

AAAS Awards

The AAAS Awards celebrate the achievements of extraordinary scientists, engineers, and journalists. We congratulate each of our distinguished Award winners.

AAAS Awards Highlights



Norman R. Augustine

Philip Hauge Abelson Prize

The coveted Abelson Prize honors a public servant for exceptional contributions to advancing science, or a scientist or engineer for a distinguished career of scientific achievement and service to the community.

For his outstanding contributions to U.S. science and technology policy, his unrelenting work to maintain U.S. scientific and technological preeminence, and his initiatives to strengthen the scientific partnerships between academia, industry, and government, AAAS named **Norman R. Augustine**, former chief executive officer of Lockheed Martin Corp., to receive the prestigious 2005 AAAS Philip Hauge Abelson Prize. Augustine's distinguished career spans 40 years. Today, he is a member of the President's Council of Advisors on Science and Technology and the U.S. Department of Homeland Security's Advisory Council.



Jane Lubchenco

Award for Public Understanding of Science and Technology

The award recognizes working scientists and engineers who make outstanding contributions to the popularization of science.

Jane Lubchenco, the Wayne and Gladys Valley Professor of Marine Biology and Distinguished Professor of Zoology at Oregon State University, was honored for her exemplary commitment to, and leadership of, public understanding of science initiatives in public policy and professional arenas. Her career and extracurricular activities demonstrate her commitment to communicating science and technology to such diverse audiences as civic groups, school children, and local, national, and international leaders as well as religious leaders and captains of business and industry. She also has used her substantial skills to create and lead at least two different organizations that train other scientists to become active public communicators.

Award for International Scientific Cooperation

The award recognizes extraordinary contributions to furthering international cooperation in science and engineering.

AAAS named a team of Russian and American scientists to receive the 2005 International Scientific Cooperation Award. The winners were Kyle T. Alfriend, Paul J. Cefola, Felix R. Hoots, and P. Kenneth Seidelmann from the United States, and Andrey I. Nazarenko, Vasily S. Yurasov, and Stanislav S. Veniaminov from Russia. Once adversaries, these dedicated scientists were honored for both their determination to transcend numerous limitations to collaboration and their pioneering work to advance state-of-the-art space surveillance in both countries for the benefit of the worldwide astrodynamics community and the safety of human activity in space.



Kyle T. Alfriend
Texas A&M University



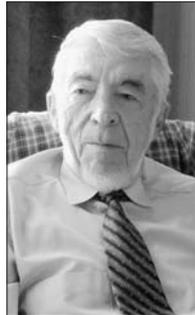
Paul J. Cefola
Massachusetts
Institute of Technology



Felix R. Hoots
AT&T Government
Solutions



P. Kenneth Seidelmann
University of Virginia



Andrey I. Nazarenko
Russian Aviation and
Space Agency



Vasily S. Yurasov
Space Informatics
Analytical Systems,
Russia



Stanislav S. Veniaminov
Space Research Center
"Kosmos," Russia



David Michaels

Scientific Freedom and Responsibility Award

The award honors scientists and engineers whose exemplary actions, often taken at significant personal cost, have served to foster scientific freedom and responsibility.

David Michaels was honored for his commitment to obtaining justice for workers who became ill after working in nuclear weapons programs and for advocating scientific integrity in public policy-making. Michaels is research professor and associate chair in the Department of Environmental and Occupational Health at George Washington University's School of Public Health and Health Services, and he directs the department's doctoral program.

AAAS Awards



Karen Butler-Purry

Mentor Award

The award honors early or mid-career members who have mentored and guided significant numbers of underrepresented students toward a Ph.D. degree in the sciences, as well as scholarship, activism, and community-building for underrepresented groups.

Karen L. Butler-Purry, an electrical engineering professor at Texas A&M University, has mentored 18 underrepresented students through the doctoral level and has positively affected the lives of scores more undergraduate and graduate students both in the electrical engineering and computer sciences areas. She has been faculty adviser to the university's chapters of the National Society of Black Engineers and the Society of Women Engineers; and she initiated the Engineering Graduate Invitational at Texas A&M, which targets underrepresented students in engineering and encourages participants from minority-serving institutions.



Sheila Ewing Browne

Mentor Award for Lifetime Achievement

The award honors members who, for more than 25 years, have mentored and guided significant numbers of underrepresented students toward a Ph.D. degree in the sciences, as well as scholarship, activism, and community-building for underrepresented groups.

Sheila Browne, a chemistry professor and the Bertha Phillips Rodger Chair in Chemistry at Mount Holyoke College in Massachusetts, overcame significant obstacles through the mentorship of teachers who encouraged her to envision a bigger future than she could see at that time. Today, she is an accomplished physical organic chemist. Browne has directed the bachelor's or master's theses of 79 women, 28 of whom went on to doctoral degrees and 31 of whom were minorities, and directed the doctoral work of two women.

Science Journalism Awards

The awards recognize outstanding reporting for a general audience and honor individual reporters for their coverage of the sciences, engineering, and mathematics. The independently judged competition is sponsored by Johnson & Johnson Pharmaceutical Research & Development, L.L.C.

- ▶ Large Newspaper — **Dennis Overbye** of *The New York Times*
- ▶ Small Newspaper — **Richard Monastersky** of *The Chronicle of Higher Education*
- ▶ Magazine — **Elizabeth Kolbert** and **Atul Gawande** of *The New Yorker*
- ▶ Television — **Joseph McMaster, Martin Williams, Lara Acaster, and Alex Williams**, NOVA-WGBH
- ▶ Radio — **John Nielsen**, National Public Radio
- ▶ Online — **Daniel Grossman**, WBUR.org
- ▶ Science News for Children (International) — **Elizabeth Carney**, Scholastic's *SuperScience*

Co-Sponsored AAAS Prizes

The Young Scientists Award

SUPPORTED BY GE HEALTHCARE

This prize recognizes outstanding Ph.D. thesis work in molecular biology worldwide.

Grand prize winner: **Ahmet Yildiz** was honored for developing a technique to improve single-molecule fluorescence and then applying the method to measure how Myosin V, a biomolecular motor involved in intracellular transport, moves.

Regional winners:

- ▶ North America — Nieng Yan
- ▶ Europe — Marina Aspholm
- ▶ Japan — Rikinari Hanayama
- ▶ All Other Countries — Jianmin Zhang



Ahmet Yildiz
University of California,
San Francisco



Nieng Yan
Princeton University



Marina Aspholm
University of Oslo,
Norway



Rikinari Hanayama
Children's Hospital,
Boston



Jianmin Zhang
Massachusetts General
Hospital and Harvard University
Medical School

Newcomb Cleveland Prize SUPPORTED BY AFFYMETRIX

The prize acknowledges an outstanding paper published in the Research Articles or Reports sections of Science.

Most recently, a paper showing the spin effects in semi-conducting materials induced by electric fields along the length of the material won the AAAS Newcomb Cleveland Prize, the oldest award conferred by AAAS. The researchers were Yuichiro K. Kato, Roberto C. Myers, Arthur C. Gossard, and David Awschalom. In a paper published 10 December 2004, they reported observing the spin Hall effect, the first time it has been seen in an experiment.

AAAS/Subaru SB&F Prizes for Excellence in Science Books

The prizes, sponsored by Subaru of America Inc., celebrate outstanding science writing and illustration for children and young adults.

- ▶ Children's Science Picture Book — *Stars Beneath Your Bed: The Surprising Story of Dust*, by April Pulley Sayre (author) and Ann Jonas (illustrator), HarperCollins, 2005
- ▶ Middle Grades Nonfiction Science Book — *The Prairie Builders: Reconstructing America's Lost Grasslands*, by Sneed B. Collard III, Houghton Mifflin, 2005
- ▶ Popular Science Books for High School Readers — *Invisible Allies: Microbes That Shape Our Lives*, by Jeanette Farrell, Farrar, Straus & Giroux, 2005
- ▶ Hands-On Science/Activity Books — *The Amateur Naturalist*, by Nick Baker, National Geographic Press, 2005