Director's Matters

For this week's issue I've asked Jennifer Greenamoyer of AIP Government Relations to interview Chris Spitzer, who recently completed his year on Capitol Hill as the AIP-AVS congressional science fellow. AIP sponsors fellowships to bring highly qualified, motivated individuals from the physical sciences community to Washington, DC, for a year to learn about and contribute to public policy. Fellows' scientific backgrounds influence their work in a congressional office or at the State Department, thus bringing the interests of the scientific community forward as our nation's public policy is developed. AIP fellowships are supported by specific contributions from Member Societies, including AAS, AVS, and ASA. APS, AGU, and OSA sponsor science policy fellows as well. Spitzer spent his fellowship working in the office of Senator Jeanne Shaheen (D – NH). He has much to share with the scientific community about his experience. —Fred

A year on the Hill

By Jennifer Greenamoyer, AIP Sr. Government Relations Liaison, and Chris Spitzer, 2010–11 AIP-AVS Congressional Science Fellow

What is your best advice to the science community about ensuring their voices are heard in Congress?

"First, in my experience the most effective advocates are those who understand how a congressional office works, and provide information and tools that are useful for policy makers. It’s better to provide a succinct summary and request a specific action rather than to ask for 'support' on a topic. Congressional staff are extremely busy, and if you can do some work to lighten their load, your issue is more likely to get attention.

"Second, it’s important to keep in mind that a Member’s constituents are their primary concern and that the narrative that you build around an issue needs to speak to the impact in a given district or state. There are a lot of good ideas out there—the ones that get attention are those where a senator or representative understands how it will affect the people that vote for him or her.

"Finally, you can’t be heard unless you speak! I think it would be great if more physicists became active in reaching out to their communities and elected representatives on the issues that concern them."

What insight did you gain into government relations and public policy?

"One of the most important lessons I learned was that public policy is built as much on relationships as it is on ideas. All the rigorous analysis in the world isn’t a substitute for a
recommendation from a trustworthy ally. Politicians often lack the background knowledge to understand the technical aspects of issues they need to make decisions about, but they do have exceptional skills at reading and understanding people."

**Over the past year the debates in Congress have reached a particularly high level of rancor. What place does science seem to have in today's politics?**

"I strongly feel that science plays a central role in informing the policy-making process. While the difficult financial environment has led to a lot of rancor, the United States still faces a huge range of challenges that can only be addressed with the help of science, and in a policy world dominated by rhetoric and unconfirmed hypotheses, science is one of the few 'honest brokers' of information."

**One of the purposes of the fellowship program is to enable fellows to gain a unique professional and educational experience. With all the debate this year about the debt ceiling, jobs, and the economy, do you think your fellowship experience was out of the ordinary?**

"I imagine that every year in Congress presents a unique set of challenges. This year the budget and debt ceiling definitely stole the show and made it difficult to have a public debate on the issues I covered, such as energy and science policy. However, I was impressed by how well the legislative process works once you get away from the senate floor. In my office's work on the Senate Energy and Natural Resources Committee, I was still able to spend the year learning how to develop strong legislation that has a broad base of support. This year might have been especially educational, as I needed to learn how to navigate the challenging political environment to develop bipartisan legislation."

After completing his year on the Hill, Chris opted to continue his work in policy. Chris currently serves as an AAAS Diplomacy, Security, and Development fellow, working at the State Department's Afghanistan and Pakistan desks.

AIP and our Member Societies have much to be proud of in our fellows. One former AIP congressional fellow became chairman of the Nuclear Regulatory Commission, one was a senior policy advisor to two secretaries of commerce, several others work as permanent Capitol Hill staffers, and many have positions in academia, industry, or at nonprofit organizations. These dynamic individuals bring a truly unique combination of science and policy experience to each position and serve as models and mentors for the next generation of science-policy specialists. We will soon introduce you to the new class of AIP science fellows in a coming issue of *AIP Matters*.

**Publishing Matters**

Capturing small matters

The AIP journal *Biomicrofluidics* (BMF) announces a video contest to draw attention to the exciting scientific merit of work conducted in microfluidics and nanofluidics.
"Small Matters" will also highlight the aesthetic and artistic qualities of the science. The communications challenge is to demonstrate a novel scientific concept in an elegant presentation, thus educating and intriguing the viewer. Finalists will be published in a special section of *Biomicrofluidics* and one grand prize winner will be chosen to receive an iPad. The submission deadline to enter the contest is April 30, 2012. Winners will be announced at The Third Conference on Advances in Microfluidics and Nanofluidics in Dalian, China, in May 2012. Visit the [BMF website](http://www.bmf.org) for submission guidelines.

**Physics Resources Matters**

**Record-breaking year**

The academic year 2009–10 produced more physics bachelor's than in any other year in US history. The 6,017 physics bachelor's degrees earned in the class of 2010 represent a 65% increase from the class of 1999 eleven years earlier. Even with this recent record-setting growth, the number of students receiving undergraduate physics degrees is still relatively small. Only about one-third of 1% (or 1 out of every 270) of all bachelor's degrees conferred in the United States is awarded in physics.

These data are published in a report titled [*focus on Roster of Physics Departments with Enrollments and Degree Data, 2010*](http://www.aip.org/data/roster/2010). The roster contains detailed departmental-level data from the annual AIP Survey of Enrollments and Degrees. These data are frequently used by physics departments to compare their size relative to other departments in the country.

**PT subscription cards boost circulation**

After a five-year hiatus, *Physics Today* again started including subscription cards in each issue. Since the cards were reintroduced in March, individual nonmember subscriptions have increased 16%, which translates to additional revenue. Of the 120,000 copies sent to subscribers each month, roughly 86,000 of them get passed around to coworkers or shared in common areas, according to readers' surveys. The cards provide a quick and easy way for those additional readers to get their own subscription.

**Off the Press**
Coming Up

Sunday–Monday, October 2–3
- AIP Journal Editors meeting (College Park, MD)

Wednesday, October 5
- ACP blood drive, 10 am–3 pm (College Park, MD)