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Director's Matters

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Guest column by Liz Dart Caron, Director, Corporate Communications



2013 Assembly of Society Officers

Are we losing ground on minority representation in the physical sciences? All data gathered by the National Center for Education Statistics and AIP's Statistical Research Center unequivocally point to the affirmative. But how can this be, given that over the past 10 years the graduation rate among African Americans for bachelor's degrees (all majors) has gone up by 51% and among Hispanic Americans by a staggering 77%? In 2011, physics garnered three graduates from every 1,000 bachelor's degrees awarded, compared to one for every 1,000 African Americans. The geosciences fared even worse at 0.7:1,000. These data are representative of the hard truths that SRC Director Roman Czujko conveyed to the participants of the 2013 Assembly of Society Officers last Thursday.



Session I presenters, from the left: Toni Sauncy (chair), Willie Rockward, Ramon Lopez and Roman Czujko.

Ramon Lopez of the University of Texas at Arlington and Willie Rockward of Morehouse College spoke about the barriers to engagement faced by the Hispanic American and African American communities.

They also identified a set of activities that can create a climate for academic success. We learned that these communities both contend with cultural, financial, and precollege preparation issues, but these specific issues are distinct and must be considered separately. Innovative programs of particular institutions have shown a marked impact in their local communities. By paying close attention to the specific needs of the students, faculty can zero in on where their prospective majors are in their career

development and cater their curriculum and “extras” to guide them through to graduation. Precollege math preparation, online courses, redefinition of core courses, practical application tracks, close mentoring, partnerships with two-year colleges, and on- and off-campus paid research experiences are a few of the measures that are beginning to show tangible results at some institutions.



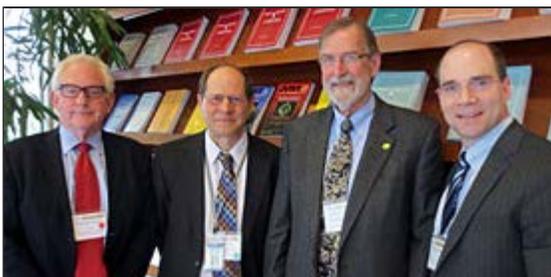
Session II presenters, from the left: Marlene Kaplan, Dot Harris, Claudia Rankins, Jim Stith (chair).

The underlying message is to be proactive! Dot Harris, DOE director of the Office of Economic Impact and Diversity, asserted, “If you do not intentionally include minorities, you will unintentionally exclude.” As DOE considers the disparate race representation in STEM fields to be a matter of national security, the agency in turn funds multimillion-dollar projects for consortia to develop and build specific, substantial, and sustainable technologies. Claudia Rankins of NSF and Marlene Kaplan of NOAA related their agencies’ extensive

programs to advance minority representation. Rankins emphasized the importance of physics education research and the need to find incentives for faculty to use innovative pedagogies and teaching strategies. Kaplan noted that NOAA has had outstanding success in cultivating individual minority students with a comprehensive package for success (tuition, paid internships, mentoring, travel, and housing allowances).

So, the big question was, “What can scientific societies do?” In panel discussions and breakout groups, society leadership told each other about their current efforts and considered what other steps might be taken, as individual societies and as a group of societies. A post-Assembly focus group will consider the findings and recommendations of the breakout groups and plan future steps.

Many of the participating societies were drawn to the Assembly’s afternoon sessions on publishing policy and science policy. Readers of *AIP Matters* are apprised of the developments in public access that have transpired over the past nine months in the UK and in the US. (See Fred Dylla’s recent articles of [February 25](#) and [March 4](#).) Brian Hitson of DOE’s Office of Science and Technical Information shared information about OSTI’s newest initiative called PAGES (Public Access Gateway for Energy and Science). Emphasizing the word “gateway,” he explained that PAGES will be a hybrid, distributed approach for public access to journal articles resulting from DOE funding. With identification of articles and provision of article metadata from [CrossRef’s new FunRef initiative](#), the access portal will offer decentralized access to full-text articles from various publishers’ websites.



Session III presenters, from the left: Graham Taylor, Fred Dylla (chair), Gene Sprouse (standing in for Joe Serene), and Brian Hitson.

Graham Taylor, who was involved with the Finch group deliberations on public access in the UK, said that the group’s decisive report, recommending a gradual but deliberate path to open access to published works from federally funded research, was based on their conclusion that change is inevitable. They ought to recognize this, embrace it and manage it. Their group assumed that a successful outcome would lead to better access to published research; financial sustainability for

publishers; affordable means for funders, universities, and libraries; and sustaining high-quality research and publishing services for researchers and authors. Joe Serene, publisher/treasurer of APS,

explained two collaborations involving APS. APS began its cooperation with arXiv.org, a free electronic archive for more than 800,000 research articles, in 1998. Despite its open-access-friendly policies, APS has apparently not felt financial repercussions; this is most likely due to the high quality of the full packages of APS publications that are usually subscribed to by libraries in entirety and the specific subfields covered within the arXiv repository. Another initiative, CERN's SCOAP3, which would offer open access to articles involving high-energy physics, appears to be an interesting experiment on open access, though questions remain about its financial support and stability.

The Assembly concluded with a celebration of the 25th anniversary of the AIP Congressional Fellows program. We heard from three past fellows, who explained how their congressional fellowship impacted their careers and the benefits of bringing science knowledge to Congress.



Current and past science policy fellows at the 25th Anniversary of the AIP program.

[I invite you to see the speaker's presentations, loaded on the Assembly website](#); notes from the breakout session will be posted next week.

Thanks to all of our excellent speakers and to the society leadership who contributed to the day's discussions.



From AIP Publishing

JCP Editor's Choice 2012



The editors at *The Journal of Chemical Physics* (JCP) facilitate publication of the most innovative and influential articles in the field of chemical physics each year. The editors have selected a few of the many notable JCP articles published in 2012 that present groundbreaking research. This collection is representative of the broad cross section of topics that the journal covers. These seminal [articles are freely available online](#) until the end of 2013.

Physics Resources Matters

Pew cites Inside Science in annual report on news media

The Pew Research Center's Project for Excellence in Journalism mentions Inside Science, produced by AIP's News and Media Services Division, in its State of the News Media 2013 report released March 18.

The widely read report provides an annual pulse on all parts of the news landscape, from local online news websites to national television broadcast networks, and offers numerous details about everything from advertising revenue to audience habits. As the report indicates, cuts in newsroom staff continue to reduce the number of reporters in specialized areas, including science. The report states: “While traditional newsrooms have shrunk, however, there are other new players producing content that could advance citizens’ knowledge about public issues.” The report points to InsideScience.org as one of several nonprofit news operations providing stories for use by traditional media outlets, which “would have once been covered more regularly and deeply by beat reporters.” The full Pew Report is available at stateofthemediamedia.org.

Member Society Spotlight

Member Societies engage policymakers in Congress



APS held their annual congressional visit day to give their members the opportunity to advocate for federal funding for basic scientific research. During these visits, scientists discussed the importance of robust support for research and development, and had the opportunity to answer questions about scientific research. In another day of advocacy on Capitol Hill, AAS, AVS, OSA, AGU, and APS staff and volunteers participated in the annual Science-Engineering-Technology Congressional Visit Day.

In support of both of these events, AIP Government Relations staff led groups of researchers around Capitol Hill and facilitated the discussions between Hill staff and visiting scientists.

Providing scientists with a background in the budget and political climate on Capitol Hill allowed the scientists to hone their message and better advocate for support for their research. As congressional offices are currently focused on managing tight federal budgets, it is important for scientists to have a seat at the table where they can participate in discussions about the budgets for their research; these visits provided a means for this conversation to take place.

Off the Press

SPS Observer, Winter 2012-13 issue



On the Cover: Top: Jocelyn Bell Burnell, a longtime friend of SPS, during her college years. Bottom: Aida Bermudez of Florida International University presents her poster at PhysCon 2012 in Orlando, FL. Photo by Ken Cole.

Coming Up

Wednesday, April 10

- Staff birthday breakfasts (Melville and College Park)

April 13-16

- APS April Meeting (Denver, CO)

Tuesday, April 23

- ACP Art Reception (College Park)

Thursday, April 25

- Lyne Starling Trimble Science Heritage Public Lecture, 6-8 pm.
Phil Schewe will discuss his new book, *Maverick Genius: The Pioneering Odyssey of Freeman Dyson* (College Park).

April 30-May 2

- STM Spring Conference (Washington, DC)

Thursday, May 2

- ACP Blood Drive