

Year in Review: 2005

WELCOME FROM THE CHAIR, SHIRLEY ANN JACKSON, AND THE CEO, ALAN I. LESHNER

In a global economy, our prosperity, safety, and overall well-being depend more than ever upon our capacity for innovation. Geopolitical tensions, exacerbated by an uncertain energy future, underscore the need to step up the pace of fundamental scientific discovery. In the United States, unfortunately, a quiet crisis confronts us as scientists and engineers are retiring in record numbers and too few students enter the pipeline.

We were encouraged, therefore, when the U.S. Administration responded forcefully to letters from many individuals and organizations, including AAAS and Rensselaer Polytechnic Institute, to further both economic and national security by sparking a legacy of innovation. When the U.S. President announced his American Competitiveness Initiative — a proposal for allocating more than \$136 billion over 10 years to increase investments in research and development, education, and innovation — it echoed and built upon an array of efforts that gained significant momentum throughout 2005.

At each step, AAAS sought to use its leadership position to leverage impact, institutionally and through the work of its Board of Directors, staff, and members. AAAS officers contributed to and helped to promote the recommendations made in both the Innovation Initiative of the Council on Competitiveness and the influential report of the National Academies, *Rising Above the Gathering Storm*. We were, in fact, intimately involved in the preparation of both reports. AAAS also continued in 2005 to voice concerns about the need to avoid a “taking turns” approach to investing in U.S. science and engineering, as our budget analyses once again revealed that most U.S. science agencies face deep budget cuts over the next five years.

Investment in innovation is urgently needed at home, but also to address problems beyond the U.S. borders. At least a billion people live in extreme poverty, trying to survive on less than a dollar per day. HIV is running rampant, particularly in sub-Saharan Africa and other impoverished regions. And, natural disasters hit the poor hardest, as we saw with the 2004 tsunami and the 2005 hurricanes that caused profound suffering in the United States, Mexico, the Caribbean, and elsewhere. The real goal thus is not simply to achieve global preeminence in science and engineering. Rather, we at AAAS believe that the more critical question is whether we can help the world solve global problems by helping to promote international collaborations and science in the service of human rights.

AAAS helped promote multi-national research in 2005 by joining other scientific leaders in calling for enhancements to the U.S. visa system. Changes were proposed to dispel the myth that the United States does not welcome international researchers, yet while maintaining tight security controls needed in the post-9/11 era. Similarly, AAAS urged and then applauded the repeal of a boycott of Israeli universities.



Shirley Ann Jackson, *Chair*
and Alan I. Leshner, *CEO*

Closer to home, other threats to the integrity of science in 2005 included efforts to insert nonscientific concepts such as “intelligent design” into U.S. public science classrooms, alongside the well-supported theory of evolution. Climate research triggered a similar trend, first with a Congressional inquiry that sought to intimidate respected scientists who have provided evidence to show that the Earth is warming, then with various proposed state bills prompting students to critically assess the validity of scientific theories, but only those related to evolution or climate change.

When so many practical challenges confront our society, we can’t risk confusing children about what is and is not science. We also can no longer afford to ignore the silent majority — women, underserved minorities, and persons with disabilities — who represent a vast and largely untapped potential talent pool.

As the chronology on pages 4–5 demonstrates, AAAS is rapidly responding to the evolution issue wherever it emerges, through a middle-ground approach that seeks to protect the integrity of science education, but without pitting science against religion. The Association continues its efforts to clarify the issues surrounding stem-cell research and global climate change, too, while promoting diversity in education and in the workforce.

In 2005, all AAAS programs began to work in closer concert with our overarching goals to engage with the public on issues related to science and technology. We also re-doubled our efforts to provide cradle-to-grave career support for scientists and engineers.

Summaries on the following pages illustrate the breadth and impact of AAAS programs in the areas of science education, science policy, and international initiatives. We look forward to achieving ever-more meaningful impacts in these and other areas as AAAS seeks new ways to fulfill its mission of advancing science and serving society.

Two handwritten signatures are shown. The signature on the left is for Shirley Ann Jackson, and the signature on the right is for Alan I. Leshner.

Shirley Ann Jackson

Alan I. Leshner