SCIENCE AND POLICY

AAAS Colloquium Examines President's R&D Budget

The terrorist attacks of September 11 provided much of the context for the AAAS 27th Annual Colloquium on Science and Technology Policy, which opened 11 April with a keynote address from John H. Marburger III, Director of the White House Office of Science and Technology Policy.

In a prepared statement he gave before a gathering of more than 500 scientists and policy-makers at the Omni Shoreham in Washington, DC, Marburger noted the importance of science and technology in combating terrorism, but pointed out that many of the tools have already been developed. "By far the greater challenge would be to define the specific tasks we want the technology to perform, and to deploy technology effectively throughout the diffuse and pervasive systems it is designed to protect."

The purpose of the annual colloquium is to provide a forum to discuss and debate the federal budget and other matters relating to science and technology policy. The event draws the nation's top S&T policy experts. The theme this year, "Science and Technology in a Vulnerable World: Rethinking Our Roles," arose from concerns about how science might respond appropriately to the nation's need for homeland security and national defense.

"The events of September 11 brought starkly to the public's attention the extent to which science and technology can be misused to inflict harm, or used for the good of society," said Alan I. Leshner, CEO of AAAS. "These attacks confront us with the need to bring the full power of science to bear on protecting our country and its well-being. Nonetheless, it's important not to fall behind in other areas of research, particularly the basic sciences that have fueled so much of our economic success and improvements in health and quality of life."

According to the AAAS analysis (www.aaas.org/spp/dspp/rd/rd03main.htm), the President's proposed budget would continue to focus on a "missiles and medicine" approach to R&D funding, with almost all other research funding remaining flat. Total R&D funding would increase to a record $112 billion, or $8.9 billion more than appropriated for FY 2002, but virtually all the additional funds will go to the Department of Defense ($5.2 billion) and the National Institutes of Health ($3.7 billion). The AAAS report notes, however, that the NIH funding proposal is following a 5-year trajectory agreed to by Congress and the Clinton Administration to double the agency's budget by 2003. NIH would receive a 16% increase in its R&D funding to $26.5 billion If NIH is excluded, R&D that is not related to defense would fall by 0.2% to $26.8 billion, a loss of $56 million, according to the AAAS report.

M. R. C. Greenwood, the Chancellor of the University of California, Santa Cruz and former AAAS president, questioned the priorities that the proposed budget reflected. She said new allocations in the budget would diminish the funding available for existing university research programs, and noted her opposition to the administration's proposal to track foreign students to reduce the threat of terrorism.

"History shows us that perceived risk changes our national security policy, and always has," said Greenwood, who gave the William D. Carey Lecture the evening of 11 April. "These changes are risky business for research universities."

In his talk, Marburger also noted that the federal government should do more to fund social science research, and expressed his concern over the country's ability to maintain its science and technology workforce.

On the second day of the Colloquium, there were several sessions, among them one on controversial research topics, which considered whether such research should be banned, and another on conflict-of-interest issues in research settings, and the challenges to governments from rapid developments in technologies. Key speakers included Senator Pat Roberts (R–KS); Benjamin H. Wu, Deputy Under Secretary for Technology at the Commerce Department; and Lee Hamilton, former Member of Congress and current Director of the Woodrow Wilson International Center for Scholars.

SCIENCE AND ART

Art Draws on Nature to Connect with Science

Sally Dillon's artwork reflects her ambivalence over her decision to leave the sciences to study art when she was a college student. Geological formations and cellular structures are among the themes she weaves into the silk quilts that now hang in the first-floor gallery at AAAS.

Leaves in Vines (detail) by Ming Sun

Dillon's quilts will be on display at AAAS through 22 May 2002, as part of an exhibit that includes the work of DC artist Ming Sun.

A professional fiber artist, Dillon has exhibited her work nationally and internationally. Her hand-painted quilts, silk scarves, and clothing reveal a life-long interest in maps, aerial views, and patterns in nature. She stretches the highest quality white silk over frames, then draws a resist line with wax before applying French dyes with soft watercolor brushes. The silk is then dried, steamed, washed, and dry-cleaned before being assembled into unique wall hangings.

Ming Sun makes her collage constructions from natural materials she finds on sidewalks, in gardens, and in parks. She assembles natural materials like twigs, branches, leaves, and seeds in a three-dimensional format, and then arranges them so they project from a background surface. Sun also works as a freelance art director and photo stylist, and has created the artwork on 15 books for Dover Publications.

—MONICA AMARELO