

SCIENCE POLICY AND SOCIETY

Providing objective, authoritative information and expertise to help guide science policy is a key goal for AAAS. The Association's Science and Policy Programs staff worked in 2008 to raise the quality and volume of public discourse about science and technology as U.S. voters evaluated presidential candidates. The group also helped to initiate productive dialogue with science leaders in other regions of the world, and leveraged science in support of human rights.



Science and the U.S. Presidential Election

Amid hard-fought campaigns for the U.S. Presidency, AAAS science-policy experts painstakingly compiled non-partisan, side-by-side comparisons of the various candidates' views on science and technology issues. A special Web site, developed in partnership with the Association of American Universities and supported by the Richard Lounsbery Foundation, allowed voters to evaluate each candidate's S&T plan for addressing energy and environment issues, improving science education, and boosting U.S. competitiveness. AAAS also organized an Annual Meeting session, moderated by *New York Times* columnist Claudia Dreifus, where candidates' representatives held forth on the energy crisis, federal research funding, and more. In September, campaign advisors took part in a health-care debate at yet another AAAS event, co-sponsored with the Scientists and Engineers for America. AAAS meanwhile teamed up with the Science Debate 2008 coalition, urging candidates to take part in a national debate on science and technology. "Let's demand more answers," AAAS wrote in the *St. Louis Post-Dispatch*, in one of several opinion essays on the U.S. presidency. "At its core, after all, science is an economic matter that cuts across party lines." See <http://election2008.aaas.org>.

35 Years of Policy Fellows

The most diverse and largest-ever class of AAAS Science and Technology Policy Fellows included a biochemist who has worked to isolate anti-tumor agents, a gifted high-school physics teacher, and a neuroscientist who happens to be the granddaughter of former U.S. President Jimmy Carter. Kiki Jenkins, one of 165 fellows named in 2008, joined four other S&T Policy Fellows in organizing a career-building workshop on diversity in science and engineering. The event drew participants from government, academia, nonprofits, and industry, including speaker Rep. Eddie Bernice Johnson (D-Texas).

Since the program's inception in 1973, S&T Policy Fellows have helped to tackle pressing world problems ranging from world hunger and disaster preparedness, to food safety, biological threats, and the energy crisis. A total of 2,146 Fellows have so far completed year-long placements in the halls of Congress and in the offices of 20 executive branch agencies and departments. Alumni of the program, headed by Cynthia Robinson, now include U.S. Rep. Rush Holt (D-New Jersey), who has described the AAAS initiative as "one of the most important programs in the United States of America." Similarly, Jay M. Cohen, Undersecretary for Science and Technology at the U.S. Department of Homeland Security, said the

Fellows “are extremely important” to his department. “They are our future,” he said at a 35th anniversary event. “It is a great program.”

Scientists Working for Human Rights

Satellite images captured before and after the 7-8 August 2009 clash between Georgia, South Ossetian separatists, and Russia revealed that 424 civilian structures in 24 villages near the city of Tskhinvali were damaged by 19 August, although they appeared intact in images taken on 10 August and earlier, reported Lars Bromley of the AAAS Science and Human Rights Program. “Imagery analysis on South Ossetia revealed discrepancies between official accounts and what actually transpired as the satellites were overhead,” said Bromley. Ariela Blatter of Amnesty International USA, which requested the analysis, noted that the AAAS research “highlights the need for the international community to undertake an independent investigation of abuses during the conflict, with the complete support of all parties involved.” Bromley and colleagues previously had assessed destruction in Zimbabwe, Darfur, Burma, and elsewhere.

Exploring other applications of technology, the AAAS Science and Human Rights Program, directed by Mona Younis, co-hosted a May 2008 International Summit for Community Wireless Networks, along with the New America Foundation, the CUWiN Foundation, and the Acorn Active Media Foundation. The program also launched “On-call Scientists,” connecting scientists and engineers interested in volunteering their skills with human rights organizations in need of expertise. Log onto <http://shr.aaas.org>.

A Forum for Optimism

“We — all of us — must make the case, day in and day out, why all science, research, technology, and innovation must be among the nation’s highest priorities again,” John Edward Porter, former Republican Congressman from Illinois, said during the 2008 AAAS Forum on Science and Technology Policy. Porter’s speech reflected a prevalent view: Attendees and speakers alike reported being frustrated by political inertia related to U.S. policies on innovation, climate change, stem cell research, energy, and more. Yet, with a presidential election looming, participants also expressed high hopes for confronting what speaker James Canton of the Institute for Global Futures described as an “extreme future,” with 95% of the world’s 8 billion people living in developing nations.

Porter, Chair of the Research!America health advocacy group, urged scientists and engineers to make their voices heard in the White House. The 33-year-old Forum, regarded as the premier event of its kind in the United States, provides a timely annual “snapshot” of American science policy. The 2008 Forum attracted more than 500 policy-makers, researchers, reporters, and others. Details are online at www.aaas.org/forum.

Personalized Medicine – Promises and Challenges

Decoding the human genome has raised the possibility that researchers can tailor diagnostic tests and treatments to a person’s individual genetic profile. Such “personalized medicine” has been touted as the next revolution in health care, but progress has been limited, and further advances will require policy changes, expert Mark B. McClellan said during a 20 June AAAS conference, co-organized with the Food and Drug Law Institute. “It is a very challenging environment,” said McClellan, former Commissioner of the U.S. Food and Drug Administration and Director of the Engelberg Center for Health Care Reform at the Brookings Institution. “The potential payoff is tremendous.” The conference, encompassing such thorny issues as patient privacy and reimbursement reform, was the first in a planned series related to personalized medicine. See www.aaas.org/spp/sfml.

Supporting Competitiveness Worldwide

When leaders of the King Abdulaziz City for Science and Technology wanted to improve the region’s research competitiveness, they called on Edward G. Derrick, Director of the respected AAAS Research Competitiveness Program. Established in 1996, the program helps researchers, universities, research institutions, and state government agencies sharpen their competitive edge. Launched with a grant from the U.S. National Science Foundation’s Experimental Program to Stimulate Competitive Research as a way to help states receiving minimal federal support, the program is now an international service. In 2008, Derrick and colleagues provided support for groups in 11 states as well as the King Abdulaziz City for Science and Technology. They also helped to arrange for review of proposals to the Environment Protection Agency’s P3 (people, prosperity, and the planet) program. An event in Vietnam on “Connecting Research and Innovation” (referenced on page 6) further extended the program’s global reach. See www.aaas.org/rcp.