Career Opportunities in Physiology Committee

2011 Session Web Resources
Multimedia presentations for the EB 2011 Careers Symposium, “New Opportunities in Non-traditional Academic Positions” were edited and posted at the APS website and catalogued at the APS Archive of Teaching Resources for wide dissemination. Users can listen to a narrated PowerPoint presentation. The resources include:

- **Survey report from Department Chairs on Non-traditional Opportunities**, Thomas Cunningham, PhD, University of North Texas HSC at Fort Worth
- **Non-traditional Teaching Opportunities**, Kathryn M.S. Johnson, PhD, Beloit College
- **Non-traditional Research Opportunities**, Lakshmi Santhanam, PhD/Lacy A. Holowatz, PhD, Johns Hopkins University/Pennsylvania State University
- **Future Trends in Medical Institutions from Provost's Perspective**, Meredith Hay, PhD, University of Arizona

2012 Careers Symposium
In 2012 the COPC and Trainee Advisory, and Women in Physiology Committees coordinated the topics of their sessions to provide a complimentary set of career advancement sessions for physiologists. Committee members John Imig and Sonya Coaxum chaired the session entitled, “Do I Need Another Degree?” Speakers provided presentations about various additional degrees scientists are pursuing to increase their ability to be competitive for new job opportunities in science, including JD, MBA, and MPH, as well as internships.

2013 Career Symposium
In 2013, Committee members Sonya Coaxum and Lisa Leon will co-chair the Symposium, “Communicating Science to Non-Scientists: Keys to Funding and Visibility.”

Career Presentations at APS Conferences
In 2011, the Committee presented a 2-hour workshop at the APS Conference, “7th International Symposium on Aldosterone and the ENaC/Degenerin Family of Ion Channels: Molecular Mechanisms and Pathophysiology,” using materials from the Professional Skills Course. The workshop, “The “Ins” and “Outs” of Authorship,” was presented by Committee chair Thomas Schmidt and focused on how authorship on manuscripts is determined and engaged participants in an authorship case study. Schmidt also shared an overview of the career development resources offered by the APS, including the Professional Skills Courses.

In 2012, the Committee will sponsor a workshop at two APS Conferences: “Autonomic Regulation of Cardiovascular Function in Health and Disease” in July and “2012 APS Intersociety Meeting: The Integrative Biology of Exercise” in October. Irving Zucker, former APS President, will present “The Ins and Outs of Authorship” workshop in July, and Committee member Lacy Holowatz will present it in October.

Undergraduate Summer Research Fellowship Program
The 2011-12 UGSRFs completed their fellowship year by attending EB 2012 in San Diego, CA. Of the 24 fellows, 22 (92%) attended EB and 19 (79%) submitted an abstract. The 2011-12 UGSRFs, like those in the past, competed successfully in the David S. Bruce Excellence in
Undergraduate Research Award program, winning 6 of the 26 abstract awards and 4 of the 11 Bruce Awards.

2012-2013 Program
For the 13th year of the program, 55 applications were received, similar to many previous years. The quality of the applications was deemed very high by the Committee and they recommended 24 students for fellowships; these students were subsequently approved by Council. Thus, 44% of the applications were funded, which still allowed for high selectivity on the part of the Committee. For the first time this year, a Fellowship was awarded to a student working with a former UGSRF, who is now a faculty member. Over the 13-year history of the program, the program has received 650 applications for the 228 awards granted, with an average funding rate of about one-third (35%).

APS Undergraduate Research Excellence Fellowship Award
The UGREF Program annually will support 6 full-time 2nd – 4th year undergraduate students who have more than 6 months experience to continue to work in the laboratories of established investigators. Both students and faculty sponsors/advisors must be active members of the APS in good standing. These Fellowships provide a $4,000 summer stipend to the student (10 weeks support @ $10/hour), a $300 grant to the faculty sponsor/advisor, and a $1,300 travel award/reimbursement for the students to attend and present their data at Experimental Biology. Funding for the program is provided by the APS. Awardees will be selected by the Committee with subsequent approval by Council.

The UGREFs will complete interactive online assignments using Blackboard, exploring how to structure a research project/series of experiments and exploring/discussing physiology-related careers. These online activities and conversations have proven exceptional for the UGSRF program, with students discussing not only their research but also their hopes and concerns about their future careers and families. The UGREF activities will build on UGSRF activities, developing UGREF’s writing and presentation skills.

Announcement Process: A website has been developed for all APS undergraduate research fellowship programs (www.the-aps.org/ugawards) and includes a key for undergraduates to determine the programs for which they would be eligible. A specific website has been developed for the UGREF award as well (www.the-aps.org/ugref).

Undergraduate Orientation Session at EB
The EB 2012 orientation session attracted 75+ undergraduate students. All undergraduate students who submitted a first-author physiology poster were invited and announcements were posted in emails to the Trainee and All-APS listservs. Members of the Careers, Trainee Advisory, and Education Committees gave the session presentations. President-elect Susan Barman welcomed all of the undergraduate students and presented certificates to the UGSRF Fellows.

APS Local and Regional Science Fair Awards
Since July 2010, 31 requests for a Science Fair Award packet have been received from APS members. Thirty APS members have made science fair awards this year.
APS Careers Web Site
In 2011-12, the Education Office reconfigured the career website and resources to provide easier access to the growing set of professional development resources APS has developed for trainees. K-12 and undergraduate students will still find specific areas with career resources, biographies, and physiology exploration activities. For physiology trainees, a “Career Development and Mentoring Forum” provides one-click access to the diverse resources (webinars, EB symposia, Mentoring Forum articles, etc.) that APS has developed. Resources are sorted by topics, then by career level (graduate, postdoc, etc.).

Physiology Video Contest for Undergraduate and Graduate Students
The Committee received 11 submissions that met all of the criteria for copyright, permissions, etc. The applicants included both undergraduate and graduate students. The Committee selected “Cardiovascular Physiology for Grandma” by Seth Fairfax, Luise King, Jacqui Crissey, Douglas Oberlin and Leryn Boyle at University of Missouri – Columbia as the First Place winner and the Viewer’s Choice award went to “Exercise Physiology-Fisiologia del Ejercicio” by Facundo Mendes Garrido Abregú, Daiana Suarez di Salvo, and Sofía Aguirre at Universidad de Buenos Aires. The students who created the Exercise Physiology video used Facebook to widely promote their video, and they had nearly 6,000 views by the contest end at EB.

Excellence in Professional Student (MD or DO) Research Travel Award
The Professional Student Research Travel Award Program annually will support up to 10 MD or DO students who are first authors on abstracts to attend EB and present their research. Faculty sponsors/advisors must be active members of the APS in good standing. These travel awards provide up to $1,800 reimbursement of travel and registration to the student. Funding for the program is provided by the APS. Awardees will be selected by the Committee with Council approval.

The travel award is listed on the APS Awards site Announcements about the new award have gone out in the all-APS emails, to chairs of departments of physiology, any members in medical school departments, trainee and minority listservs, various APS Facebook pages and Twitter feeds, and will be in the August, October, and December issues of The Physiologist.

It is hoped that early engagement not only in research projects but with the APS community will encourage MD/DO’s to continue their involvement in both research and the Society. It should also build their appreciation for the importance of basic science training in medical school. The Committee will track application numbers and awards but will plan to survey awardees periodically (4-5 years) to determine whether they have continued to engage in research, publish papers, attend meetings, etc.