

Policy and Society

AAAS promotes increased support for research and development (R&D) by remaining alert to relevant policy events, and by assisting policy-makers as a trusted, authoritative source of objective analysis. Throughout 2006, AAAS offered testimony and sent letters to lawmakers as well as influential media outlets regarding federal research funding and key proposals. Continuing contributions to science policy include a prestigious fellowships program and guidance regarding research competitiveness and the responsible use of science in society.

All-Star Forum Lineup

More than 500 scientists, policy-makers, educators, students, and others took part in the 31st annual AAAS Forum on Science and Technology Policy in Washington, D.C., showcasing a closely watched R&D analysis and an all-star lineup of Capitol Hill insiders. A deep partisan divide would leave 2007 research allocations in limbo, experts warned, while falling short of proposals. John H. Marburger III, director of the White House Office of Science and Technology Policy (OSTP), acknowledged constraints, but predicted that the President's proposed American Competitiveness Initiative would "assure the future economic competitiveness of our nation."

Kei Koizumi, director of the AAAS R&D budget program, unveiled his highly regarded annual analysis of the U.S. Administration's budget proposal: "In this very tight budget, for every increase, there would be steep cuts elsewhere." He predicted that the trend would continue for several years, with some agencies facing real cuts of 10 to 30 percent and "fierce competition" for 2007 research dollars. G. William Hoagland, director of budget and appropriations for Senate Majority Leader Bill Frist (R-Tenn.), said that the Iraq war, hurricane relief, and a tax-reduction measure had all strained the 2006 budget, significantly increasing the 2005 federal deficit of \$319 billion. See www.aaas.org/forum.

Policy Fellows at the Forefront

The AAAS Science and Technology Policy Fellowships program, involving some 2,000 scientists and engineers since 1973, has seeded top-level positions on Capitol Hill and in academia, and continues to promote innovation and international cooperation. In 2006, for example, a small group of AAAS S&T Fellows helped unveil the Iraqi Virtual Science Library (IVSL), with a goal to deliver millions of full-text scientific articles from 17,000 science and engineering journals to Iraqi researchers and students.

"The IVSL is an excellent example of the creativity and collaboration that has been a hallmark of the Fellowships for more than 30 years," said Program Director Cynthia Robinson. "AAAS Fellows serve as catalysts."

As another example, Former Diplomacy Fellows Marsha Goldberg and Fernando Echavarría organized a forum on geographic information systems (GIS) and sustainable urban development in Amman, Jordan. Such events "can assist people living in the Middle East in dealing with the critical and extremely complex challenges that characterize the region in the political, social, and economical realms," said Nidal Saliba, GIS manager for the Water Authority of Jordan. That, in turn, promotes the "enhancement of people's everyday lives." See www.fellowships.aaas.org.

Dialogues on Evolution

Featuring a fictional college student who struggles to reconcile her traditionalist Christian upbringing with her scientific interests, *The Evolution Dialogues*, a book from the AAAS Dialogue on Science, Ethics, and Religion (DoSER), offers a path toward common ground on evolution.

The new resource and a related study guide are part of the Association's broader response to the evolution issue. Also in 2006, DoSER staff met with evangelical leaders, scientists, and other constituent groups to begin planning AAAS efforts over the next five years. Father George V. Coyne, director of The Vatican Observatory, provided a moving public lecture at AAAS on how modern science has revealed a cosmos shaped by the interplay of randomness and necessity over the past 14 billion years. Speakers at yet another DoSER event called for greater educational emphasis on scientific evidence as well as proactive responses to anti-evolution efforts.

Extending DoSER's contributions, the AAAS Center for Public Engagement with Science and Technology organized a town hall meeting, "Evolution on the Front Line,"

for 500 educators and others in St. Louis, Mo., and published more than a half-dozen op-ed pieces in regional newspapers in 2006. See www.aaas.org/spp/dser.

S&T Leadership from AAAS

According to David Kay, former chief U.S. weapons inspector in Iraq, focusing on massive weapons systems and state-to-state conflict could leave the United States ill-prepared to address terrorist and nuclear rogue-state threats. Kay — one of many leading experts to speak during the third annual AAAS Leadership Seminar in Science and Technology Policy — argued that institutions and world views dating to the Cold War still dominate U.S. policy planning, which should focus more on improving on-the-ground intelligence resources and securing weapons stockpiles. Other influential speakers at the 2006 AAAS S&T Leadership Seminar were: David Rejeski, director of the Project on Emerging Nanotechnologies at the Woodrow Wilson International Center for Scholars; Rachel E. Levinson, formerly assistant director for life sciences at OSTP; Bob Simon, currently minority staff director on the U.S. Senate Committee on Energy and Natural Resources; and author and space scholar Howard McCurdy.

Launched with a grant from the William T. Golden Endowment Fund for Program Innovation, the S&T Leadership Seminar offers a crash course in the workings of the U.S. White House, Capitol Hill, budget-making, lobbying, and the federal science bureaucracy. See www.aaas.org/spp/leadership.

Science Ethics and Integrity

Practices that pose a serious threat to the integrity of science and public trust in the scientific enterprise, from falsification, fabrication, and plagiarism to more subtle ethical breaches, were a focus during the 2006 AAAS Forum on Science and Technology. At another event, organized by the AAAS Scientific Freedom, Responsibility, and Law (SFRL) program, scientists, and ethicists weighed the impacts of human enhancements such as steroid use by athletes, implanted devices for treating depression, and the possibility of genetic manipulations to prolong human life. The SFRL program, which helps to uphold high ethical standards for science and engineering, also



teamed up with the National Center for State Courts and the Federal Judicial Center in 2006 to convene judicial seminars on “Emerging Issues in Neuroscience.” A new book, *Wrestling with Behavioral Genetics*, and the results of a project on “Challenges of Ethics Consulting in the Biotechnology Industry,” were released, too. See www.aaas.org/spp/sfrl.

Influencing U.S. Science Policy

AAAS science policy experts routinely seize opportunities to influence U.S. research funding, human embryonic stem cell research, global climate change, the free and open exchange of information, and other key issues, while working with colleagues Association-wide to promote international research, too. “Real-time, day-by-day tracking of legislative proposals allows us to provide timely, objective information, and that heightens the impact of all our U.S. policy work,” explained Joanne Carney, head of the Center for Science, Technology and Congress. As outlined on pages 4–5, policy efforts work in tandem with letters to policy-makers and op-eds as well as briefings and more. See www.aaas.org/spp/cstc.