

## Director's Matters

By H. Frederick Dylla, Executive Director

### Need some good news?

For most of the Northern Hemisphere, the pace of activity slows down in August. Much of the working world tries to squeeze in a vacation, many governments take a break, and academia takes a few more summer breaths before the start of the fall term. The latest tremors in the world's economy, continued turmoil in the Middle East, the famine and conflict in Somalia, and surprising unrest in England have rattled our consciousness. That spate of bad news cries out for some positive news. I welcomed the minor splash that the impressive winners of Google's inaugural science fair were able to make in the national press. More than 10,000 students from 91 countries joined the online competition, and the top three winners were young women from the United States. Theirs is a reassuring story that highlights the opportunities in science available to young people. And it counters the misconception that young women have neither the interest nor the DNA to excel in science.

One of AIP's science correspondents, Steve Corneliusen, reported for [Physics Today Online](#) on the national coverage of the story, including an article published in the [New York Times](#) on July 18. Almost a month later, the reporter's characterization of the grand prize winner, Shree Bose, a 17-year-old high school student from Fort Worth, TX, still has me captivated with her achievements and her obvious fascination with scientific discovery:

*"As a budding inventor and scientist, Shree Bose, in second grade, tried to make blue spinach. In fourth grade she built a remote-controlled garbage can. In eighth grade she invented a railroad tie made out of recycled plastic and granite dust, an achievement that got her to the top 30 in a national science competition for middle school students.*



*In 11th grade Ms. Bose ... tackled ovarian cancer, and that research won her the grand prize and \$50,000 in the Google Science Fair...*

*For the winning research Ms. Bose looked at a chemotherapy drug, cisplatin, that is commonly taken by women with ovarian cancer. The problem is that the cancer cells tend to grow resistant to cisplatin over time, and Ms. Bose set out to find a way to counteract that.*

*She found the answer in a cellular energy protein known as AMPK ... [that] added later on, when the cancer cells were growing resistant, ... worked to maintain the effectiveness of cisplatin, allowing it to continue killing the malignant cells."*

Such a finding would pass muster for many an NIH postgraduate research project. This young lady will no doubt have an even more productive research career as she passes rapidly through undergraduate and graduate training and joins the scientific workforce. But she has already contributed to the body of science.

This anecdote calms my nerves during our current period of angst because it tells me that this country still provides plenty of opportunity for bright kids to discover and excel in science. As a Sputnik kid growing up in the 1950s and 1960s, I was afforded many opportunities to be exposed to science, from being given free samples of some of Bell Lab's first transistors, to meeting engineers from RCA who helped me build a laser with "loaned" parts, to a very patient high school biology teacher who let me study physics instead of biology because I liked the subject better.

Shree Bose no doubt has very supportive parents and teachers who have let her grow her passion for science from a young age. Our nation and the rest of world benefit from students of science who always find the means of feeding their passion for this enthralling human endeavor.

## PUBLISHING MATTERS



### JCP's new section: "Advanced Experimental Techniques"

A new section in *The Journal of Chemical Physics* (JCP) debuted last month to highlight significant breakthroughs in experimental methodologies that are likely to open new avenues of research. Through "Advanced Experimental Techniques," JCP aims to greatly increase the visibility of this groundbreaking work within the chemical physics community. The first papers published in this section illustrate a few of the many recent developments that are propelling the field forward:

- **Nandini Mukherjee** and **Richard Zare** propose an innovative optical pumping method for preparation of polarized molecules in the gaseous phase;
- **Robert Field** and coworkers develop a new broadband Fourier-transform technique for high-resolution spectroscopy in the millimeter-wave region; and
- **Darren Segale** and **Vartkess Apkarian** introduce a spectrally resolved, four-wave mixing scheme to interrogate vibrational coherences in the condensed phase.

### More from JCP: Communications articles' time-to-publication drops by more than 30%

The JCP Communications section of the journal features concise, timely reports on important findings in chemical physics. JCP Communications have high impact; many of those published in the past two years have reached JCP's monthly Top 20 Most Downloaded list. Given the time-sensitive nature of these vital new results, editorial staff adopted a new policy earlier this year that calls for priority handling of all Communications. Since the policy was instituted, JCP has reduced the time-to-

publication for Communications by more than 30%.

## PHYSICS RESOURCES CENTER MATTERS

### Estate Planning: The best option when the economy is in turmoil

Since September 2010, the development division has been undergoing a restructuring that includes not only expanded outreach to our private sector supporters but also more information and services to internal and external constituencies. To that end, one area worthy of exploring, one we are all hesitant to discuss, is planning for after our deaths—particularly providing security for our families and for the missions we care deeply about. How you plan today will impact the lives of your loved ones and help continue the great work of many organizations. Although it is impossible to know or control what happens in the future, you can have security about achieving your ultimate goals by making a plan.

Estate planning can have an impact during our lives as well as after. Different types of planning vehicles include wills, life insurance, living trusts, IRAs, and annuities. Chief Development Officer Richee L. Smith, Esq., has drafted a brief article about each of these options; it discusses what ought to be considered when planning your estate and addresses charitable bequests and gift annuities. Staff can access the [document on AIP|InSite](#), other readers may [contact Smith for the full article](#).

### Ben Stein (re)joins AIP as editorial manager of ISNS



AIP welcomes Ben Stein to the News and Media Services staff. Ben will provide primary leadership for Inside Science News Service (ISNS), a service that distributes science news stories to news outlets around the country in an effort to grow the general public's understanding of and appreciation for science. As manager of the ISNS staff, Ben will guide the development of ISNS and coordinate the work of other writers and editors to ensure steady production of high-quality content.

Since August, 2007, Ben has served as director of media relations in the public affairs office of the National Institute of Standards and Technology in Gaithersburg, MD. Ben is also well acquainted with the AIP community. Previously, he worked at AIP for 16 years, including his role as manager of Member Society media services. Ben holds a master's degree in journalism from the New York University Science & Environmental Reporting Program with a Certificate in Science & Environmental Reporting and a bachelor's degree with honors in Physics from the State University of New York, Binghamton.

## AROUND AIP

### What have you been up to?

There is a feature of the Employease Network that allows us (and you) to track your education and professional development. If you have attended a workshop or seminar in the past few years, your records should be updated with this valuable information. Sign into the [Employease Network](#) and click the "Work Info" tab. From the drop-down menu, click "Training/Certificate" and "Update Information." Enter the title of the training

and then "Save Changes." You will see a "Pending Approval" message immediately. The entry will be accepted as soon as you submit a copy of your training certificate to Human Resources. Contact [Judy Rance](#) or [Donna Jones](#) if you have any questions.

## WHAT'S HAPPENING THIS WEEK

Tuesday, August 16

- Brown Bag Lunch on "Estate and Disability Planning" (Melville, NY)

Wednesday, August 17

- Blood Drive (Melville, NY)

Through Monday, August 29

- ACP school supply drive (College Park, MD)

We invite your feedback to this newsletter via email to [aimatters@aip.org](mailto:aimatters@aip.org).

For past issues of this newsletter, visit the [AIP Matters archives](#).