research: Communicating with Congress." The goal of the symposium was to provide strategies and tips on how to approach members of Congress with regard to federal funding and other legislative issues that might impact biomedical research. In order to make federal research funding a national priority again, it is critical that scientists around the country convince their elected representatives that biomedical research is a sound and worthwhile national investment. To do so, researchers need the tools to effectively communicate the importance of science to Members of Congress and other audiences. This also requires a special appreciation of how to discuss federal funding priorities on Capitol Hill. This symposium was designed to explore ways to communicate about science, work with Congressional staff, develop ongoing relationships with lawmakers and effectively convey both the local and national importance of federally funded biomedical research.

The speakers were Jon Retzlaff, Director of Legislative Affairs for FASEB; William T. Talman, Professor of Neurology and Neuroscience at the Univ. of Iowa, Chief of Neurology at the Iowa City Veterans Affairs Medical Center, and past chairman of the APS Public Affairs Committee; Sarah England, Associate Professor of Molecular Physiology and Biophysics at the Univ. of Iowa Carver College of Medicine, and a former Robert Wood Johnson Health Policy Fellow who worked in the office of Senator Hillary Rodham Clinton; and Stacie Propst, Director of Government Relations for Research!America. The Communications Committee symposium was a success, drawing a crowd of about 50 people.

Communications Office Activities in 2005-2006

There were a total of 66 scientific releases during the report period: 30 journal releases, 17 releases from EB, and 19 conference releases. This averages to slightly more than five releases per month, which was the goal set for the year. There were an additional 12 releases related to awards and APS activities, yielding a total of 78 releases for the year, or about 6½ per month.

Journal Release Program

The Communications Office produced 30 press releases based on scientific papers appearing in nine APS journals. This slightly exceeds last year's journal press release record, despite the three-month vacancy in the Communications Office staffing. This steady output of two to three papers per month is greatly facilitated by input from Journal Editors and Associate Editors, as well as in house APS Journal supervisors and copy editors.

Conference Releases

The Communications Office carried out general media relations for two conferences this past year: "Comparative Physiology 2006: Integrating Diversity," (Virginia Beach, October 2006) and "Physiological Genomics and Proteomics of Lung Diseases," (Ft. Lauderdale, November 2006) and Experimental Biology 2007 (Washington, April-May 2007). There were 12 releases related to the *Comparative Physiology* conference and seven to the *Lung Disease* conference.

The Communications Office developed 17 press releases for EB 2007. These received an unprecedented extent of media coverage. There were 261 TV hits from these releases, including coverage in each of the 10 top US markets. Releases were also picked up by major non-TV outlets, such as CBS Network Radio, BBC Radio (UK), NPR, Forbes.com, UPI, Reuters, MSNBC.com, *Scientific American*, the *Wall Street Journal*, the *Atlanta Journal Constitution,* and the *Austin American Statesman*.

Society Releases

APS makes a special effort to publicize its award programs, the individual award winners and their institutions. This past year included about a dozen releases concerning awards and honors, public affairs, and educational programs.

APS Press Room

The APS Press Room on the APS Web site is an accessible site that serves both the media and the general public's interest in physiology. This page (http://www.the-aps.org/press/pitn/index.htm) contains active links to the various media sites picking up our press releases.

Traffic to the APS Press Room is measured on an ongoing basis. Traffic on this site, which includes the general public *physiologyinfo.org* site, shows considerable month-to-month variability, but the overall trend seems to indicate increasing traffic.

Timeline of Physiology–Endocrinology and Metabolism

Accepting an earlier "challenge" to all APS Sections from the Committee, the Endocrinology and Metabolism Section completed the first sectional timeline under the direction of Charles Lang of Penn State. It has been posted on the APS website: http://www.the-aps.org/press/endotime/index.htm. This spring, it was also released in poster format. Other sections have been encouraged to develop Section Timelines for their specific disciplines.

APS-AAAS Mass Media Science and Engineering Fellowship: 2005 & 2006 Fellows

The Committee oversees selection of an APS-sponsored AAAS Mass Media fellow each year, which encourages an informed exchange between science and journalism. The 2006

Fellow, Erin Cline, received her PhD from Stanford University. She spent eight weeks at the *Los Angeles Times* working with science editor Ashley Dunn. Cline wrote an article for the February 2007 issue of *The Physiologist* describing her experience as a reporter.

The 2007 Fellow is Katherine Leitzell, who is a PhD student at the Univ. of Southern California. Her dissertation project is focused on the regulation of intracellular trafficking of GABA transporters in neurons. Leitzell is the ninth AAAS Fellow that APS will have sponsored. Five of our previous Fellows have remained directly engaged in science and research, whereas three have pursued a career in journalism or communications. This record is comparable to the overall AAAS Mass Media Fellowship program. The goal of the program is to increase the communications awareness and skills of its Fellows, not necessarily to produce journalists. The Committee feels that producing science journalists with an understanding and appreciation of physiology and producing working physiologists with a better appreciation and affinity for communicating science to the general public are both worthy and useful outcomes.

Council approved a new statement of purpose for the Communications Committee.

Council approved the necessary funding to support a face-to-face Committee meeting at the APS offices in fall 2007.

Council authorized the necessary funding to provide support for a Communications Symposium at the Experimental Biology Meetings on an annual basis.

Council approved the necessary funding to support one APS-sponsored AAAS Mass Media Fellow for five years.

Thomas A. Pressley, Chair

Education Committee

Web-Based Professional Skills Courses

With support from the NIGMS Minority Opportunities in Research (MORE) division, the APS is developing live, web, and CD-ROM short courses that focus on critical professional skills areas. Each course will include a strong focus on the interaction of racial/ethnic background and culture with the development of these skills. Students who complete the course(s) will:

improve their performance in specific professional skills areas;

increase their understanding of how these skills can impact career opportunities and advancement in biomedicine;

increase their understanding of how diversity issues, especially cultural influences and background experiences, can interact with the development of professional skills targeted by the course; and

increase their knowledge of resources and materials that can further assist in their development of these key professional skills.

Although direct oversight of the project resides with the Education Committee, the Careers in Physiology, Porter Physiology Development, Trainee Advisory, and Women in Physiology Committees are actively involved in the project, particularly through the project's Advisory Board.

Live Short Course Development: Basic Presentation Skills

In 2007, the Education Office developed materials for a live short course focused on basic presentation skills and poster development. Two live short courses were held in 2007 to field test the materials. Numerous APS members volunteered to be speakers and small group leaders and to provide feedback on the draft materials. Several of the small group leaders asked to serve at the second course and in future courses. The short courses also included participants and group leaders from other biomedical research societies (American Society for Microbiology and Society for Developmental Biology). Initial feedback from participants and group leaders at both live short courses indicate that they were highly successful.

Online Course Development

In 2007-2008 this project will develop the live short course materials into an interactive, online course, as well as prepare the live short course materials for easy download and course replication.

Continuation of Live Courses

Although the current NIGMS grant does not provide support to implement additional live short courses, the feedback from the participants and instructors was overwhelmingly positive, emphasizing the usefulness of the live interactions during the course, As a result, at its spring 2007 meeting, the APS Council voted to partially support two live short courses each year for the next three years. Students will pay a fee to attend the course. The fee will include the course, materials, housing, and meals. The 2008 courses will be in January and will include both the writing and reviewing for journals course and the basic presentation skills course.

Future Courses

The APS Education Office plans to submit a grant proposal to NIGMS to develop additional courses in 2009-2011.

EB Refresher Course

The APS Refresher Courses are designed to provide both an intensive overview of content in one of the areas of physiology and opportunities to review new teaching methods and materials for physiology instruction. They are targeted especially for non-specialists who have teaching responsibilities in the refresher course's content area in medical education. The 2007 Refresher Course focused on gastrointestinal physiology and was organized by Education Committee members P.K. Rangachari and L. Britt Wilson. The session was well attended with about 150 participants. Judging from the submitted comments, attendees matched the targeted audience: 64% teach medical physiology and only 35% listed gastrointestinal physiology as their primary field. Participant ratings of the

usefulness of the presentations were very positive.

In 2008, the EB Refresher Course will focus on respiratory physiology.

Meeting of the Medical Physiology Course Directors

As a joint project of the APS and ACDP, the APS has created an online resource site for medical physiology course directors (http://www.the-aps.org/education/course_director1/). Resources include information on faculty evaluation, course evaluation, curriculum issues, and instructional options. For the past three years at EB, interested course directors have met to receive updates on the resources already available at the website and to share materials to further populate the site.

Sharing Resources at IAMSE

The Education Committee and Education Office coordinated an exhibit at the International Association of Medical Science Educators meeting in Cleveland in July 2007. The exhibit shared information on the Medical Physiology Course Directors Website (an APS member benefit), APS membership information, and information on the APS Archive of Teaching Resources.

APS Archive of Teaching Resources

The APS Archive is a free digital library of teaching resources. The Archive has partnerships with a number of professional societies: Human Anatomy and Physiology Society (HAPS), Society for Developmental Biology (SDB), IUPS Education Group (IUPS), and National Association for Health and Science Education Programs (NAHSEP). These partners add their own materials to the Archive, making it a collaborative effort. It includes both materials published by APS and continues to grow in both size and diversity of resources.

The Archive is also a partner in the National Science Digital Library (NSDL) Pathways to the Biological Sciences online portal. This portal, BioSciEd Net or "BEN," is housed at the AAAS and the APS is a founding partner in the BEN collaborative. At BEN, users can freely search the peer-reviewed resources of more than 20 professional societies.

K-12 Materials Review

As part of a recent National Science Foundation (NSF) grant, the APS developed new review criteria that will allow K-12 materials developed by Frontiers in Physiology Summer Research Teachers to be reviewed and added to the Archive. These criteria include not only scientific accuracy and appropriate use of animals and humans in laboratory activities (the standard Archive review criteria), but also appropriate grade level, safety issues, and experimental focus.

BEN Scholars

The APS is collaborating with other BEN societies on the development of a new undergraduate faculty development program, called BEN Scholars. BEN scholars are undergraduate faculty members in life sciences, who develop specific expertise in the uses of digital libraries to enhance teaching and learning, how to contribute to a digital library, and how to conduct professional development activities for colleagues at their home campuses.

Archive Upgrade

The NSF grant also is providing partial support for a complete upgrade of the Archive programming. This will include a new front look for the Archive but, more importantly, important backend upgrades of the Archive database and interactive online review system. It will also allow Education Office staff to more easily add new partners to the Archive, including the addition of new variables and separate review systems for each partner. This work is being supported by the NSF grant, NSF funding From the Society for Developmental Biology, and the APS.

Medical Physiology Learning Objectives Project

The Medical Physiology Learning Objectives were published in 2000 with a planned periodic review by each APS section to update the objectives on a regular basis. The ACDP will continue to periodically revise sections to insure that they remain current.

Summit Meeting on Undergraduate Physiology

The APS seeks to increase the pool of applicants interested in pursuing graduate training in physiology. The Society has already established a summer research program in physiology, a highly successful EB undergraduate poster session, and an undergraduate research award (the David Bruce awards). In order to identify effective additional strategies to increase exposure of undergraduate students to physiology, the APS Council authorized funds to support a meeting of institutional representatives to explore and develop a set of models for undergraduate programs in physiology. In September 2006, the APS Education Committee convened the brainstorming summit in Bethesda, MD and invited physiologists from a wide variety of undergraduate-serving institutions. The specific objective of this summit was to gather information for development of a report that includes models for establishing undergraduate physiology majors and minors, partnerships between medical schools and undergraduate departments to promote excellence in physiology education, and other initiatives to promote physiology at the undergraduate level. The report will provide the basis for future APS activities at the undergraduate level.

David Bruce Awards

The Education Committee has completed its fourth round of David S. Bruce Awards for Excellence in Undergraduate Research. A total of 59 applications were received for the 2007 awards, double that of the previous year. The Committee selected 17 finalists based on the abstract and a one-page letter submitted by the undergraduate students. The 17 finalists each made oral presentations with their posters to the judging team comprised of Education Committee members and additional APS reviewers. From that group, six awardees were selected.

EB 2007 Undergraduate Poster Session

All undergraduate students who were first authors on abstracts submitted to APS sessions at EB 2007 were contacted and invited to present their posters at a special APS Undergraduate Poster Session held on Monday afternoon. Of the 109 undergraduates invited to present at this special session, 93 (85%) responded positively and put their posters up at the session. Approximately 200 APS members came to see the posters and talk with the students. Again this year, physiology departments were invited to pay a fee for table space to promote their graduate programs to the undergraduate students at the session. Fifteen institutions from 13 states and Canada participated, paying $250 each. These funds help offset the cost of poster boards and refreshments. This was 500%

increase in the number of participating institutions over the previous year.

HAPS Collaboration

Human Anatomy and Physiology Society (HAPS) is an association of physiology educators, primarily from community and four-year colleges. The APS collaborates with HAPS in a number of ways, including exhibiting and conducting workshops at HAPS meetings. HAPS also is a partner in the APS Archive of Teaching Resources, cataloguing past issues of their journal, *HAPS Educator*, for free access in the digital library. In addition, the APS sponsors a keynote research update speaker each year. In 2007, L. Gabriel Navar was the APS-sponsored speaker, presenting an update talk on renal physiology.

Navar's talk was part of a new initiative by HAPS to provide structured professional development for undergraduate faculty members. The HAPS Institute combines pre- and post-meeting assignments with keynote talks and workshops at the HAPS meeting to create a one-credit continuing education course through the University of Washington. Navar's talk was the keynote talk around which a course on advanced renal physiology was built.

Frontiers in Physiology

APS Summer Research Program for Teachers

The Summer Research Program continues to work with teachers from across the nation, engaging them in biomedical research, building connections at the local level between teachers, students, and researchers, improving the teaching methods and curricular materials used by the teachers, and deepening the understanding of both teachers and students of how biomedical research is done and how animals are used in research. In 2007, the program is supporting 16 teachers from 14 states in an intensive, year-long professional development program.

As always, APS members show strong support for the program. Members not only volunteer to host teachers in their laboratories, but also provide the needed lab materials and supplies for each teacher's research and, often, provide part of the stipend and travel costs for the teacher.

Local Site Team Development

The APS continued its support for outreach via Local Site Teams (LSTs) in 2006-07. LSTs combine the expertise and enthusiasm of physiologists and science teachers to provide effective training workshops for middle and high school science educators in their region.

EB Workshop for Teachers and Students

Education Committee member Joseph Benoit of the University of North Dakota coordinated the 2007 APS Workshop for High School Teachers and Students. More than 100 Washington, DC-area teachers and their students attended the workshop, along with APS members and 2006 Frontiers Research Teachers (RTs). The keynote talk, "Why Fat is Good: The Physiological Consequences of Obesity in Mammalian Hibernators," was given by APS member and Porter Committee chair, Gregory L. Florant of Colorado State University. His talk was followed by a Careers Panel that included Florant and APS members Patricia Molina of Louisiana State University Health Sciences Center, and Mesia Steed of the University of Louisville. Steed was also the 2006 APS Minority Outreach K-12 Fellow. The panel was moderated by science teacher Margaret Shain (Indiana). Thirty two APS members served as tour guides during lunch. They took teachers and students through the exhibits and posters and shared a box lunch while discussing physiology careers.

The afternoon student session was led by Robin Looft-Wilson of the College of William & Mary, with assistance from Barb Goodman of the Univ. of South Dakota, Jeffrey Osborn of the Univ. of Kentucky, Rayna Gonzales of the Univ. of California, Irvine, Jennifer Uno of the Univ. of North Carolina, Chapel Hill, and the two 2007 APS Minority Outreach K-12 Fellows, Jessica Clark of Washington Univ. in St. Louis, and Clintoria Richards of the Univ. of Alabama, Birmingham. Students used the "Elvis Experiments" from the APS "Physiology of Fitness" unit to learn about factors affecting flow of liquids through tubing (radius, length, viscosity). While students were conducting their experiments, their teachers (as well as the 2006 Research Teachers) participated in workshop activities on the anatomy and physiology of the heart, and an inquiry approach to identifying and classifying slide images of tissue samples, with presentations led by science teachers Cynthia Pfirrmann (New Jersey) and Stephen Biscotte (South Carolina). Benoit and Thomas Pressley coordinated the teacher workshop.

International Science And Engineering Fair (ISEF) Awards

The 58th Annual International Science and Engineering Fair (ISEF) was held in Albuquerque, NM May 13-19, 2007. Nearly 1,500 students from 47 countries, regions, and territories competed in the world's largest pre-college science competition awards. During the two evenings of award ceremonies, over $1 million in scholarships, cash prizes, and awards were distributed in categories ranging from behavioral science to engineering and medicine. Prizes included scholarships, cash awards, scientific field trips to foreign countries, and the grand prizes: three $50,000 scholarships from Intel. Grand Awards in each of the14 categories ranging from $500 to $5000 were presented by the Intel Foundation. Special Awards were presented by over 70 scientific, professional, and educational organizations and included scholarships, summer internships, book and equipment grants, and scientific field trips.

For the 12th year, the APS presented four awards in the form of cash prizes, certificates, and *Physiology* subscriptions for the best projects in the physiological sciences. This year's APS judging team was lead by Britt Wilson from the Univ. of South Carolina. He was accompanied by Nancy Kanagy, Laura Gonzalez Bosc, Brad Broughton, and Karen Sweazea, all from the Univ. of New Mexico. Matthew Campen from Lovelace Respiratory Research Institute also served as part of the APS judging team.

Physiology Understanding Week

The primary objective of Physiology Understanding Week is to increase student interest in and understanding of physiology in their lives and to introduce them to physiology as a possible career.

2006 PhUn Week Activities

The theme of PhUn Week 2006 was exercise and health. A website (http:///www.PhUnWeek.org) and dedicated email address (phunweek@the-aps.org) were established for providing basic program information and downloadable resources. Briefly, in 2006, eight APS members with a total of 16 other

team presenters, in collaboration with 15 teachers, coordinated nine outreach events in schools or classrooms. One 2005 APS Teacher Fellow, Jessica Tiatia, Daly City, CA, also held an event in her classroom. More than 1,000 students participated, from grades 1-12. An overview article was written for the April 2007 issue of *The Physiologist*.

Science + Society Meeting

In January 2007, APS' Physiology Understanding Week was highlighted at the "Science + Society: Closing the Gap Conference" in Boston, MA, as one of 14 organizations having an innovative project for communicating science to local communities. "PhUn Week: Promoting the Understanding of Physiology" was presented, describing the APS education programs and the member-based PhUn Week outreach initiative. The conference was convened as the first science-related event among scientists, educators, media professionals, policy makers, and the public to discuss effective and practical ways to improve science communication and enhance science literacy.

EB PhUn Week Training Session

The objectives of the first annual Physiology Understanding Week Training Session at EB 2007 were to increase awareness of PhUn Week among members, to recruit members in participating in PhUn Week 2007, to instruct PhUn Week leaders in the methods and materials for the program, and to brainstorm plans and themes for 2008. Participants in PhUn Week 2006 events briefly presented their collaborations and visits to classrooms.

Funding and Partnerships

A potential partnership for developing a PhUn Week 2007 event to coincide with an exhibit at the Boston Children's Museum was established at the "Science + Society Conference." Currently, the Science Program Manager of the museum is in communication with the APS Education Office and APS member Andrea Gwosdow of Gwosdow Associates Science Consultants in the greater Boston area. Preliminary plans are underway for enhancing the museum's "Kid Power" exhibit on exercise and health for the family during PhUn Week (November 5-9, 2007).

Interest for a prospective corporate sponsorship with AD Instruments was generated from the PhUn Week training session at EB 2007. The APS Education Office is in preliminary discussions and planning with the AD Instruments Marketing Manager to incorporate the use of the company's technology and equipment for a targeted PhUn Week event with an experienced APS member. Representatives from AD Instruments were invited to attend and demonstrate their equipment and software with science teachers during the 2007 Science Teaching Forum of the Frontiers in Physiology Professional Development Program (July 23-29).

IUPS Collaborations

21st Century Physiology Project

This project, headed by APS Council member, Dee Silverthorn, is revising a set of older IUPS and APS laboratory activities to incorporate more effective student-centered teaching methods and to update content in the activities. IUPS members are collaborating in the development process. In 2006-07, the current and past Education Committee chairs worked with APS staff to review and revise several activities. These are currently being field tested and should be ready for Archive submission soon.

Enhancing Teaching among US and International Members

The Education Committee, Education Office, and APS Teaching Section played an active role in the 2005 IUPS Teaching Satellite Meeting following the IUPS/EB meeting. Currently, APS members and the APS Education Office are working to submit a number of proposals for the 2009 IUPS meeting and the planned IUPS Teaching Satellite meeting in Kyoto.

Council approved the necessary funding to support awarding the David Bruce Awards at 20% of the applicant pool with a maximum of up to 20 awards per year.

Finance Committee

Peter D. Wagner, Chair

During the spring meeting of Council, the Finance Committee Chair reported that the Society's financial condition remains strong through sound management and investment practices and continued success of the journals program.

2006 Budget

The Society employs a consolidated operating budget to manage overall operations. The consolidated budget is comprised of the individual budgets for the various cost centers; these include Publications, Membership and Meetings, Education, Public Affairs, Communications, Marketing, and the Executive, Information Technology, and Business Offices. G&A costs are allocated to other Society offices based on each office's share of total salary expenses.

For 2006, the year ended with income of $18.10 million (including $1.27 million allocated from the Society's reserves) and direct expenses of $15.89 million, plus general and administrative (G&A) costs of $2.14 million, for total expenses of $18.03 million. The Society therefore ended the 2006 year with a net surplus of $69,438 (that is, $18.10 income - $18.03 expenses), which was $77,062 under the $146,500 budgeted surplus.

The Finance Committee reported that barring any significant changes, expenses are projected to grow slightly faster than revenue over the next three years. Using a linear extrapolation model, a surplus of $112,000 is projected for 2008, and deficits of $75,000 and $279,000 are projected for 2009 and 2010, respectively. It is expected that the Society will make adjustments to its revenue and expenses in the next three years in order to avoid the projected 2009 deficit, just as it has when similar predictions were made in recent years. In essence, these projections suggest that the budget process is properly in touch with recent history of the revenue and expense streams of the society. The Society's journals program is its primary source of income accounting for approximately 80% of all revenue. By a 1995 Council mandate, the journals program is structured to generate a return of 10% annually, which is used to support other society programs.

2007 Budget

The Council earlier approved a 2007 budget of $18,698,500 in expenses. With revenue budgeted at $18,701,000 (including the 4% investment allocation of $1,329,500 and projected net revenue from Publications of $1,452,500), the budget shows a

Journal	2008 Print + Online	2008 Print Only	2008 Online Only	2007 Print + Online	2007 Print Only	2007 Online Only
AJP Consolidated	$4,060	$3,880	$3,325	$3,880	$3,710	$3,180
AJP-Cell Physiology	765	720	620	730	690	590
AJP-Endocrinology & Metabolism	525	500	435	500	480	415
AJP -Gastrointestinal & Liver Physiology	575	545	470	550	520	450
AJP-Lung Cellular & Molecular Physiology	515	490	415	490	470	395
AJP-Heart & Circulatory Physiology	1,055	1,000	860	1,010	955	820
AJP-Regulatory, Integrative & Comparative Physiology	720	700	595	690	670	570
AJP-Renal Physiology	525	500	435	500	480	415
Journal of Applied Physiology	1,290	1,235	1,055	1,230	1,180	1,010
Physiological Reviews	480	465	400	460	445	380
Journal of Neurophysiology	1,470	1,395	1,200	1,405	1,335	1,145
Physiological Genomics	340	330	290	325	315	275
Physiology	290	270	230	275	255	220
Advances in Physiological Education	N/A	65	N/A	N/A	60	N/A
The Physiologist	N/A	115	N/A	N/A	110	N/A

surplus of $2,500. This 2007 budget is similar overall to that of 2006, effectively another break-even budget. The publications component again comprises around 80% of total income. The journals program is budgeted to generate a return of 10.9%.

Journal Subscription Pricing

The Journals Program, which generates about 80% of the Society's revenues, is asked each year to budget for a margin of 10%. In order to meet this mandate, the Publications Committee recommended, and the Finance Committee and Council both agreed, that 2008 subscription prices should be raised by 4.6%. A comparison of 2008 and 2007 domestic institutional prices is shown in the table below, reflecting the above percentage changes.

It is also noted that for 2008, the Finance committee supports the Publications committee recommendation to offer an author-pays publishing option at a cost of $2,000 plus author charges (manuscript handling fees, page charges, reprint fees, and color charges) per paper. This is both to explore the attractiveness of paying full publication cost should open access cause subscriptions to disappear, and to raise author awareness of the financial burden that open access may cause.

Long Term Investments

Our long term investments consist of both unrestricted reserves (about $34 million at the end of 2006) and restricted funds (about $8 million at the end of 2006). They are managed as a single investment pool referred to below as the managed accounts. However, it is only the unrestricted reserves from which 4% is drawn each year for the operating budget.

2006 Audit

As reported to Council in the spring, the Finance Committee received the annual audit from Grant Thornton, LLP. Grant Thornton audited the Society's financial statements in accordance with general accepted auditing standards. Grant Thornton rendered an unqualified opinion that the Society's statements presented fairly, in all material respects, the financial position of the Society at December 31, 2006 and 2005. In

APS Statement of Financial Position as of December 31, 2006

ASSETS

Cash and cash equivalents	$ 1,300
Investments	47,513,084
Accounts receivable	1,259,135
Accrued interest receivable	177,137
Advances to section editors	446,291
Prepaid expenses	138,591
Inventories	34,977
Furniture, fixtures, and equipment	241,765
Total assets	49,812,280

LIABILITIES AND NET ASSETS

Accounts payable	$ 1,307,305
Unearned revenue	
Subscriptions	6,573,594
Dues and other	613,135
Total liabilities	8,494,034
Net Assets:	
Unrestricted	40,701,637
Temporarily restricted	604,109
Permanently restricted	12,500
Total net assets	41,318,246
Total liabilities and net assets	$ **49,812,280**

APS Statement of Activities
for the year ended December 31, 2006

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Operating revenue:		-		
Subscriptions	$ 9,651,189	-	$ -	$ 9,651,189
Author charges	3,609,747	-	-	3,609,747
Membership dues	838,697	-	-	838,697
Grants	1,081,557		-	1,081,557
Conferences and meetings	591,392		-	591,392
Contributions	119,434	117,973	-	237,407
Advertising	205,783	-	-	205,783
Back issues	47,337	-	-	47,337
Other income	353,906	-	-	353,906
Net assets released from restrictions	217,765	(217,765)	-	-
Total Operating Revenue	16,716,807	(99,792)	-	16,617,015
Operating expenses:				
Publications	12,930,568	-	-	12,930,568
Society general	2,615,975	-	-	2,615,975
Society programs	1,315,264	-	-	1,315,264
Education	807,928	-	-	807,928
Marketing	299,399	-	-	299,399
Total Operating Expenses	17,969,134	-	-	17,969,134
Operating change in net assets	(1,252,327)	(99,792)	-	(1,352,119)
Net realized gain on investments	2,762,399	-	-	2,762,399
Net unrealized gain on investments	(817,365)	-	-	(817,365)
Interest and dividends	1,447,047	-	-	1,447,047
Investment management fees	(420,526)	-	-	(420,526
Total Investment Income	2,971,555		-	2,971,555
			-	-
Change in net assets	1,719,228	(99,792)	-	1,619,436
Net assets, beginning of year	38,982,409	703,901	12,500	39,698,810
Net assets, end of year	$ 40,701,637	$ 604,109	$ 12,500	$ 41,318,246

addition, due to the amount of Federal support received, an audit of the Society is required in accordance with Office of Management and Budget (OMB) Circular A-133 *Audits of States, Local Governments, and Non-Profit Organizations*. The A-133 audit includes certain tests in accordance with *Government Auditing Standards*. Grant Thornton's tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, and the audit report noted no material internal control weaknesses.

Summary

The APS continues to do extremely well financially. The annual operating budget continues to remain balanced. The journals program remains able to generate the 10% margin set by Council. The long term invested accounts are growing steadily in spite of using 4% of reserves annually to support Society programs. The Finance committee has overseen several important changes in the management strategies of the long term investments in the past 12 months, including changing poorly performing managers, hiring managers with specific expertise in fixed income instruments (that reflect about 1/3 of our invested funds), and recently hiring a manager specializing in international equities to potentially increase our reserves growth even more.

International Physiology Committee

Patricia E. Molina, Chair

The International Committee of the APS has worked throughout the past year to develop strategies to enhance participation of international APS members in the activities of the Society. Active member participation in the activities of APS is necessary for the Society's growth and development. In particular, active engagement of the international membership is critical in order to achieve the vision developed by the strategic plan in becoming a more diverse society.

Participation was encouraged this year by urging self nomination for membership in the International Committee among our international members. This was a successful campaign that resulted in numerous self-nominations and an active recruitment of candidates for membership in the Committee. In addition, the composition of our Committee was enhanced by the addition of a trainee representative, Christian Ochoa.

Through the Latin American Initiative, APS provided support for three symposia in Latin America, which were successful in providing a much needed enrichment of Latin American physiologists, including students, and fostering collaborative ties with several institutions south of the border. This program, which provides support for didactic or scientific symposia in Latin America, is an excellent opportunity for our Society to share talents and resources with colleagues in Latin America. APS members are encouraged to apply for this funding mechanism.

The International Committee has continued to urge Council and the APS leadership to develop mechanisms that will enhance international participation in APS activities, particularly through inclusion of international scientists in section-sponsored symposia. This initiative has gained considerable support and new and exciting opportunities are in discussion to ensure that symposia become more inclusive of our international members. A new initiative, that will be launched this fall, will be a newsletter targeted at international members to help stimulate their interest in becoming active members of our Society. That mechanism is likely to be the most successful in their integration into the Society's overall activities. Finally, let me take this opportunity to urge you to become an ambassador for our society by reaching out to make the experience of visiting international members and their integration during the EB meeting a memorable experience.

Joint Program Committee

Curt D. Sigmund, Chair

Experimental Biology 2007

The 2007 EB meeting was held in Washington, DC, April 28 through May 2 under the meeting-wide theme of "Today's Research: Tomorrow's Health." All scientific and poster sessions were well-attended and overall enthusiasm for the meeting remains high. The primary participating societies were: APS, American Society for Pharmacology and Experimental Therapeutics (ASPET), American Society for Nutrition (ASN), American Society for Biochemistry and Molecular Biology (ASBMB), American Society for Investigative Pathology (ASIP), and American Association of Anatomists (AAA). APS hosted five guest societies: The Microcirculatory Society (MCS), the Biomedical Engineering Society (BMES), the American Federation for Medical Research (AFMR), the Society for Experimental Biology and Medicine (SEBM), and the Association of Latin American Physiological Societies (ALACF).

The APS portion of EB 2007 featured two unopposed Techniques and Technology in Physiology Workshops on Saturday entitled, "Emerging Techniques for Ion Channel Studies," and "Chronic Instrumentation in Conscious Small Animals." The Chronic Instrumentation workshop chairs reported standing room only attendance. The chairs also prepared an online link that provides the presenters' slides and additional resources. APS also sponsored four "Cross-Sectional" Symposia entitled, "Linking Molecular Profile to Physiology," "Protein O-linked N-acetylglucosamine (O-GlcNAc): Nutrient Sensor and Modulator of Cardiovascular Function," "The SLC26 Transporter Family and Epithelial Function," and "Heart Failure and Exercise: Autonomic and Cardiovascular Responses."

The total meeting attendance was 13,388. This is comparable with EB 2006 in San Francisco, which included the same

six primary participating societies and had a total attendance of 13,211. This EB 2007 attendance figure represents 11,534 registered scientists (including 235 high school students and teachers and 632 undergraduates), 1,692 exhibitors and their guests, and 48 press registrants. APS programmed 308 sessions in total: 179 poster sessions, 64 symposia, 44 featured topics, 16 lectures, three workshops, and one refresher course and one poster discussion.

The Physiology InFocus program entitled, "Novel Technologies in Physiology and Medicine" was organized by Dale Benos and included four symposia scheduled throughout the meeting. These were entitled, "Novel Approaches to Structure-Function Relations in Membrane Transport Proteins," "Experimental Evolution as a Tool of Physiological Analysis," "Forensic Medicine," and "Novel Technologies and Approaches in Imaging."

The lectures included the 12 Section Distinguished Lectureships, the MCS Landis Award Lecture, the Physiology in Perspective—The Walter B. Cannon Memorial Award Lecture, presented by Frances M. Ashcroft; The Henry Pickering Bowditch Award Lecture, presented by James D. Stockand; and The Walter C. Randall Lecture in Biomedical Ethics, which featured two presenters: Sandra L. Titus and David Prentice.

Experimental Biology 2008

EB 2008 will be held Saturday April 5 through Wednesday April 9 in San Diego. The meeting will carry the slogan "Today's Research: Tomorrow's Health." The JPC met on June 20 in Bethesda to finalize and schedule by day and time the platform sessions. The Call for Abstracts and online abstract submission site will be available by September 2007. The abstract deadline will be November 7, 2007. EB 2008 will again provide for a late breaking abstract deadline, anticipated sometime in February 2008.

The JPC received 13 Cross-Sectional symposium proposals, of which four were approved: "Role of Endogenous Hydrogen Sulfide Signaling in Health and Disease," "Using Nanotechnology to Answer Physiological Questions," "Systems and Computational Biology: A Direction for Physiology in the 21st Century," and "Regulatory Mechanisms in Diseases of Epithelial Transport."

In addition, two *Techniques and Technology* workshops will be scheduled on the first day of EB 2008. The first is tentatively titled, "Mining the Metabolome" and will include presentations on Obestatin, Intermedin and Nesfatin. The second program is tentatively titled, "Exercising the Metabolome" and is being organized in collaboration with David Parkes at Amylin Pharmaceuticals. The Physiology InFocus program, organized by APS President Hannah Carey, is entitled, "One Physiology" and will feature a series of four symposia focusing on: "Physiology and Public Health," "Physiological Basis of Ecosystem Health," "Global Physiology 'Omics'—Mechanisms in Complex Systems," and "Physiology and Lifestyle."

As is customary, the meeting will also feature sessions organized by the APS Publications Department, Careers in Physiology Committee, Public Affairs Committee, Women in Physiology Committee, Education Committee, Liaison with Industry Committee, and Trainee Advisory Committee.

APS Conferences

The 2007 APS Conference entitled, "Sex Steroids and Gender in Cardiovascular-Renal Physiology and Pathophysiology," organized by Jane F. Reckelhoff, was held August 9-12 in Austin, TX. The 2008 APS Intersociety Meeting entitled, "The Integrative Biology of Exercise V" was held September 24-27 in Hilton Head, SC.

This will be my last report to council as Chair of the JPC. Ronald Lynch from the Department of Physiology, University of Arizona has agreed to assume the chairmanship of this important committee starting January 1, 2008. It has been an honor to work with the APS staff and leadership for the past six years. I have truly enjoyed this experience and have learned a great deal about the inner workings of the society, perhaps more than I ever wanted to know. I have learned that Iowa is where I live, but the APS is my home.

I wish to thank all current and past members of the JPC, for without them, we would not have a program at the EB meeting. Watching the JPC in action during its June meeting no doubt would make anyone dizzy. But from the chaos has come many outstanding EB programs. Every member of the JPC has had a hand it making the program a reality. I thank Allen Cowley who really was the one to introduce me to the APS, included me in the Blue Ribbon Panel on programming years ago and then thrust me into the JPC as the first PG representative.

There are two additional people I want to thank. First, Marty Frank for his wisdom and humor, and particularly for his friendship especially during 2006 (he knows why). Secondly, I want to sincerely thank Linda Allen for her efforts, efficiency, advice, and humor (and for being the voice in the elevator at the APS headquarters). I can say with absolute certainty that without her, this assignment would have been unbearable. Instead, she made it fun (even when programming IUPS).

Chahrzad Montrose-Rafizadeh, Chair

Liaison with Industry Committee

The Liaison with Industry Committee (LWIC) met at the EB 2007 meeting in Washington, DC. The Committee is composed of representatives from most of the active Society Sections, nominated to serve by their sections. The current Committee membership is composed of Alison Strack, Neural Control and Autonomic Regulation; Ken Olson, Comparative and Evolutionary Physiology; Jeffrey Zachwieja, Environmental and Exercise Physiology; Craig Plato, Renal; Christine Schnackenburg, Water and Electrolyte Homeostasis; Michael Finley, Central Nervous System; Joshua Anthony, Endocrinology and Metabolism; Shaila Basavappa, Gastrointestinal and Liver Physiology; Cheryl Watson, Teaching of Physiology; Adrienne Zion, Cardiovascular; Chahrzad Montrose, Cell and Molecular Physiology; and Doug Eaton, APS Councilor.

Symposium 2007

At EB 2007, the Committee sponsored a symposium titled,

"Stem Cells in Physiology and Drug Discovery," chaired by Chahrzad Montrose-Rafizadeh and Brigid Hogan. Speakers were Timothy Allsopp, John McNeish, Aaron Chuang, and Betty Yan; topics covered included: stem cells and new medicines, pharmacology applications for stem cells in drug discovery, manipulating stem cells physiology for neurodegenerative disease therapy, as well as protein C pathway in human endothelial progenitor cells isolated from cord blood. This is the seventh symposium sponsored by the Committee and it was very well attended.

Translational Symposium 2007

At EB 2007, the Committee also put forward a translational symposium titled, "Drug Discovery Efforts for Pain Indications: Ion Channels and GPCRs," chaired by Michael Finley and William Martin. Speakers were Chris Felder, Brigid Priest, Christopher Flores, and Ed McCleskey; topics covered included: therapeutic opportunities in endocannabinoid transport inhibition, peripheral nerve sodium channel blockers as analgesics, TRPM8 as a novel pain target, as well as ASIC and ischemic pain. This was the first translational symposium organized by the Committee and was very well received.

Education on Science and Career in Industry has been put forward by the Committee by creating two slide decks for the LWIC website. These slide decks will serve as teaching and mentoring tools for young investigators interested in learning about science in industry and exploring career opportunities in industry.

The 7th Annual Physiologists in Industry Mixer was held on April 29th. The attendance was good due to careful scheduling, as well as proactive advertisements by the APS office via "All APS News" and via the Industry ListServ. Promotional documents were distributed at the mixer, which was beneficial for recruiting potential new members. In addition, the slide deck created by the Committee was projected in the room which allowed discussions and mentoring of new scientists on Drug Discovery and Science in industry. The LWIC Committee would like to continue to distribute these handouts at the next year's mixer and include information on APS Websites, APS benefits, education and career programs, APS committees' nomination forms, as well as educational materials used by industry scientists.

Novel Disease Model Award

The award typically recognizes one graduate student and one postdoctoral fellow submitting the best abstract describing a novel disease model. Two students and three postdocs applied (a total of five abstracts were received, a clear decrease from 18 from last year). The top two abstracts included both a student and a postdoc and awards in both categories were given.

Symposium 2008

The LWIC wishes to continue its annual tradition of sponsoring high quality workshops/symposia relevant to industry and academic scientists and has proposed a symposium on "Recent Advances in the Renin-Angiotensin-Aldosterone System for the Investigation and Treatment of Hypertension" for EB 2008.

Council approved the necessary funding for an LWIC mixer at the EB meetings on an annual basis.

Council approved the proposal to contact selected pharmaceutical companies for contributions to support the Novel Disease Model Award.

Lisa M. Harrison-Bernard, Chair

Membership Committee

New members are now required to select a primary section affiliation. The membership committee hopes that affiliation and active participation with a section will aid in retention of members.

Membership Dues

Regular and Affiliate member dues will increase by $10 in 2008. Dues will be $130 and $85, respectively for Regular and Affiliate dues. Student membership is unaffected: $10 for the first year; $20 for years two to five. When a student transitions to Regular, the first year of Regular membership dues is free and the member enjoys a 50% discount for up to five years postdoctorate.

Membership Benefits

Listservs

APS must institute a mechanism that reduces the incidence of members receiving multiple listserv messages (i.e.: postdoctoral job announcement sent to multiple lists should only appear once in a member's mailbox). The content of listserv messages should not be so cumbersome that members delete them all. The Committee recommends that all new members be automatically subscribed to the listserv of their primary section with a box to deselect.

Charitable Donations

The Committee recommends that members who make charitable donations via their dues renewal be automatically thanked by the Society regardless of the amount of contribution.

Testimonials

Each member of the Membership Committee is charged with providing a testimonial—either their own or a colleague's—that states how being a member of APS is important.

Student Membership

APS only accepts student applications when the student is working toward a doctorate in physiology or related field. The bylaws state that the student must be "actively engaged in physiological work" so we should include undergraduate, masters, and doctoral students.

Recognition of All APS Committee Members at EB Meetings

A recommendation was made for all Committee Chairs to be provided with a ribbon identifying them with the committee

that they chair. This will facilitate interaction of all APS officers with the general membership, especially during the opening reception.

Council approved changing the student membership to include undergraduate students.

Perkins Committee

Norma C. Adragna, Chair

For the two cycles corresponding to 2006-2007, the Committee received four applications, three of which were funded. The number of applications received was half the corresponding to the previous period, in spite of all the work done by the Committee to improve and clarify the forms for both the applicants and the Committee's selection process. We hope that for the coming cycles, active recruiting of candidates by APS members will increase the number of applications. We have discussed that "word of mouth" is a quite effective strategy for any type of activity involving recruitment of people.

Council approved a request to send program announcements to the Job Advertisement Center and email at least one announcement to APS members prior to the fall and spring application deadline.

Council approved a request to contact foreign societies of physiologists to advertise the award.

Council approved the addition of a regular member to the Perkins Committee beginning in 2009.

Council approved changing the award title to John Perkins, Jr. Memorial Award for International Physiologists.

Council approved changing the length of stay for visiting scientist from a minimum of six months to a minimum of three months and for the visiting family to a minimum of two months.

Porter Physiology Development Committee

Gregory L. Florant, Chair

Proposed Revisions to the Committee Charge

One of the first tasks of the strategic planning group was to propose revisions to the Porter Physiology Development Committee charge. It has been more than 10 years since the committee charge has been updated, and the current charge does not reflect the committee's activities. In addition, the committee proposes adding a trainee member to the committee, particularly one of the second year Porter fellows; a second year fellow would have no conflict of interest in the selection process for the fellowship because s/he is in the final year of the fellowship. The committee proposes the following updated charge:

Porter Physiology Development Committee (Established 1952)

This committee is composed of at least seven members of the Society, including a trainee member who is a second-year Porter Fellow at the time of the appointment. The committee has co-chairpersons. The Society's Director of Education Programs and Director of Finance are ex officio members of the Committee, without vote.

The purpose of the Porter Physiology Development Program is to stimulate and support the development of minority students engaged in graduate study in physiology. In addition, the program provides assistance in the improvement of American departments of physiology in minority-serving institutions.

Duties of the Porter Physiology Development Program Committee are to:

oversee the Porter Physiology Development program, including the definition of its objectives and selection criteria, assessment of its effectiveness, selection of awardees, oversight of the Porter Physiology Development fund, and provision of annual written reports to Council and the William Townsend Porter Foundation;

rank applications of minority students to the APS Minority Travel Fellows Program, which are collated by the Director of Education Programs;

coordinate career development activities for minority physiology students, especially Porter Fellows and Minority Travel Fellows;

monitor the status of minorities in APS and promote the participation of minority physiologists in Society activities and governance;

counsel physiology departments in American minority-serving institutions on curriculum and other improvements;

develop new programs to promote diversity in physiology; and

assist the Society in soliciting outside funds for support of the APS minority programs.

2006-2007 Porter Physiology Fellowship Program

In 2006-2007, the program provided funding for nine fellows. This is a larger number than typical, thanks to additional one-time funds provided by the Porter Foundation in 2005. Fellows provided their annual progress reports to the APS in August 2007.

2007-2008 Porter Fellowships

New and Renewal Applications: This was the second year that only one deadline was in effect for the Porter Fellowships. The number of new applications received for Porter Fellowships continues to increase. A total of 13 new and one renewal applications were submitted to the new online award application system for the January 15 deadline. The Committee again noted the increase in quality of applications being received. The stipend paid to the Porter Fellows for 2007-2008 will be

$20,772, consistent with the NIH scale. This meant the Porter Fund allowed for a total of eight awards for 2007-2008. Funds were available for four new awardees and one renewal.

The Porter Physiology Development Committee Fund

In March 2007, The Porter Physiology Development Committee Fund had a budget of $242,963. During 2006, the fund received the following contributions: $75,000 from the William Townsend Porter Foundation, $40,000 from the APS, $20,000 from Merck Foundation, $305 in private contributions, $9,708 from interest revenue and $6 from miscellaneous income. In April, one of the fellows informed the Education Office that he had accepted another fellowship and would be returning part of the funds from his award ($13,848). Given the remaining commitments for 2006-2007 Porter Fellows of $24,235 (as of June 4, 2007), the fund has a balance of $245,179 for new fellowships and activities, including the APS annual endowment contribution of $40,000. The Committee expresses its sincere appreciation for the continued support of both the William Townsend Porter Foundation and the APS Council that makes these fellowships possible.

Proposed Program Revisions

As a result of the strategic planning meeting held in February, the committee plans to implement a number of enhancements to the Porter fellowship program. The goal of these enhancements is to increase the overall impact of the fellowship on the student's career and their long-term interactions with the APS. Currently, fellows' primary interactions with the APS are: submitting their annual report, receiving their stipend payments, becoming a member if they wish to apply for a second year of funding, and receiving the biweekly minority physiologists listserv messages. There is no requirement for fellows to attend EB or present their research at an APS meeting. The fellow's annual reports serve as the only formative evaluation mechanism for the program. The fellows are asked to participate in a longitudinal survey. That is done every three to four years.

The proposed program enhancements include the following:

add an entry and exit survey to the Porter fellowship together better formative feedback and information on short term impacts;

send an individual press release for each fellow to their hometown paper and institutional press office to provide additional visibility of the program and the fellows;

require participation in professional development activities;

submission of an abstract to EB;

attendance at EB (This would require a minority travel fellowship);

attendance at an APS professional skills live workshop OR completion of the online course;

participation in at least one APS outreach opportunity during their fellowship period (two-year), such as mentoring a junior travel fellow at EB, serving as a lunch host at the high school student workshop at EB, or participating in Physiology Understanding Week through their home institution.

The Minority Travel Fellows Program

2007 Travel Awards: Eight travel fellows received funding to attend the two fall APS conferences in 2006. In January 2007, the Committee selected 33 travel fellows to attend EB 2007 in Washington, D.C. Five additional travel fellows will receive funding to attend the summer 2007 APS conference on "Sex and Gender in Cardiovascular-Renal Physiology and Pathophysiology." Again this year, the Committee was pleased that former Porter Fellows and past Travel Fellows volunteered to be mentors for the younger Travel Fellows. Committee members noted the increase in minority physiologists as a direct result of the APS programs.

Porter Reception: For the past several years, the Committee has held a reception for Travel Fellows, their meeting mentors, and past and current Porter and Travel Fellows. This was initiated with the goal of building stronger connections between minority students and the larger community of APS scientists, especially other minority scientists. The Porter reception again this year was extremely successful with an increase in attendance; more than 60 physiologists, overall, attended the event. A number of Council members, including the APS President, Dale Benos, past President, Doug Eaton, and incoming President, Hannah Carey, were on hand to meet the students and welcome them to the meeting. Importantly, the reception continued for more than two hours as participants interacted and networked with one another. In addition a number of former Porter Fellows attended. Given the success of the reception, the Porter Committee plans to continue this event.

Annual Biomedical Research Conference for Minority Students (ABRCMS) Awards: This meeting attracts approximately 2,600 individuals, including 1,650 minority undergraduate (64%) and 280 graduate students (11%), 30 postdoctoral scientists, 750 faculty and administrators across the country and provides an opportunity to recruit students into the physiological sciences and the APS. The APS, along with more than 280 graduate institutions and professional associations, exhibited at the 2006 meeting in Anaheim, CA, promoting graduate study in physiology and the APS programs for minority students. The APS provided $2,000 for eight $250 cash awards for the most outstanding undergraduate presentations in physiology research. Twenty-five judges, including APS members, Kothapa N. Chetty, Grambling State Univ., Cary W. Cooper, Univ. of Texas Medical Branch, Scott Diamond, Univ. of Kentucky College of Medicine, Latanya Hammonds-Odie, Spelman College, Irving G. Joshua, Univ. of Louisville, Evangeline Motley-Johnson, Meharry Medical College, Nancy Pelaez, California State Univ., Fullerton, and Roy L. Sutliff, Emory Univ./Atlanta VA Medical Center, selected the winners:

The K-12 Minority Outreach Fellows Program

The APS K-12 Minority Outreach Fellowship seeks to foster communication between minority graduate and postdoctoral students and middle/high school minority life sciences students. The program capitalizes on the relationships that the NIDDK Minority Travel Fellows Program and Porter Physiology Fellowship program builds with minority graduate and postdoctoral students and the relationships that the Frontiers in Physiology program builds with minority middle/high school teachers. Program activities include year-long outreach fellowships for senior graduate students and postdoctoral fellows to visit K-12 classrooms, help conduct teacher professional development workshops, and attend scientific meetings. The first K-12 Outreach Fellow was Mesia M. Steed, Department of Physiology and Biophysics, Univ. of Louisville.

For 2007-2008, two K-12 Outreach Fellows were selected: Jessica A. Clark, Department of Surgery, Washington Univ.

School of Medicine, and Clintoria Richards-Williams, Department of Physiology & Biophysics, Univ. of Alabama at Birmingham. Both Clark and Richards-Williams are past Porter fellows.

Council approved the proposed changes in the Committee charge.

Council approved adding a current or recent past-Porter fellow to the Committee.

Council approved the proposed enhancements to the Porter Fellowship Program.

Michael A. Portman, Chair

Public Affairs Committee

Public Affairs Committee Members Visit Capitol Hill During EB

Since EB was held in Washington, DC this year, there was the unique opportunity for Public Affairs Committee (PAC) members to visit their Members of Congress and talk about a number of issues, including research funding and the use of animals in research. APS staff distributed talking points and other materials to facilitate scheduling of meetings. As a result, 15 APS members went on at least 20 meetings on Capitol Hill. Members of Congress from Washington, Alabama, Nebraska, North Carolina, Iowa, Georgia, Pennsylvania, Illinois and Wisconsin were visited. Several Public Affairs committee members were among those who made visits.

Center for Scientific Review Open Houses

As the NIH examines the peer review process, the Center for Scientific Review is holding a series of open house workshops that focus on integrated review group (IRG) alignment. Each open house examines several IRGs roughly grouped by topic. The strategy of the PAC has been to gather information from APS sections in the form of a survey. The first open house was held in March, and information was collected from the CNS and NCAR sections.

The survey is in the process of being reworked by the PAC in response to feedback received. The next open house reviews the following IRGs: digestive sciences, musculoskeletal, oral and skin sciences, renal and urological sciences and endocrinology, metabolism, nutrition and reproductive sciences. To gather information, the revised survey will be sent to the following sections and groups: gastrointestinal and liver, environmental and exercise, renal, water and electrolyte homeostasis, endocrinology and metabolism, epithelial transport and muscle biology.

Coalition activities 2006-2007

The APS continues to be involved in a coalition of groups that comes together to sponsor polling on attitudes about evolution and science education. The data resulting from those polls has been compiled in a Policy Forum piece that has been submitted for publication in *Science*. A decision on publication is currently pending, but editors at *Science* have previously indicated interest in publishing the results of the polling. APS will appear as a member of the coalition, which collectively authors the Policy Forum piece.

Experimental Biology 2007

In addition to the Capitol Hill Day activities outlined above, the PAC sponsored a symposium entitled, "Human Subject Research Ethics: Issues for going from bench to bedside." The symposium was chaired by Virginia Miller and myself, and featured speakers from both industry and academia.

A joint public affairs session was held featuring NIH director Elias Zerhouni and former Congressman John Porter. Discussion focused on the realities of the budget situation at the NIH, as well as how scientists can become better advocates for science.

Experimental Biology 2008

Jane Reckelhoff has agreed to chair next year's public affairs symposium entitled, " What every scientist needs to know about ethical issues in biomedical research."

Council approved the necessary funding to support a face-to-face Committee meeting at the APS offices on an annual basis.

Kim E. Barrett, Chair

Publications Committee

Scientific Impact/Attractiveness to Authors

Impact factor. The Publications Committee's belief that the impact of the journals could be enhanced by even a modest increase in selectivity received wide support from the Journal Editors, all of whom are trying to increase their rejection rates.

Manuscripts received. The submission rates were flat in 2006, which may be a reflection of the difficult conversion of our online peer review system from one version to an upgraded version. The submission rates are up by 7% in the first five months of 2007.

Time to first decision. Time to first decision averaged 28 days in 2006 across all the monthly original research journals.

Time to publication. APS staff redoubled its efforts to decrease the time to publication, which in 2006 was an average of four months for all the monthly research journals. A decision was made to start mailing the issues in 2007 during the issue month, instead of the month before. This will prevent the articles published in a given month from looking a month older than they really are, and should allay some perceptions of slow publication. Real savings in time to publication should be realized by the end of 2007.

Supplemental Material. Two hundred twelve data supplements total were published in 2006; 36 of them were video clips. Approximately 37% of the non-video data supplements were published in *Physiological Genomics*. All supplemental data is free; in other words, a reader can view supplemental data without a subscription to the journal.

e-Letters to the editor in all journals (JAP). A successful e-letter program around the Point Counterpoint articles published in *JAP* has been created.

Member benefits. APS members started receiving free online access to all journals, including the Legacy Content, in 2002. Members also receive a print subscription to *Physiology, The Physiologist,* and *Advances in Physiology Education*. Members can opt out of receiving *Advances* in print. Color charges are waived for all members who are first or last authors of a paper containing color figures. Members also receive a 35% discount on all APS books.

Interdisciplinary Approach

Physiology in Medicine. An agreement was made in 2001 to publish the "Physiology in Medicine" (PIM) series of articles in *Annals of Internal Medicine*. Four articles were published in the PIM series in 2006.

Classic Articles. As an outgrowth of the Legacy Content project, the Classic Articles Collection was rolled out on the APS web site in August 2004. Each commissioned essay is linked to its classic article, which is made free online in the Legacy Content. In 2006, more essays were added to the collection, and we will continue to accept appropriate suggestions. In 2006, a series of articles that describe ways in which the Classic Articles can be used for teaching was published in *Advances*.

Theses posted to web considered prepublication. The Committee decided that posting doctoral theses online did not constitute prepublication, only because theses had always been available on microfilm to those who needed to find them.

Using junior colleagues as substitute reviewers. The following text was added to the Reviewer invitation letters: "If you ask a junior colleague to assist with the review, please identify them and ensure that they also agree to maintain confidentiality." This will ensure that reviewers who already share the work with or reassign reviews to junior colleagues do so within our guidelines. This is something the committee supports as a training mechanism.

Online meeting presentations as pre-publication. So many societies with large meetings are placing meeting presentations online or on CD that the Committee decided to reverse the previous policy that considered meeting presentations disseminated beyond meeting attendees as prior publication. The new policy will allow authors to have their presentations disseminated without fear of precluding eligibility for submission of their articles to APS journals.

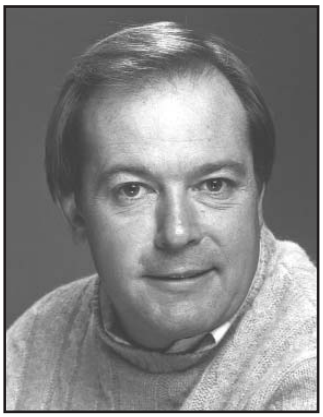
2008 Subscription Prices. Based on the cost plus 10% model we have used since setting 2002 prices, the Publications Committee recommended that subscription prices be increased 4.6% in 2008 for all journals.

OA fees for all journals. A plan to transition, if necessary, to an author-pays revenue system was approved by the Committee and Council. The first step in the plan—giving authors of all the research journals a choice to pay for immediate open access for a $2,000 fee—was also approved by the Committee and Council.

PG trial subscriptions. A marketing experiment was done in 2006, giving institutional subscribers a free online subscription to *PG* if they subscribe to *AJP-Consolidated* online. It has been decided to extend this experiment through 2007, during which time our Circulations Department will do some targeted emails/calls to turn those complimentary subscriptions into sales.

Increase in color charge fee. The amount of color published is still increasing every year, although the cost per figure should drop based on the new printing contract. However, the Committee had reviewed color charges of competing journals last year, and decided that APS, at $300 per figure, was charging authors a comparatively low amount for color. Therefore, the color charge to nonmembers was increased to $350 as of July 1, 2006, and will increase to $400 as of July 1, 2007.

Council approved the possibility of APS publishing textbooks.



Kenneth M. Baldwin, Chair

Section Advisory Committee

CSR Activities

It is encouraged that sections put forward members to attend and provide input to ensure that IRBs are aligned properly with the membership, since certain sections are not benefiting certain groups of scientists. It was suggested the APS Office of Science Policy develop a survey to determine how good a job the study sections are doing at representing the various areas of research. The SAC was encouraged to forward names of individuals interested in attending IRG "town meetings." Rebecca Osthus, APS Science Policy Analyst, will follow up with the sections in an effort to increase responses to the survey. Activity within the sections on this topic is currently on going.

Online Awards Module

The SAC applauded the new online awards submission and review model, although there was some confusion about the review process. One concern raised was that there were fewer applications for Junior Faculty Awards. In contrast, submission for postdoctoral and graduate students awards were on the rise across most of the sections.

Duplicate Awards

Since the APS Council agreed that no individual may receive more than one award at the EB meeting, the SAC was reminded that every effort must be made to reduce the possibility across all of the possible awards. It was pointed out that a feature of the online awards module indicates when an applicant has applied for or been selected for an award. Each section should indicate the winner within the module so that everyone has the benefit of knowing who the winners are as they happen. Cross talk between the sections is necessary to insure that duplicates do not arise.

Awards Application

The SAC unanimously recommend that APS needs to enhance the visibility of the online awards application mode. APS should implement a mechanism whereby abstract submitters can access the APS awards submission module in a seamless manner (i.e., providing a link in the abstract submission email confirmation).

Senior Physiologists Committee

Beverly P. Bishop, Chair

Seven senior physiologists (Charles Tipton, Harvey Sparks, Julio Cruz, Ronald Freeman, Virendra Mahesh, Vernon Bishop, and Beverly Bishop) comprise the Senior Physiologists Committee. One of the primary duties of each Committee member is to "develop and maintain liaison with emeritus members and members about to retire." This liaison is accomplished by submitting, on behalf of the Society, a personal 70th, 80th, 90th, or 100th birthday greeting. Thus, each committee member makes about three dozen mailings in the course of the year. Each greeting includes an invitation for the senior recipient to inform APS about his current activities, interests and whereabouts, and requests "words of wisdom" for younger colleagues. The historical and philosophical commentaries evoked by this invitation provide the material subsequently published in "Senior Physiologists' News" in each *The Physiologist*. There were 20 response letters printed. Responses from recipients of these birthday greetings are extremely positive and enthusiastic. Whether retired or still working in their labs, the majority of seniors obviously retain their passion for science. They express in innumerable ways how fulfilling they have found life.

Another responsibility of the Senior Physiologists Committee is to review applications and recommend to Council the annual awardees of the $500 G. Edgar Folk, Jr., Senior Physiologists Award. This award is designed to support the scientific activities of a senior member. The award was granted to two seniors in 2006.

More recently the Senior Committee has been charged to "be alert to senior physiologists who have written autobiographic or historic accounts of interest to physiologists." This activity is in concert with the recently stated goals of the *APS Living History of Physiology*.

Angela Jean Grippo, Chair

Trainee Advisory Committee

Trainee Advisory Committee (TAC) Trainee Survey

2004 Survey Report

In 2004, the TAC conducted a Trainee Survey to determine what each segment of APS trainees (graduate students, postdoctoral fellows, and new investigators) saw as important issues that the Society could begin to address. The results of that survey have directed many of the Committee's activities, as well as those of other APS Committees and Section Steering Committees.

2007 Survey

In its 2006 report, the TAC requested approval from Council to make the Trainee Survey one of the regular activities of the TAC. The survey will be conducted every three years to update APS' information on the needs of trainees (graduate students, postdoctoral fellows, and new investigators). The survey is not limited to APS members, but casts a broader net to solicit information from the many trainees who are involved in APS activities and meetings.

Experimental Biology 2007

The second Trainee Symposium was co-organized by Jennifer Pluznick, Yale University and Erica Wehrwein, Michigan State Univ. The session was entitled, "Multiple Career Paths for a Physiologist: Understand Your Options and How to Get There." The session was very well attended and the presentations received very high ratings from the participants.

Experimental Biology 2008

The 2008 Trainee Symposium will be "Marketing Yourself on Paper for Academic Positions." It is being organized by Lacy A. Holowatz, Penn State University and Eric Berglund, Vanderbilt University. It will include presentations on developing both a research statement and a teaching philosophy. The TAC is again coordinating with the Women in Physiology and Career Opportunities in Physiology Committees to plan complimentary sessions.

Trainee Email Newsletter

The TAC sends out a trainee email newsletter to keep all interested trainees advised of relevant APS and other news, notice of award opportunities, postdoctoral position openings, articles of special interest to trainees, etc. Committee members Chris Madden (Oregon Health & Science University) and Erica Wehrwein work with APS staff to develop the content, ensure the newsletter comes out on a monthly basis, and provide content relevant to the Committee charge. The newsletter issues have a topic focus, such as fellowships and awards. The TAC also issues a special e-newsletter issue containing a list of all relevant career sessions for trainees at the EB meeting. Each Committee member distributed the special list via their section listservs, as well as the trainee listserv.

Trainee Web Page

The new Trainee web page continues to serve as a visible feature on the APS website, providing critical information for APS trainees. In addition to current announcements, it provides quick links to: TAC section contacts and staff contacts; TAC activities and programs; trainee newsletters (both past newsletters and requests to receive new ones); trainee associations (e.g., National Postdoctoral Association); trainee resources (awards, career planning, family & career, finding a job, funding resources, lab management, mentoring, and science policy/advocacy), and mentoring discussion forum.

Professional Skills Courses

Several TAC members have been active participants in the Advisory Board for the APS Professional Skills Training (PST) project. At the fall Advisory Board meeting, current and former TAC members Angela Grippo, Erica Wehrwein, Sean Stocker, Frank Golder, and Ryan Bavis worked with staff to develop the content for the most recent PST live course on basic presentation skills.

APS Trainee Community and Professional Service Award

In its 2006 report, the TAC asked for and received Council approval in concept to develop an APS award designed to recognize and promote trainee participation in community and professional service. Committee members Chris Madden, Bryan Helwig, Lacy Holowatz, and Angela Grippo prepared the award proposal throughout 2006-2007, and the TAC submitted a proposal to Council for approval. The first award would be made at EB 2008.

Committeee Outreach

New Member Outreach: The TAC wants to reach out to new APS trainee members (student, postdoctoral). They are working with the APS Membership Office so that each TAC representative receives information on new trainee members in their section. They will contact each new trainee member personally and make them aware of the types of resources and programs the APS offers to promote their career development.

Undergraduate Student Outreach: At EB 2007 the TAC volunteered to reach out to the undergraduate students at the APS Undergraduate Student Poster Session. The committee members distributed the APS "Physiology Researcher" pins and talked to undergraduate students about careers in physiology and how professional societies like the APS can help support their career development. The committee also had a table of information at the poster session. This was viewed as a very successful outreach effort, and both the TAC and the Education Committee hope to continue it in the future.

K-12 Outreach: The TAC will work with the Education Office staff in 2007 to encourage APS trainee members to participate in Physiology Understanding Week activities via messages through their section listservs.

Section Activities

In order to help APS sections to develop or expand their trainee activities, the TAC members have been gathering information on what each section does for its trainees. They have shared this information via e-mail, and many have taken the information back to their section steering committees. This is stimulating discussion among steering committee members on possible new trainee activities. Additionally, the TAC plans to organize this information and post it on the TAC website. Each section's trainee-relevant activities will be highlighted for one month on the website, beginning approximately August 2007.

Trainee Representation on APS Committees

The TAC efforts to promote the inclusion of student members on more APS committees and task forces have been very successful. Over the past three years, a number of committees have added or requested a trainee representative. The following committees now have a trainee member: Education, Communications, Porter Physiology, Animal Care and Experimentation, International Physiology, Long Range Planning, Membership, Public Affairs, and Women in Physiology.

Council approved the necessary funding for a new APS Early Career Professional Service Award for a five-year period.

Women in Physiology

Sirbhinya Benyajati, Chair

Bodil Schmidt-Nielsen Distinguished Mentor and Scientist Award

Sixteen nominations were received for the fourth Bodil Schmidt-Nielsen Distinguished Mentor and Scientist award. Members of the Women in Physiology Committee reviewed the nominations and selected Barbara A. Horwitz of Univ. of California, Davis as the 2007 awardee. The awardee received an honorarium of $1,000, a plaque, and reimbursement of expenses to attend the EB 2007 meeting. Horwitz gave a 30-minute talk on mentoring entitled, "Mentoring: Lessons Learned," and an article based on the lecture will be published in *The Physiologist*. The lecture was followed by a buffet luncheon to which were invited APS Council members, the former Schmidt-Nielsen Awardees, Horwitz's nominators and mentees, awardees of the various APS award programs (tum Suden, Minority Travel, Porter Fellows, etc.), other trainees, and guests specified by the awardee. More than 60 physiologists attended the award presentation.

Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards

The Women in Physiology Committee received 167 applications for the 2007 Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards. The number of applications has been steadily increasing over the past few years (113 in 2004, 115 in 2005, 134 in 2006, 167 in 2007; this represents a 48% increase in award applications over three years). These awards provide monetary ($500) prizes and complimentary registration for graduate students and postdoctoral fellows of either gender who give presentations at the 2007 EB meeting. The applications include an abstract submitted for presentation at EB and a supporting letter from the applicant indicat-

ing the goals of his/her research project, his/her specific role in the project described in the abstract, and the reasons why he/she is deserving of the award. From that pool of candidates, 36 were selected to be recipients of the tum Suden Award. The awardees were invited to attend the APS Business Meeting where they each received a certificate and a check for $500. Sixty-one per cent of the 2007 awardees are APS members.

Career Mentoring Program

The APS Career Mentoring Website continues to be a valuable resource for both women and men trainees who are looking for information and assistance in developing and maintaining a good mentoring relationship with more senior and junior scientists. It has been cited by a national publication as being an excellent resource for mentoring and receives a considerable number of hits each month. A new feature last year for the APS Career Mentoring website was a Mentoring Discussion Board, designed to provide timely and practical career information to young physiologists. Members of the Women in Physiology Committee developed a list of topics and the first topic ("Teaching your First Course") was posted last November. The discussion board was populated by invited posts from members of the Trainee Advisory, Career Opportunities in Physiology, Education Committees, and the Teaching of Physiology Section Listserv. The Discussion Board was also advertised to the trainees via the Trainee Listserv and the general APS membership in an all-APS email.

In order to enhance visibility of the online discussion board, the Committee will be adding a Mentoring Column in *The Physiologist* covering the same topic previously posted on the Career Mentoring website. Selected comments generated from the articles will be included in the following issue and posted to the website. The new topics will be published in the Mentoring Column in *The Physiologist* one to two times per year.

EB Mentoring Workshop

Each year the Women in Physiology Committee co-sponsors a workshop with the ASPET Committee on Women in Pharmacology. For EB 2007, ASPET was the lead organization sponsoring a workshop on "Being Heard: The Microinequities That Tilt the Playing Field." Two representatives from the Women in Physiology Committee (Kathleen Berecek and Siribhinya Benyajati) and two representatives for the Committee on Women in Pharmacology (Susan F. Steinberg, Holly H. Brevig) served as co-organizers. This year, the program was structured more as a symposium than a workshop and the speakers were rated well (see evaluation results below). Since the session did not include information on how to deal with the equity issues raised by the speakers, the APS Women in Physiology Committee is adding a webpage to the workshop website with suggestions/comments from leaders of the Society and committee members about things women could do to deal with the "microinequities" issues (similar to the online discussion format). Education Office staff will be distributing and collecting responses to the questions and will add them to the webpage.

As APS is the lead organizer for the joint APS/ASPET Mentoring symposium for 2008, the Women in Physiology Committee consulted with the Trainee Advisory Committee concerning their planned 2008 Trainee Symposium to best meet the needs of APS trainees. The Committee selected a topic of "Gainfully Employed: From Launching a Job Search to Navigating Negotiations" to complement the Trainee Symposium topic of "Marketing Yourself on Paper for Academic Positions." The organizers will be Siribhinya Benyajati and Colleen Hegg (APS) and Jelveh Lameh (ASPET). As in the past, the APS-led session will include both speakers and interactive activities and will include practical applications/suggestions that trainees can use in their job searches and negotiations.

FASEB Excellence in Science Award

The Chair of the Women in Physiology Committee serves as the APS representative to the FASEB selection committee for the prestigious FASEB Excellence in Science Award, which carries a $10,000 cash prize (supported by Eli Lilly and Company) and the opportunity to present a plenary talk at a FASEB-sponsored meeting. Competition is very rigorous for this award. Most nominees have extensive dossiers documenting their numerous contributions to research, education, service, and mentoring. Frances Arnold, California Institute of Technology, was the 2007 awardee. The Chair of the Women in Physiology Committee is precluded from coordinating a nomination because of the conflict of interest that this represents. For the 2007 award, members of the Committee

Table 1. 2007 EB APS/ASPET Women in Physiology and Pharmacology Workshop

Topic and Speaker	Mean Rating*
Overview: Women in Academic Science and Engineering - Beyond Bias and Barriers **Joan A. Steitz, Yale Univ.**	4.5
Leveling the Playing Field: A Focus on Students **Barbara A. Horwitz, Univ. of California, Davis**	4.2
Institutional Strategies to Improve the Status of Women **Jeanine D'Armiento, Columbia Univ. College of Physicians & Surgeons**	4.3
Succeeding in a Male-dominated Environment **Florence P. Haseltine, NICHD, NIH**	4.2
OVERALL PROGRAM RATING	4.6

*1 (Not at all useful) to 5 (Very useful)

(Berecek, Fuller, and Alexander) worked with three APS members to improve their nomination packets. For the 2008 award, 56 applications were received, of which eight were primary APS members. The Committee will continue to work with APS members to enhance their nomination packets.

Women Serving on Committees/Sections

The Women in Physiology Committee annually reviews the number of women serving on APS Committees and Section Steering Committees. Women members comprise 21% of the APS regular membership. The Committee was pleased to see that there are 82 women serving in 209 committee slots (39%). This is a higher percentage than last year (36%). In addition, as in 2006, eight of the 22 (36%) Committee chairs and four of the 12 members (33%) of the elected Council are women (including the third female President). There are 40 women serving in 123 (33%) steering committee member slots. The Committee will continue to monitor these numbers and encourage the Committee on Committees, the sections, and general membership to continue to include women in governance roles.

Women and APS Awards

The Committee again noted that the number of women among the top Society awardees (Cannon, Bowditch, Distinguished Lectureships) has not been high. There have only been five female Bowditch awardees (1957, 1993, 1995, 1996, 2004) and three female Cannon awardees (2004, 2006, 2007). The Committee submitted nomination packets of outstanding women for both the 2008 Bowditch and Cannon awards. In addition, the Committee will encourage the sections to consider women as Distinguished Lecturers.

Summary and Conclusions

The Women in Physiology Committee remains active through conference calls to identify ways to promote the advancement of women and young physiologists in APS, to engage in the mentoring program, to encourage nomination of women for committees of APS and for APS and FASEB awards, and to select awardees for the Bodil Schmidt-Nielsen Distinguished Mentor and Scientist Award and Caroline tum Suden Opportunity Award. The Women in Physiology Committee continues to work to develop its agenda based on the directions outlined in the 2006 Strategic Plan. ❖

Council approved the necessary funding for videotaping sample interview and negotiation sessions for APS-ASPET Mentoring Workshop at Experimental Biology 2008.

Council approved a request that applicants applying for the tum Suden awards must be an APS member at time of application.

Postdoctoral Positions

Postdoctoral Position: An NIH-funded opening at the University of California, San Francisco in Neuroscience/Control of breathing is available in September 2007 to identify respiratory neurons in tadpole hindbrain slices using optical and electrophysiological methods. A background in optical imaging, fluorescence videomicroscopy, and electrophysiology is required. Molecular biology experience (gene expression analysis, PCR, cell culture) knowledge is also highly desirable. The Bickler laboratory studies a wide range of issues related to hypoxia, including intracellular signaling, gene expression, preconditioning, and cell death. Please send your CV and three letters of reference to: Philip Bickler, MD, PhD, Dept. of Anesthesia, University of California, 513 Parnassus Ave., San Francisco, CA 94143-0542; Email: bicklerp@anesthesia.ucsf.edu.

Postdoctoral Position: An opportunity is available immediately in a program dedicated to characterizing, at the molecular, cellular, tissue and whole organism levels, the fundamental mechanisms that link salt (sodium) to hypertension. Trainees will work with the group that first identified this novel pathway involving critical ion transporters that directly control vascular tone and blood pressure. Experience with physiological studies on isolated, pressurized arteries is highly desirable. The research includes experiments on mice with genetically altered Na and Ca transporters (knockouts, overexpressors and other mutations), and on the isolated arteries from these mice. Prior research experience in vascular physiology/pharmacology, Ca^{2+} imaging, or electrophysiology is required; fluency in both spoken and written English is essential. Strong preference will be given to US citizens and permanent residents. Applicants must hold a doctoral degree (MD, DVM, or PhD in physiology or pharmacology). Applicants should send a CV and bibliography, a brief statement of personal training objectives, and three letters of recommendation to: Withrow Gil Wier, PhD, Department of Physiology, UMB, 655 W. Baltimore St., Baltimore, MD 21201; Email: gwier001@umaryland.edu.

Postdoctoral Position: Renal-Electrolyte Division, Department of Medicine, University of Pittsburgh. A position is available for a highly motivated postdoctoral fellow to pursue studies on the regulation of ion channels (CFTR and ENaC) by the energy sensor AMP-activated protein kinase in lung and other epithelial cell systems. A variety of experimental approaches will be employed in these studies, including electrophysiological (patch clamp, two-electrode voltage clamp, and Ussing chamber measurements), biochemical (e.g., phosphorylation and binding assays, surface biotinylation, and blotting), and molecular (e.g., mutagenesis, stable transfection/transduction, and knockdowns). State-of-the-art equipment and facilities are available. Interested applicants with experience in electrophysiology, membrane transport, and biochemistry are encouraged to apply. Applicants must by a US citizen or permanent resident and possess a PhD degree (or equivalent), should have excellent oral and written communication skills, and display initiative as well as independence. The candidate will be expected to present research findings at scientific conferences, compose manuscripts, assist in experimental design, and apply for extramural postdoctoral funding during the first year of work. Salary is based upon experience and NIH salary levels. Please send a statement of research interests, curriculum vitae, and the names and contact information of three references to: Kenneth Hallows, MD, PhD, Renal-Electrolyte Division, Department of Medicine, University of Pittsburgh, S976 Scaife Hall, 3550 Terrace Street, Pittsburgh, PA 15261; Email: hallows@pitt.edu; Webpage: http://www.dept-med.pitt.edu/renal/faculty/faculty_info.asp?id=343&UserLname=Hallows.

Postdoctoral Fellowships, Institut Pasteur, Paris, France: A once-in-a-lifetime opportunity for US citizens to live in Paris and work at the Institut Pasteur within any of our 140+ laboratories. Founded in 1887 by Louis Pasteur and located in the heart of Paris, the Institut Pasteur is a world-renowned private research organization. The Pasteur Foundation of New York is seeking outstanding Fellowship Applicants. Candidates may apply to any laboratory within 10 departments: Cell Biology and Infection; Developmental Biology; Genomes and Genetics; Immunology; Infection and Epidemiology; Microbiology; Neuroscience; Parasitology and Mycology; Structural Biology and Chemistry; and Virology. See website for details. Annual package is $70,000 for three years. This is a biannual call for applicants; see website for deadlines. Please note: US citizenship required. Email: PasteurUS@aol.com. Website: http://www.pasteurfoundation.org.

Postdoctoral Positions: Two postdoctoral positions are available immediately in the Heart Failure Laboratory, Department of Pediatrics, Emory University, Atlanta, GA, to study the regulation and function of cardiac membrane ion channels, molecular mechanisms underlying the development of cardiac hypertrophy and failure, and disease-related arrhythmias. This laboratory uses a wide range of technologies including patch clamp, calcium imaging, molecular and cellularbiology techniques. The first position requires investigation in the area of functional genomics characterizing the fetal genes involved in cardiac hypertrophy and fibrosis using cultured cells and gene-targeted mouse models in vivo. These include studying the transcriptional regulation and signaling mechanisms of L-type calcium channels by site-directed mutagenesis, protein phosphorylation, and fluorescence-tagged channel trafficking. Strong background in cellular and molecular biology is required. The second position involves studying the disease-related electrical remodeling in cardiac hypertrophy and heart failure mouse models and in human myocytes. We are most interested in the remodeling of potassium channel and L-type calcium channels. Special attention will be given to candidates with expertise in the field of calcium imaging and patch clamp studies. The in vivo electrophysiology experiences in animals will be a plus. The successful applicants with PhD and/or MD degree will be expected to be individuals with the motivation and vision to develop independent research programs. Both positions require working with mice. Applicants should have good organizational skills, and interact/collaborate with other lab members. The working enthusiasm is essential. Salary will commensurate

with qualifications and experience. The future promotion is highly possible depending on the working excellence. Interested individuals should send a cover letter, curriculum vitae and provide contact information of three references (Email preferred) to: Yanggan Wang, MD, PhD, Department of Pediatrics, Emory Children's Center, 2015 Uppergate Drive, Atlanta, GA 30322; Email: Yanggan_wang@oz.ped.emory.edu; Tel.: 404-727-2592. [AA/EOE]

Postdoctoral Position: The Center for Human Movement Studies at the School of Applied Physiology of Georgia Institute of Technology, Atlanta, GA (http://www.ap.gatech.edu/) is inviting applications for a postdoctoral position to work on a project "Sensorimotor Control of Locomotion after Peripheral Nerve Injury." The scope of the project will include investigations of *1*) mechanical response of the local musculoskeletal system to peripheral nerve injury and repair; *2*) short-term compensation of muscle coordination during the recovery from self-reinnervation of selected ankle extensors in the cat; and *3*) contribution of proprioception from intact muscles to adaptation of the motor patterns to the loss of feedback in selected ankle extensors. The research will involve close collaboration with the groups of Dr. Arthur English (Emory University) and T. Richard Nichols (Emory University/Georgia Tech). The Center for Human Movement Studies has a 6-camera Vicon system, three small Bertec force platforms, and equipment for recording muscle and nerve activity and forces from selected muscles. The appointment will start immediately and be for one year initially and renewable up to a total of three to five years. Successful candidate is expected to have a background in human/animal movement science, biomedical engineering, neurophysiology or related fields. Experience in motion analysis, animal surgery and chronic physiological recordings is beneficial. Existing research programs at the School of Applied Physiology use a systems physiology approach to study movement and mobility at all levels, from molecule to organism. Research areas include muscle and exercise physiology, neural control, biomechanics, and prosthetics and orthotics. Opportunities for collaboration exist on campus and with the Emory School of Medicine, Georgia State University and the Atlanta VA Medical Center. Georgia Tech is one of the top 10 US public research universities and is situated on an attractive 400-acre campus in the heart of Atlanta, a culturally-rich and dynamic city. Please send CV, research summary, and contact information of three references to Dr. Robert J. Gregor at robert.gregor@ap.gatehc.edu or Dr. Boris I. Prilutsky at boris.prilutsky@ap.gatech.edu.

Postdoctoral Position: An NIH-funded position is immediately available at the LSU Health Sciences Center, Shreveport, LA to study the mechanisms of pathological angiogenesis during experimental colitis and Inflammatory Bowel Disease. A variety of experimental models are used in the laboratory and include transgenic and gene targeted mutant mice, the Millipore diffusion disk angiogenesis model, primary culture of normal and mutant mouse endothelial cells, fluorescent and confocal microscopy, in vitro Dunn cell migration chamber analysis of endothelial cell motility, and in vitro leukocyte-endothelial cell assays. Members of the laboratory are from several different backgrounds including basic scientists, postdoctoral fellows, clinical fellows, technicians, and graduate students providing a rich learning and training environment. Highly motivated applicants with a doctoral degree in Physiology, Pathology, Biochemistry, Cell or Molecular Biology, or a related field are encouraged to apply. Salary and benefits will be commensurate with experience and in accordance with NIH guidelines. Interested individuals should send a cover letter, curriculum vitae, and the names and addresses of three references to: Dr. Chris Kevil, LSU Health Sciences Center-Shreveport, LA, 1501 Kings Hwy, Shreveport, LA 71130-3932; ckevil@lsuhsc.edu.

Postdoctoral Fellow: A recently-funded position is immediately available for up to three years to study the regulation of expression voltage gated calcium channels in vascular smooth muscle. A variety of experimental approaches will be employed in these studies including patch clamp electrophysiology of Ca^{2+} channels in native smooth muscle myocytes and heterologously expressed in mammalian cells; analysis of gene and protein expression; and analysis of functional activity of Ca^{2+} channels in resistance arteries. Interested applicants with experience in patch clamp methods or isolated resistance artery techniques are encouraged to apply. Salary is based upon experience and competitive salary levels. Interested applicants should send a cover letter, curriculum vitae, and names of three references to: Robert H. Cox, PhD, Ion Channel Laboratory, Lankeanu Institute for Medical Research, 100 E. Lancaster Avenue, Wynnewood, PA 19096; Email: coxr@mlhs.org; Home Page: http://www.limr.org.

Postdoctoral Fellow: A recently-funded position is immediately available for up to three years to study the regulation of expression voltage gated calcium channels in vascular smooth muscle. A variety of experimental approaches will be employed in these studies, including patch clamp electrophysiology of Ca^{2+} channels in native smooth muscle myocytes and heterologously expressed in mammalian cells; analysis of gene and protein expression; and analysis of functional activity of Ca^{2+} channels in resistance arteries. Interested applicants with experience in patch clamp methods or isolated resistance artery techniques are encouraged to apply. Salary is based upon experience and competitive salary levels. Interested applicants should send a cover letter, curriculum vitae, and names of three references to: Robert H. Cox, PhD, Ion Channel Laboratory, Lankeanu Institute for Medical Research, 100 E. Lancaster Avenue, Wynnewood, PA 19096; Email: coxr@mlhs.org; Home Page: http://www.limr.org.

Postdoctoral positions: Cardiovascular research postdoctoral positions are immediately available in the Division of Molecular Medicine, Department of Anesthesiology and Cardiovascular Research Laboratories at UCLA. A doctorate in biomedical sciences or related disciplines is required. Previous trainings in cardiomyocyte biology, coronary artery disease/heart disease models or angiogenesis/vascular biology are desired. These are great opportunities of joining our very productive and fast growing research team located in the heart of the UCLA Health System. Our

recent work has been published in leading scientific journals such as *PNAS* and *Circulation Research*. One of the unique and important research tools we have is an electron spin/paramagnetic resonance (ESR/EPR) spectrophotometer for quantitative and sensitive detection of reactive oxygen species. For more information about our research programs, visit our laboratory website at http://research.anes.ucla.edu/cai/. Send CV, a description of previous training experiences, and contact information of three references to Dr. Linda Cai at hcai@mednet.ucla.edu. [AA/EOE]

Faculty Positions

Animal Physiologist: Millikin University invites applications for a tenure track faculty position in the Department of Biology beginning August 2008. The department seeks a teacher-scholar dedicated to undergraduate teaching and research. The successful candidate will have appropriate training and expertise to teach a majors course in animal physiology. Additional duties will involve instruction to both majors and non-majors, as well as service to the department and university. The department consists of nine biologists, a lab coordinator and support staff. The department delivers programming in traditional biology and cell and molecular biology. Millikin University is a private selective liberal arts university with 2,000 students in the traditional program and adult learners in a variety of programs. Rank will be assigned according to credentials. Ideal candidates will have completed a PhD (by August 2008) from a recognized program in physiology; evidence of excellence in undergraduate teaching and a commitment to undergraduate research. Deadline for receipt of applications is November 1, 2007. Review of files will begin immediately. Application materials should include a current curriculum vita, copies of graduate transcripts, statements of teaching and research philosophy, syllabi from two recent courses (including animal physiology) and three letters of reference which should be sent to: Dr. Judy Parrish, Chair, Department of Biology, Millikin University, 1184 West Main Street, Decatur, IL 62522; Email: jparrish@mail.millikin.edu; Tel.: 217-424-6235. [AA/EOE]

Faculty Education Physiology Position: Touro University College of Medicine is a newly created allopathic medical school located in northern New Jersey, a few minutes from New York City. We are seeking a candidate to fill a faculty education position in Physiology. This person is responsible for developing, implementing and evaluating our medical education program in Physiology**.** Qualifications include a doctoral degree, a passion for teaching and experience in a medical school environment. For more information visit our Web site at http://touromed.touro.edu. Applicants should submit a letter of interest and current CV to: jobs.touromed@touro.edu. Interest may be expressed confidentially. Advancing health care through science, compassion, and caring. [AA/EOE]

Assistant Professor/Associate Professor: Scholar with expertise in motor learning, motor development or motor control to join the Movement Science and Education/Kinesiology program faculty Department of Biobehavioral Sciences, Motor Learning/Development/Control at Teachers College, Columbia University. Our highly-ranked program has been a leader in graduate education and research for over a century, and was the first program in the United States to offer both the master's and doctoral degree in this field, and was the first program to offer a graduate degree with a specialization in motor learning. Presently we have faculty expertise in motor control, exercise and autonomic physiology, physical education pedagogy and physical activity promotion. We seek a scholar to compliment these areas with expertise in areas such as development, learning or control of movement in typical developing/developed populations throughout the lifespan and/or rehabilitation of movement in populations with movement disorders. Preference will be given to applicants with applied research interests who can relate their work to the teaching and advisement of graduate students, many of whom have rehabilitation backgrounds (physical and occupational therapists), who can contribute to our graduate specializations in rehabilitation offered in collaboration with rehabilitation programs at Columbia University Medical Center, as well as applicants who can relate to other areas of the department (Neuroscience & Education, Speech Pathology) and Teachers College (e.g., human development, special education, physical disabilities, cognitive psychology). Responsibilities: teach graduate courses; advise students; supervise doctoral research; and, maintain an active, externally-funded research program. Qualifications: earned doctorate in Kinesiology or related field, with post-doctoral research training preferred. Applicants at the level of Assistant Professor will be expected to have some experience in teaching and advisement, peer-reviewed publications, and evidence of potential for obtaining competitive, extramural research funding. Applicants at the level of Associate Professor will be expected to have an established record of extramural funding and a substantial record of publication in peer-reviewed periodicals. Rank: Assistant Professor, Tenure Track, or Associate Professor, Tenure Track or Tenured. Applicants with exceptional qualifications may be considered at a higher rank. To apply: Send a CV, a cover letter describing research and teaching interests, the names and contact information of three references and three sample publications to: Prof. Andrew Gordon, Search Committee Chair, Department of Biobehavioral Sciences, Box 199, Teachers College, Columbia University, 525 West 120th Street, New York, NY 10027. Review of applications will begin on November 12, 2007 and continue until the search is completed. Appointment begins September 2008. Teachers College as an institution is committed to a policy of equal opportunity in employment. In offering education, psychology, and health studies, the College is committed to providing expanding employment opportunities to persons of color, women, and persons with disabilities in its own activities and in society. Candidates whose qualifications and experience are directly relevant to College priorities (e.g., urban issues, education equity, and concerns of underrepresented groups) may be considered for higher rank than advertised.

Visiting Assistant Professor/ Instructor: The Department of Biological and Allied Health Sciences at Ohio Northern University is recruiting a physiologist to teach undergraduate students. The successful candidate will have a graduate degree with a doctorate

preferred and teaching responsibilities will include upper-level physiology courses. The position is available immediately but may commence no later than the end of November. The appointment will be at the Assistant or Instructor level with salary commensurate with qualification and experience; excellent fringe benefits are included. Review of applications will begin immediately and will continue until the position is filled. Interested candidates should submit a formal letter of application, curriculum vitae, three letters of reference, a statement of educational philosophy/teaching approach, and official transcripts to: Dr. Nancy Woodley, Assistant Chair, Department of Biological and Allied Health Sciences, Ohio Northern University 525 S. Main St., Ada, OH 45810; Email: n-woodley@onu.edu; Tel.: 419-772-2326; Fax: 419-772-2330.

Tenure/Tenure-Track Assistant or Associate Professor: The University of Minnesota Medical School, Duluth Campus is seeking applications from outstanding physiologists and pharmacologists to fill a position at the Assistant or Associate Professor level in the Department of Physiology and Pharmacology. The position is a regular, 12-month, tenure/tenure-track appointment to begin as early as the winter 2008. The successful candidate will be expected to establish a productive, externally funded independent research program in integrative systems-based (cardiovascular, respiratory, renal, neuro-) physiology or pharmacology. This person will also be expected to teach physiology and/or pharmacology to medical, pharmacy, graduate and undergraduate students in team-taught courses. Qualifications: Candidates must have a PhD, MD, DVM or equivalent doctoral degree, postdoctoral experience and a publication record supporting a nationally recognized research program or strong evidence of the potential to develop and direct such a program. Evidence of competence in teaching and communication must also be documented. Date Applications Accepted: Beginning August 1, 2007 and continuing until the position is filled. About the Location: The University of Minnesota, Duluth with its 10,000+ students overlooks the western end of Lake Superior. The extraordinary high quality of life is a result of the combination of a dynamic and growing university environment, a vital city with strong support of education and the arts, the magnificent scenery of the area and numerous opportunities to enjoy summer and winter outdoor life and wilderness. (http://www.visitduluth.com/ and http://www.dumn.edu/) The University of Minnesota Medical School, Duluth campus provides two years of basic medical science training for approximately 100 students per year who have special interest in rural family practice careers and choose to begin their training in Duluth. In addition, faculty also participate in undergraduate, graduate and allied health student education. Many faculty are actively involved in research, successfully compete for extramural funding and publish regularly. A congenial academic environment on the Duluth campus promotes significant inter-disciplinary activity. Close relationships with faculty in the UM College of Pharmacy Duluth and the UMM-Twin Cities faculty in the Academic Health Center (150 miles to the South) also provides excellent opportunities for research collaborations. Application: Interested individuals should apply online at https://employment.umn.edu (Search for Requisition Number 149693). To ensure consideration, submit (electronically or by regular mail) a letter of application, curriculum vitae, and a succinct statement of a) research interests and b) teaching interests. In addition, names and complete addresses (including email) of three individuals who will provide letters of recommendation should be included. Physiology/Pharmacology Search Committee, c/o Dr. George Trachte, Professor, Department of Physiology and Pharmacology, University of Minnesota Medical School Duluth, 1035 University Drive, Duluth, MN 55812-3031; Email: gtracht1@d.umn.edu. [AA/EOE]

Assistant Professor of Physiology: The Department of Physiology of the School of Medicine of the University of Puerto Rico invites applications from scientists for a tenure-track position at the rank of Assistant Professor. Exceptional candidates may be considered for more senior positions. Candidates must have a PhD and/or MD with appropriate postdoctoral fellowship training, a strong record of research accomplishments, and the ability to establish and maintain an independent research program that complements existing strengths within the department. The ideal candidate should have an externally funded research program in the areas of cardiovascular, renal or endocrine physiology. He/she will also participate in medical, dental, and graduate training. The closing date for applications is October 31, 2007. Applicants should send a curriculum vitae, a description of past research and future plans, and the names of three potential references to: Dr. N. Escobales, PhD Chair, Physiology Search Committee, Department of Physiology, University of Puerto Rico-School of Medicine, PO Box 365067, San Juan, Puerto Rico 00936-5067 (nescobales@rcm.upr.edu). [AA/EOE]

Assistant/Associate Professors: Ross University School of Medicine (RUSM) is an internationally recognized medical school located on the Caribbean Island of Dominica in the West Indies (http://www.avirtualdominica.com). The Department of Physiology (http://www.rossmedphysiology.com) has six faculty members, and will be adding two more in the next two years. The Department invites applications for three faculty positions in Pulmonary, GI, or Endocrine Medical Physiology. The successful candidates will be appointed at a level commensurate with prior experience. Candidates will be expected to teach medical physiology courses and serve as facilitators in the problem-based learning curriculum. RUSM is primarily a teaching university, but is expanding its commitment to research and has a modest budget for intramural support of human studies and medical education research (no animal facilities). Requirements: An advanced degree (PhD in relevant field of study or MD/PhD); relevant teaching experience; extensive knowledge of this program; excellent communicative and teaching skills; documented record of teaching effectiveness; previous teaching experience at a North American or United Kingdom medical school in the case of Associate rank. Applications are encouraged from individuals who have a strong interest in medical education. Ross University offers a Doctor of Medicine or Doctor of Veterinary Medicine degree to dedicated students. Our US-style basic sciences courses are taught on our Caribbean campuses, and provide an earlier involvement into clinical situations and surgery. Students complete their clinical studies in the United

States. After passing all prerequisite examinations, Ross graduates are licensed to practice medicine in the US. Ross University is a division of DeVry, Inc (NYSE:DV). Ross University offers a competitive annual salary that is potentially tax-free, relocation assistance to and from the island, deferred compensation program, medical benefits, 25 days of paid annual leave, and opportunities for professional development. To apply, please visit our website at http://www.rossu.edu/med, select "Careers" and copy or paste your resume/CV, or complete our online application process. [AA/EOE]

Assistant Professor: Biology/Specialty Physiology; Augustana College invites applications for a tenure track assistant professor to begin with the 2008-2009 academic year. While a PhD is preferred, consideration will be given to advanced ABDs. Primary teaching responsibilities include introductory cellular biology, human physiology, comparative physiology, and the possibility of general biology for non-majors. A commitment to undergraduate teaching in a liberal arts setting is required. The successful candidate will maintain an active research program in their area of expertise and involve undergraduates in this research. There are approximately 350 students majoring in biology and the pre-health professions, and 12 faculty in the biology department. Augustana College is a highly selective, four-year, liberal arts institution of 2,450 students, most of whom live in residence halls on a wooded 115-acre campus. Rock Island, IL is one of the Quad-Cities of Illinois and Iowa, a diverse metropolitan area on the Mississippi River with 400,000 residents. Augustana College is an equal opportunity employer and actively encourages applications from women and persons of diverse ethnic backgrounds. We do not discriminate based on age, race, color, ethnic origin, gender, sexual orientation, disability or creed. Details about Augustana, our expectation of the faculty, the selection process, and the Quad Cities are all available at the Faculty Search website; http://www.augustana.edu/academics/faculty_search/. Send a letter of application, curriculum vita, graduate transcripts, a statement of teaching philosophy and research interests, and three letters of recommendation to search #105-08Biology/Physiology Committee, c/o Jeff Abernathy, Dean of the College, Augustana College, 639-38 Street, Rock Island, IL 61201. Questions may be directed to the department co-chair at SteveHager@augustana.edu. Review of applications will begin October 31, 2007.

Assistant Professor: The Department of Biological Sciences invites applications for a tenure-track faculty position for fall 2008. Assistant professor, PhD physiologist with a background in mammals and/or comparative biology. Undergraduate teaching and post-doctoral experience is desirable. Primary teaching responsibilities will include Anatomy and Physiology, Mammalogy, and upper division courses in area of expertise. Preference will be given to candidates with research interests in areas related to human health issues. The successful candidate is expected to participate in activities of the Center for Integrative Natural Science and Mathematics (http://www.nku.edu/~cinsam/) and to engage undergraduate students in active research. More detailed descriptions of the position plus departmental information may be found on the web (http://www.nku.edu/~biosci). Send letter of application; brief statement of professional goals; statements of teaching/research philosophy; curriculum vitae; transcripts; and names, addresses, phone numbers, and Email addresses of three references to Physiologist Search Committee; Department of Biological Sciences, Northern Kentucky University, Highland Heights, KY 41099. All application materials must be received by November 16, 2007. NKU is a comprehensive regional university primarily concerned with the advancement of undergraduates. Upon a contingent offer of employment all applicants will be required to undergo a pre-employment criminal background check as mandated by state law. [EOE/AA]

Research Positions

Director, Consumer Experience Lab: Kohler, WI. Please visit Www.Kohler.Jobs to apply for this position. No phone calls please. Thank you! Under the direction of the Vice President-Industrial Design this position will have knowledge in areas that include biomechanics, psychology, and physiology towards gaining a deeper understanding of tomorrow's consumer. With the benefit of trend sighting and contextualizing, focus in on the future influences and changes that effect people. Have connections to outside experts with the knowledge and foresight to bring the right resources together as needed. Uncover opportunities in the form of desired experiences, methods to benefit issues based on health, well-being, aging, injury, etc. that will enhance the lives of our target consumers. Areas of study for this group include: trend sighting and contextualizing; domain mapping that supports Strategic Planning and NPS. Consumer/User targeted learning in the following areas: biomechanics, psychology and physiology. More specifically to Kohler, personal hygiene, hydrotherapy, sensory impact, the aging process, health and wellness, bio-mechanics and cognitive thinking; identify new product opportunities as result of above learning; the basic ergonomics of safety and comfort; support the NPD community with concept testing; understand global differences relative to the above user interface design. Must be highly motivated to lead a creative team of researchers, project teams and consultants, staying ahead of our competitors in all aspects of innovation. This research lead focus must take Kohler ahead in time, yet maintain a solid foundation. This team-spirited individual must be able to lead through demonstration, influence, skill, and passion for the work. Someone who can draw the best from their associates while maintaining a happy, healthy work environment and demonstrates knowledge and abilities in the areas of current trend mining methodologies, an understanding of and an empathy for a changing world culture. Strive toward comprehension of basic business principles. Education and Experience Requirements: A Masters or Doctorate Degree in a sociology, psychophysiology, psychology, or anthropology with emphasis on product design applications. Eight to ten years experience.

Graduate Research Opportunity: We are looking for several highly motivated graduate students to study exercise

physiology/metabolism or biomechanics at the University of Southern California, Los Angeles. In exercise physiology, our research focuses on metabolism (carbohydrates and lipids) and its regulation during exercise, with aging and in pathophysiological conditions (type I diabetes, type II diabetes and obesity). In biomechanics, our research focuses on the mechanisms humans use to generate and control momentum during multi-joint movements (athletic, ergonomic, and clinical populations). Courses for doctoral students are offered within and outside of the department in areas including biomedical engineering, computer science, integrative and evolutionary biology, physiology, gerontology and statistics. Doctoral students enter one of two interdisciplinary degree programs available at USC: Biomedical Engineering (biomechanics) or Integrative and Evolutionary Biology (biomechanics and exercise physiology). All graduate students receive appointments as teaching or research assistants with stipends, health benefits, and tuition remission. These may be renewed on an annual basis. Students are also encouraged to apply for graduate fellowships. If you are interested in learning more about the biomechanics program, please contact Dr. Jill McNitt-Gray at mcnitt@usc.edu. If you are interested in learning more about the exercise physiology/metabolism program, please contact Dr. Lorraine Turcotte at turcotte@usc.edu.

Research Associate/Postdoctoral scholar: The University of Kentucky, College of Health Science, has a new position available immediately for a Research Associate or Postdoctoral scholar to study the biology of the laryngeal muscles. The successful applicant will join a highly collaborative group with a growing basic and translational research program focused on the larynx. Ongoing studies include the mechanisms of laryngeal muscle specialization, endocrine effects on muscle function, and aging. The laboratory uses a wide spectrum of experimental approaches, from cell biology and biochemistry to gene expression profiling. Independent and self-motivated individuals with a PhD and/or MD degree and a strong background in skeletal muscle physiology, motor systems, or in voice/speech pathology are particularly encouraged to apply. Salary is negotiable according to experience. Applicants should send their curriculum vitae and the names of three references to: Dr. Joseph Stemple, Professor, Division of Communication Disorders, Department of Rehabilitation Sciences, College of Health Sciences, University of Kentucky, 900 South Limestone, 120H, Lexington, KY 40536-0200; phone: 859-323-1100 Ext. 80556; Fax: 859-323-8957; Email: joseph.stemple@uky.edu.

Research Assistant/Associate: A Division of Nephrology position is available for a candidate with a background in rodent surgical techniques, including but not limited to renal hemodynamics (renal blood flow, GFR, and autoregulation). Salary is competitive and commensurate with experience. Please send a cover letter, curriculum vitae and the name of three references to: Dr. Karen A. Griffin, MD, Professor, Department of Medicine, Loyola University Medical Center and Hines VA Hospital; 2160 South First Avenue, Maywood, IL 60153; Tel.: 708-202-4120; Fax: 708-202-7978; Email kgriffi@lumc.edu [AA/EOE].

Director, Mount Desert Island Biological Laboratory, Salisbury Cove, Maine: The Mount Desert Island Biological Laboratory (MDIBL), located on Mount Desert Island, ME, home of Acadia National Park, is a 109-year-old independent research institution. The laboratory is known for its world-class seasonal scientific and educational programs, and an expanding year-round research program that focus on marine physiology, epithelial transport, developmental biology and environmental toxicology. MDIBL invites applications for the Position of Director. He/she will be responsible for articulating the scientific vision and overseeing the development, implementation, execution, and management of the scientific and educational agenda of the laboratory. The Director, who reports to the Board of Trustees, serves as Chief Executive of the institution to whom the senior administrative staff and year-round investigators report. The candidate must be a seasoned, grant-supported academic scientist and administrator. Experience interacting with basic marine biologists, physiologists, biomedical investigators and/or environmental toxicologists is advantageous. Effective communication and interpersonal skills, as well as successful dealings with private donors and government officials at all levels are important prerequisites for this position. Please send a letter of interest, CV, and the names and addresses of three references to: Search Committee, MDIBL, Box 35, Salisbury Cove, ME 04672 or search_committee@mdibl.org. A detailed job description can be found at: http://www.mdibl.org/info/careers.shtml. Review of applications will begin October 15, 2007, but applications will be considered until the position is filled. [AA/EOE]

Senior Research Scientist: Cardiovascular Physiology. CVRx, a world leader in device therapy for hypertension, invites applications for the position of Senior Research Scientist. We seek a high-potential, self-starting individual with a PhD (or equivalent experience of 7+ years) in Physiology or a related field. The candidate must have a background in integrative cardiovascular physiology and autonomic regulation. Other requirements for the candidate include: history of exceeding work expectations in quality and timeliness; record of high productivity and collaboration in a team environment; acumen in planning and executing complex, interdisciplinary tasks; proven ability to design and conduct *in vivo* experiments; clinical experience; strength in analyzing integrative physiologic data and distilling salient results; excellent verbal and written communication skills; record of impactful scientific communication in journal publications and conference presentations; talent for cultivating relationships with healthcare professionals. Candidates with experience in the medical device industry and familiarity with electrical stimulation of nerves or muscle are preferred. Interested parties should submit curriculum vitae to ResumeRD@cvrx.com. ❖

Morris Wins Fulbright Award

Mariana Morris

APS Member Mariana Morris, chair and professor of pharmacology and toxicology, received the prestigious Fulbright Research/Teaching Scholar-ship from the J. William Fulbright Foreign Scholarship Board. The competitive program sends American scholars to lecture and/or conduct research in more than 130 countries.

The award will provide an opportunity for Morris to conduct a research and teaching program in Porto Alegre, Brazil. She will work at the University Cardiology Foundation, Federal Foundation of Medical Sciences of Porto Alegre and Federal University of Rio Grande do Sul along with Brazilian clinical and basic scientists.

The focus of her work is on translational sciences, the interface between clinical and basic science. In this project, she will study the role of diet in diabetes and insulin sensitivity. She will also teach translational physiology in a small group setting with a focus on animal models for human diseases. The research is in collaboration with other Brazilian scientists and medical and graduate students.

Morris has a longstanding interest in international research and teaching exchange, particularly with South America. She directed an international exchange program supported in the US and Brazil. The Brazil consortium provided for the exchange of students between Brazil and the US. Morris has trained numerous international students and fellows and directed a course for medical students, "Translational Physiology: From Bench to Bedside," at the University of Sao Paulo in Ribeirao Preto, Brazil.

A member of the inaugural class of the Executive Leadership in Academic Medicine (ELAM), Morris has been active in science and leadership training for women and underrepresented minorities. She has served on numerous National Institutes of Health (NIH) review panels, has been active in the American Heart Association and the American Society of Pharmacology and Experimental Therapeutics and has served on the editorial board of prominent journals in her field.

APS Member Receives 2006 National Medal of Technology

On July 27, President Bush presented the 2006 National Medal of Technology to APS Member Leslie A. Geddes, Purdue Univ. In a White House ceremony, Geddes was recognized "for his contributions to electrode design and tissue restoration, which led to the widespread use of a wide variety of clinical devices. His discoveries and inventions have saved and enriched thousands of lives and formed the cornerstone of much of the modern implantable medical device field."

President Bush recognized the 27 Laureates for 2005 and 2006 stating that this is "the highest award a President can bestow for astounding achievement in science and technology. They recognize work that has helped expand the horizons of human knowledge. The National Medal of Science honors those whose research has enhanced our understanding of life and the world around us. And the National Medal of Technology recognizes innovators whose work keeps America on the cutting edge with discoveries that change the way we live."

Stephane Baudry is currently a Researcher in the Neurophysiology of Movement Lab at the Univ. of Colorado. Baudry had been at the University Libre De Bruxelles Lab of Applied Physiology in Brussels, Belgium.

Walter Boron is currently Chairman, Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, OH. Prior to his new position, Boron was a Professor of Cell and Molecular Physiology at Yale University, New Haven, CT.

Patrice Guy Bouyer is currently Research Associate, Department of Surgery, University of Chicago, Chciago, IL. Previously, Bouyer was a Postdoctoral Fellow at Yale University, New Haven, CT.

John Buckwalter is currently a Professor, University of Texas at Arlington, Texas, having moved from the VA Medical Center in Milwaukee, WI.

Christie Cefaratti is currently Regional Scientific Manager at Takeda Pharmaceuticals, Chesterland, OH. Prior to this new position Cefaratti was a Faculty Instructor at Case Western Reserve University, Cleveland, OH.

Darren S. DeLorey is currently Assistant Professor, Faculty Physical Education and Recreation, University of Alberta. DeLorey had been a Postdoc in the Department of Anesthesiology at the Medical College of Wisconsin.

Michael Garrett is currently Assistant Professor in the Department of Medicine/Kidney Disease Center at the Medical College of Wisconsin. Prior to his new position, Garrett was an Assistant Professor at the University of Toledo Health Science Campus, OH.

Jacob Haus is currently at the Cleveland Clinic Foundation, Shaker Heights, OH. Previously, Haus was at Ball State University, Human Performance Lab, in Muncie IN.

Masski Isoda is currently a Research Scientist, RIKEN Brain Science Institute, Lab Symbolic Cognitive Development, Wako-Shi, Japan, having moved from the National Eye Institute, NIH, Lab Senserimotor Research, Bethesda MD.

William E. Johnson is currently a Biology Instructor in the Department of Math, Hillsborough Community College, Tampa Fl. Prior to his new position, Johnson was a Visiting Assistant Professor at the University of South Florida College of Public Health.

Bilijana Jovov is currently an Associate Professor, Department of Medicine, Gastroenterology-Hepatology at the University of North Carolina, Chapel Hill. Previously, Jovov was an Assistant Professor in the Department of Medicine, Gastroenterology, at Tulane University Health Sciences Center, New Orleans, LA.

Luis A. Juncos is currently an Associate Professor, Division of Nephrology, at the University of Mississippi Medical Center, Jackson, MS. Juncos had previously been an Associate Professor at the Mayo Clinic College of Medicine, Rochester, MN.

Meyer Kattan is currently a Professor in the Pediatric Pulmonary Division, at Columbia University Medical Center New York, having moved from the Department of Pediatrics, at the Mount Sinai School of Medicine New York.

Heidi Ann Kluess is currently an Assistant Professor in the Department of Health, Kinesiology Recreation and Dance at University of Arkansas. Kluess was a Postdoctoral Fellow at the Medical College of Wisconsin.

Ashok Kumar is currently an Associate Professor in the Department of Anatomical Sciences Neurobiology at the University of Louisville School of Medicine. Prior to new position, Kumar was a Research Scientist, Musculoskeletal Disease Center, Loma Linda, CA.

Christoph Lossin is currently an Assistant Researcher in the Department of Neurology School of Medicine at the University of California, Davis. Previously, Lossin was a Research Fellow at Osaka University in Japan.

Xiuying Ma is currently an Assistant Research Scientist in the Department of Pharmacology, Merck Co., Inc., Rahway, NJ. Ma had been at the University Iowa, Department of Internal Medicine, Iowa City, IA.

Michael P. Massett is currently an Assistant Professor in the Department of Health and Kinesiology at Texas A&M University. Prior to his new position, Massett was a Research Assistant at the University of Rochester School of Medicine and Dentistry, New York.

Scott Mazzetti is currently Assistant Professor Department of Health PE and Human Performance at Salisbury University. Prior to his new position, Mazzetti was an Assistant Professor in the Department of Kinesiology at Anderson University, IN.

Marcel Miampamba is currently a Research Scientist at Ardea Biosciences, Costa Mesa, CA. Previously, Miampamba was a Research Scientist at Ferring Research Institute Inc. in San Diego,CA.

Walter Murfee is currently an Assistant Professor in the Department of Biomedical Engineering at Tulane University, New Orleans, LA, having moved from the Department of Bioengineering, at the University of California, San Diego.

Amanda Jean Nelson is now affiliated with the Department of Human Biology, at the University of Wisconsin, Green Bay. Prior to her new position, Nelson was in the Department of Vet Biosciences at the University of Illinois, Urbana IL.

Ralph Paxton is currently a Program Manager in the Office of Research and Development at the Veterans Health Administration, Washington, DC. Prior to this position, Paxton was at the Auburn University College of Vet Med, Department of Anatomy, Physiology, and Pharmacy, AL.

Nancy J. Pelaez is currently an Associate Professor in the Department of Biological Sciences at Purdue University in West Lafayette IN. Pelaez was an Assistant Professor of Biological Sciences at the California State University in Fullerton.

John K. Petrella is currently an Assistant Professor in the Exercise Science and Sports Medicine Department of Stamford University, Birmingham, AL. Prior to his new position, Petrella was a Research Fellow, VA Medical Center GRECC at the University of Alabama.

Lawrence S. Prince is currently an Assistant Professor in the Division of Neonatology at Vanderbilt University School of Medicine, Nashville, TN. Previously, Prince was an Assistant Professor in the Department of Pediatrics, University of Alabama at Birmingham.

Stacey Reading is currently an Assistant Professor on the Faculty of Kinesiology at the University of New Brunswick. Reading was a Postdoctoral Fellow in the Department of Pharmacology at the University of Vermont.

David Russ is currently an Assistant Professor in the School of Physical Therapy at the Ohio University, Athens. Prior to his new position, Russ was an Assistant Professor at the University of Maryland, Baltimore.

Donald Shaw is currently an Assistant Professor in the Department of Biological Sciences at the University of Tennessee, Martin. Prior to this position, Shaw was an Assistant Professor in the Department of Biology at Augustana College, Rock Island, IL.

Dinender K. Singla is currently an Associate Professor in the Biomolecular Science Center, at the University of Central Florida, Orlando. Previously, Singla was an Associate Professor in the Department of Medicine at the University of Vermont, Colchester.

Cristina Trandafir is currently a Postdoctoral Fellow in the Department of Physiology at the University of Utah. Prior to her new position, Trandafir was a Postdoctoral Fellow in the Department of Physiology at the University of Alberta, Canada.

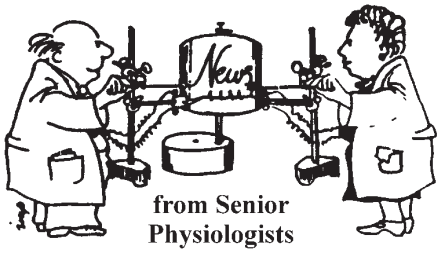
Lesley J. White is currently an Assistant Professor at the University of Georgia, Athens. Prior to this, White was an Assistant Professor at the University of Florida, Gainesville.

Mary E. Zimmer is currently an Assistant Professor in the Department of Biological Sciences at Ferris State University. Previously, Zimmer was a Research Associate at Wayne State University. ❖

Letter to Julio Cruz

Pedro Pasik writes: "At last I come to answer your kind letter of congratulations for my 80th birthday. I responded only with my thanks on my 70th because I had not retired at that time. In fact I officially retired (off the payroll with an emeritus status) in 1998, at age 72, when I decided to stop competing for grants after over 35 years of uninterrupted support from various institutes of the NIH. However, I was soon called back to continue as Co-Director of the Brain & Behavior course for second year medical students which I had started and directed for 10 years since 1988. Although the course demands my full efforts from end of August to end of December, I still get a kick out of attending activities to improve my teaching skills in the interim. I have always been a chalk and board teacher but in the last few years I had to adapt and developed Powerpoint presentations that come quite close to drawing and writing on the board. I might add that there is no comparable pleasure than detecting a spark of understanding in the eyes of a student to the unweaving of a complex problem on my part. For a while I did miss bench research that had used only monkeys as subjects and that had spread from testing visual functions including psychophysical measurements after brain lesions to immunoelectron microscopy of visual and basal ganglia structures. Of course, this is not the place to review our work and that of our students. I learned to compensate for the lack of laboratory work by doing historiography research on some Neuroscience prominent figures. Perhaps more significant, together with my wife, Dr. Tauba Pasik, we undertook to publish what has been called the "definitive Cajal," the *Texture of the Nervous System in Man and the Vertebrates*, under the auspices of Springer-Verlag, which appeared in three volumes in 1999, 2000 and 2002. This is an annotated and edited translation from the original Spanish book with the additions that Cajal made in the French version. Furthermore, it attempts to correct important errors of these texts and update certain concepts, as well as reproducing original artwork, completing the legends of figures and checking and standardizing the references. Having obtained the permission of Cajal's heirs beforehand, it is the only authorized English version of this monumental work.

"Let me comment now on an always-gripping question when reaching our



age and status. Shall we be remembered? This kind of question came up to me quite a number of years ago while teaching a graduate course for Neurobiology and Neuropsychology PhD candidates. I gave it for 26 years in a row for about 250 students. I always asked them whether they knew who was Heinrich Klüver. Less than 5% had heard of him in the context of the Klüver-Bucy syndrome. Heinrich Klüver was one of our heroes with his fundamental contributions covering a wide range of the Neurosciences, from the mechanisms of hallucinations, to the functions of the occipital and temporal lobes, and the porphyrin content of myelin that was conducive to the Klüver-Barrera stain. A closer example, the last edition of a well-known text of *Neuropsychology* does not mention Morris Bender and/or Edwin Weinstein, both pioneers in the field. Even closer yet, some years ago the Oxford School of Psychology recognized in one of their publications that the Pasiks were the masters of the analysis of visual functions in the absence of striate cortex. Our egos swelled accordingly, but in the last symposium on the subject, although people returned to the designation that we coined: extrageniculostriate vision, our work was not mentioned once in the entire 500-page book resulting from that symposium. What does all of this mean? It means to me that the majority of us, with all our efforts in both basic research and/or clinical fields, are laying the bricks that build the edifice. Once the edifice is very advanced or completed, the individual bricks do not count any longer, unless they have perhaps a name engraved on it. And then perhaps that brick will be remembered let us say 50 years later. And then time will erase even that engraving and in another 50 years, perhaps one in a thousand of us will still be counted. One of them is without doubt our maximal hero, Santiago Ramón y Cajal, whose magnum opus published over 100 years ago that we put into English is still mentioned an average of 200 times yearly in the literature. My words may sound somewhat bitter or pessimistic. They are neither. They are just realistic. And when I make inventory of our production in the last 50 years, the many papers, chapters and now books, I am absolutely convinced that our ever-lasting contribution is our progeny. Between our three children, their spouses and our six grandchildren we shall be remembered for roughly 100 years. They are indeed our most valued legacy and we are grateful to them for the past, the present and the future.

"In closing, I want to tell you about our plans. During the winter, we are teaching courses or giving lectures (every year less and less), at the Medical Schools of the University of Málaga in Spain, and the University of Buenos Aires in Argentina. Unhappily, most of our foreign collaborators have already died. We travel quite a bit; spend a few weeks in balmy Florida where we enjoy musical listening with close friends of over 60 years. And all along we have a great time visiting at least once a week with each of our children and their families. The rest of the year we keep up with our daily work. Frankly, do I still miss research at the bench, the long nights of postoperative care of our animals or dissecting specimens for EM? Sometimes. Do I miss competing for the NIH funds that supported us for 35 years with no interruption? Definitively not.

"A final word of advice to the younger generation: have children if you can and, no matter what, have fun in what you are doing. Without fun nothing is worth it."

Letter to Vernon Bishop:

R. James "Jim" Barnard writes: "Thank you for your letter on the occasion of my 70th birthday. I am still working full time as Professor of Distinction in the Department of Physiological Science at UCLA where I have just completed my 39th year. My research focuses on the mechanisms by which a low-fat, high-complex-carbohydrate, high-fiber diet combined with 60 min of daily exercise can prevent or control major chronic diseases. At the present time we are focusing on prostate cancer and heart disease but are also investigating the impact of this lifestyle on children where many of the health problems start. We are especially interested in chronic, low-level inflammation as it is thought to be involved in the early stages of many problems.

"This past spring I had surgery to repair my mitral valve as two chords had ruptured from the papillary muscle and I was experiencing major regurgitation and LV dilation. The good news from the whole ordeal was that I have no coronary disease to worry about.

"I plan to teach for a few more years before retiring and am considering writing a book on preventing common health problems. Over the years I have studied hypertension, diabetes, heart disease and some forms of cancer. I am convinced that most of the health problems seen in the U.S. today are due to what people eat, the fact that they do not exercise, and are exposed to hazardous chemicals so ubiquitous in our society."

Letter to Charles Tipton;

Saul W. Brusilow writes: "I am very pleased to asked about my current activities because it allows to tell how I got to do them.

"I was elected to the APS while studying the electrolyte physiology of secretory glands—the salivary gand sweat glands in particular. For reasons not necessary to explain I measured ammonia concentration in sweat using the microdiffusion method popular then. A house officer asked me to measure ammonia on a patient he thought might have a genetic defect in urea synthesis which would be detected by finding hyperammonemia. The hospital lab did not measure ammonia levels then. The patient did have hyperammonemia and the desease. She and other patients were treated experimentally with nitrogen free analogues if amino acids to no avail. In writing up these failed experiments I thought of a biochemical/physiological way to treat one of the urea cycle disorders. Based on a suggestion of a colleague other drugs were developed all of which were helpful clinically and were approved by the FDA. For many years prior to FDA approval I was operating a pro-bono pharmaceutical firm. One drug just led to another until my current plan is to evaluate the role of methionine sulfoximine, a glutamine synthetase inhibitor that we have shown prevents the cerebral edema of hyperammonemia. To do this, I, as PI, submitted a grant to the NIH that would enable us to do human studies if current studies show that methionine sulfoximine can be given to man safely. "The story is, of course, had I not been measuring ammonia in sweat, I would not have developed drugs for urea cycle patients as I continue to do now.

"Go APS ! ! !" ❖

Wine Wizard

As I have previously noted, many of us are very thrifty folk, a flaw borne of necessity after years of scraping by, courtesy of NIH et al. Thus, each year, it is worth taking a look at the Charles Shaw wines, aka Two Buck Chuck. Recall that these are available only at Trader Joe's stores (try Traderjoes.com) and where I reside, in San Diego, they remain just $1.99 a bottle. Of great interest, the California State Fair recently awarded winning status to the 2005 TBC Chardonnay (which is the current release). In this competition, the wine beat out Chards costing more than 20 times as much.

Well, in my opinion, we got what we paid for this time and no more. I don't know what the California State Fair tasters were drinking (or, more likely, smoking) that day. Here are my notes on the current releases, of which I found five. Five bottles for $10.

2005 Chardonnay: The nose was OK, soft citrus and apple with a slight yeasty edge. The palate was nondescript and like so many other cheap whites. It was light in body, with light oak, generic citrus, slight perfume and vanilla and tasted slightly sweet – except at the finish which was a little hard and lean. It would just work as a summer backyard pool party wine, no more. I have no idea what the Caifornia State Fair judges were tasting. You may wish to try it just in case what I tasted and what those judges tasted represents bottle variation – you might just win the lottery.

2005 Sauvignon Blanc: On the nose, this wine had one of the three bad flaws I always hope I do not see in whites. (The three being sulfur, cork taint, and dirty wet socks (which may be a sulfur variant)). This one had wet socks. There was some lemon fruit as well. The palate also had the wet sock element, and the fruit was light and simple – slightly sweet melon and lemon character. None of rich herbal grassy features of the good SB's. Not recommended even at $2.

2005 Syrah: This wine also had some dirty sulfur (aka barnyard) on the nose with some earthy sweet vanilla and cherry as well. While the fruit was decent in intensity it was "berryish" and hard to identify as Syrah (or any other grape for that matter). It had good acidity but was a bit too tannic for the fruit. Not really recommended.

2005 Cabernet: Here we go again—stemminess and sulfur on the nose. The palate was again "berryish" and could not be identified as any particular grape. It was light in body and slightly sweet. I would not even use it for cooking, sorry.

Peter Wagner

2005 Merlot: There as a touch of stemmy green peppers (OK for merlot) and floral red cherry on the nose. At last, no sulfur. The palate had decent if generic red berry fruit, soft tannins and OK acid. It was simple and not varietal, but would do OK as a party red for folks who did not care about which grape was in the bottle. OK for $2.

I felt so guilty about this outcome I went a bit further this past weekend and found a couple of surprises for you:

Pepperwood Grove Old Vines California Zinfandel. $5. No vintage year on the label!! This wine comes from Sebastiani, a venerable Sonoma vintner, as an offshoot brand that declares the makers as the "Three Loose Screws". This refers to three Sebastiani kin who apparently are responsible for this brand. This Zin has a very nice nose of clean, sweet vanilla with loads of ripe but not overripe cherry and raspberry fruit. The palate is very accessible with cherry/raspberry fruit right out there, lots of vanilla, but it is made in a very easy to drink lighter bodied style with not much tannin. Acidity is perfect, there is no residual sugar, the alcohol is in check, and there is a touch of tobacco. The finish is also quite good. This is a remarkable find for the price, and should be widely available. The only suggestion is please drink it young – I am sure it will not age well.

2004 Pietra Santa Cienega valley Zinfandel ($10). While this may be hard to find, it is a nice drop. This is a very ripe wine, almost "late harvest" in style (which means very ripe, high in alcohol and with a touch of residual sugar giving it a slightly sweet taste). There has been a trend lately to produce ultra-ripe late harvest monster zinfandels, which I do not care for, and many are simply over the top. This one is close to the top, but not over it, and I do like it. There is intense sweet dark berry fruit on the nose and palate with a youthful slightly floral grapey note. Tannins are soft and the acidity is high, which helps balance the ripeness. Alcohol is 15.8%, which is getting up there. If you like ripe, alcoholic, slightly sweet zins with loads of good fruit, this is for you.

Those of you who patronize Costco know they have their own wine brand – Kirkland. Those of you who patronize Australian wines may be familiar with Sparky Marquis, an Australian winemaker known for voluptuous reds (reds, not redheads) under the recently disbanded Marquis-Phillips "Roogle" label. Roogle represents interbreeding of eagles and kangaroos – go figure. After Marquis divorced his USA partner Mr. Phillips (now "Roogle" means something), he has apparently taken up with Costco. I think they should call the wine "Coogle", or "Costaroo" but who am I to them? What is now available is:

2004 Kirkland "Roogle" Shiraz (10). This is sumptuous stuff, a big, oaky and alcoholic. Mae West style of wine, but the tannins are soft and acid is good. There is copious rich dark berry fruit. The only complaint is the amount of American oak manifest by lots of dill, but even this subsides a bit with airing. This is a wine meant to be drunk in its youth, but it could last a couple of years if well-cellared. Needs a strong red meat dish to make it shine.

2006 Martinborough Sauvignon Blanc $12. Another new Zealand show-stopper with all we have come to expect – herbal grassy gooseberry/passionfruit nose and palate with richness and excellent acidity. Squeaky clean and very, very easy to drink. Highly recommended, but as I have said before, if you can't find it, basically any New Zealand Sauvignon Blanc you can find will not disappoint you (if you like the NZ style of course). ❖

November 8-11

2nd Asia Pacific Congress on Controversies in Obstetrics, Gynecology and Infertility, Shanghai, China. *Information:* Comtec Headquarters & Administration, 53 Sderot Rothschild, PO Box 68, Tel Aviv, 61000, Israel. Tel.: 972-3-5666 166; Fax: 972-3-5666 177; Email: cony@comtecmed.com; Internet: http://www.comtecmed.com/cogi/china/.

December 17-18

Renal Cortex: Physiological Basis of Glomerular and Tubular Diseases, Bristol, United Kingdom. *Information:* Nick Boross-Toby, Head of Events, The Physiological Society. Tel.: +44 (0)207 269 5718; Fax: +44 (0)1207 269 5720 Email: meetings@physoc.org; Internet: http://www.physoc.org/meetings/bris2007.asp.

2008

January 30–February 3

Developmental Vascular Biology Workshop III, Monterey, CA. *Information:* Bernadette Englert, Tel: (301) 760-7745; Email: mailto:bernadette@navbo.org; Internet: http://www.navbo.org/dvb08Workshop.htm.

February 2-6

Joint Meeting of the Biophysical Society 52nd Annual Meeting and 16th International Biophysics Congress, Long Beach, CA. *Information:* Yvonne Butters, Biophysical Society, 9650 Rockville Pike, Bethesda, MD, 20814. Tel.: 301-634-7226; Fax: 301-634-7114; Email: ybutters@biophysics.org; Internet: http://www.biophysics.org/meetings/2008.

February 5-7

RACMEM 2008 - Recent Advances and Controversies in Measuring Energy Metabolism, Denver, CO. *Information:* Internet: http://www.uchsc.edu/racmem/.

February 17-21

9th International Symposium on Resistance Arteries 2008, Hamilton Island, Australia. *Information:* Internet: http://medicalsciences.med.unsw.edu.au/somsweb.nsf/page/9thISRA2008.

March 2-7

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

June 28-July 3

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

August 17-22

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

September 8-15

Cardiovascular & Respiratory Systems Modeling: From Cell to Organ, Seattle, WA. *Information:* Kay Sterner, The NSR Physiome Project, Box 355061, University of Washington, Seattle, WA 98915-5061; Tel.: 206-685-2005; Email: sterner@u.washington.edu; Internet: http://www.physiome.org/Course/sept07.html.

September 11-14

Workshop on the Biology of Signaling in the Cardiovascular System, Cape Cod, MA. *Information:* Bernadette Englert, Tel: (301) 760-7745; Email: mailto:bernadette@navbo.org; Internet: http://www.navbo.org/BSCS08Workshop.html.

September 28-October 2

XXII International complement Workshop, Basel, Switzerland. *Information:* Administrative Secretariat, ICW, C/O AKM Congress Service, Clarastrasse 57, PO Box 4005, Basel, Switzerland. Tel.: +41 61 686 77 11; Fax: +41 61 686 77 88; Email: info@akm.ch; Internet: http://www.akm.ch/ICW2008/.

October 30-November 2

The 2nd World Congress on Controversies in Diabetes, Obesity and Hypertension (CODHy), Barcelona, Spain. *Information:* Comtec Headquarters & Administration, 53 Sderot Rothschild, PO Box 68, Tel Aviv, 61000, Israel. Tel.: 972-3-5666 166; Fax: 972-3-5666 177; Email: cony@comtecmed.com; Internet: http://www.codhy.com/.

December 7-11

American Society for Matrix Biology (ASMB) 2008 National Meeting, San Diego, CA. Information: Program Chair: Bill Parks. Tel.: 206-897-1303; Email: parksw@u.washington.edu; Internet: http://www.asmb.net/.

PHYSIOLOGISTS

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