



OUR GOALS

ENHANCE THE SCIENCE AND TECHNOLOGY WORKFORCE AND INFRASTRUCTURE

A well-trained and supported science and technology workforce is essential to the continued vitality of the science and technology enterprise and to its contributions to society. To maintain the quality of that workforce over time requires sustained efforts at all stages of the educational pipeline. AAAS focuses attention on the recruitment, training and retention of scientists and engineers, as well as working to ensure adequate resources to sustain their work. Young scientists in particular need help identifying sources of support for both their education and their research projects.

IN PURSUIT OF THIS GOAL, AAAS IMPLEMENTS THE FOLLOWING STRATEGIES:

Support for Young Scientists

AAAS supports young people with a number of websites, fellowship opportunities, and other services, offering advice and information on financial aid, grants, graduate school, and how to change careers. AAAS also conducts career fairs and workshops, and provides forums and fellowships for undergraduate and graduate students, as well as for professional scientists and engineers. A website, *Science's Next Wave*, offers information on scientific training, career development, and the science job market.

Increasing Diversity

Women, African Americans, Hispanic Americans, and Native Americans, as well as persons with disabilities, are among the underrepresented in the science and technology workforce. AAAS is a recognized leader in developing and providing programs and resources to encourage under represented groups to pursue science and technology careers at the highest levels. AAAS advises institutions on training and retention of scientists and engineers, and promotes ways of making that workforce better educated and more diverse.

STRATEGIES IN ACTION

The activities described below are among the AAAS initiatives that demonstrate the Association's commitment to enhancing the science and technology workforce, and to making it more diverse.

Online Effort to Raise Number of Minority Scientists

Launched with the purpose of diversifying the ranks of the nation's top scientists, the Minority Scientists Network, a new AAAS web site, is creating an online community of students, mentors, and administrators. At the heart of MiSciNet are individual voices, sharing personal experiences. These snapshots offer a glimpse into the private pathways chosen by successful minority scientists, and the strategies that effectively help keep them on course. Student essays, in particular, reveal the obstacles that may confront underrepresented scientists, and their tactics for overcoming prejudice and for resisting efforts to keep them from moving forward.

"I am very happy now, doing science policy at the national level and learning how the big decisions in science are made," says Joan E. Esnayra, a Native American scientist in an essay on MiSciNet. "When I reflect back on the faculty in my graduate program, I realize they were just little fish in a little pond. I, on the other hand, have become a fearless and tough fighter. And I am afraid of no one."

Jobs for Young Scientists with Disabilities

For 25 years, AAAS has worked to bring young scientists with disabilities into the workforce. Its most recent effort is a program known as ENTRY POINT!, which has served as a bridge into jobs in engineering and sciences in both the public and private sectors since 1996. The men and women who take part in the program are either blind or deaf, or they may use wheelchairs or have learning disabilities. But their disabilities do not define them, and have not stopped them from taking jobs as biologists, computer scientists, mechanical engineers, and aerospace scientists.

The ENTRY POINT! program—which received a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, through the National Science Foundation—now claims some 200 alumni. An estimated 92 percent are either working on science or engineering fields, or pursuing degrees in graduate programs.

And the public and private partners in the program say they are delighted at the quality of ENTRY POINT! interns. "Going through AAAS, we knew we could get some of the best talent in the industry," says Ted Child, Vice President, IBM Workforce Diversity. "We like the students and we like the skills they bring to the job."

New Careers for Bioweapons Scientists

With a grant from the U.S. Commerce Department, AAAS is working with a group of former bioweapons scientists from Russia, providing them with training so that they can apply their skills to challenging and useful work. In 2001, AAAS brought a group of 17 scientists to Washington, DC, for a workshop on technology commercialization and commercialization principles.

"We learned about some new elements of the quality system that we had no idea of. But of course, to implement in our country it will require serious work. Work, work, work!" says one of the participants, Valentina Ivanovna Masycheva, Director of Research and Design in the Technological Institute of Biologically Active Substances for the Russian Research Center of Virology and Biotechnology (VECTOR).