

AMERICAN ACADEMY OF ARTS & SCIENCES



Programs in

SCIENCE, ENGINEERING, AND TECHNOLOGY POLICY

SCIENCE, ENGINEERING, AND TECHNOLOGY

The Initiative on Science, Engineering, and Technology examines how society adapts to technological change and makes meaningful use of new scientific knowledge. Drawing on the expertise of scientists, humanists, social scientists, legal professionals, and others, the Academy analyzes the impact of advances in science and technology and develops policy recommendations for government, academia, nongovernmental organizations, and the private sector. Areas of interest include U.S. productivity in science, engineering, and technology; public understanding of, and trust in, science and medicine; and how the adoption of new technologies is shaped by societal values and individual and institutional decision-making.

The Public Face of Science

www.publicfaceofscience.org

The Academy's multiyear initiative on The Public Face of Science will address various aspects of the complex and evolving relationship between scientists and the public, including how individual beliefs, scientific literacy, and media coverage affect the public's perception of and trust in scientific research. The initiative will include a series of studies that examine how scientists are consulted

during public decision-making processes, such as in court decisions, the development of educational standards, and responses to natural disasters, disease outbreaks, and climate change. The project will engage experts in communication, law, humanities, the arts, journalism, public affairs, and the physical, social, and life sciences.

PROJECT LEADERS: **Richard A. Meserve** (Covington & Burling LLP; formerly, Carnegie Institution for Science) and **Geneva Overholser** (Democracy Fund; formerly, USC Annenberg School for Communication and Journalism)

New Models for U.S. Science and Technology Policy

www.amacad.org/newmodels

This project explores how the nation can sustain a long-term, nonpartisan focus on the future of the U.S. science and technology research enterprise and improve policy-making in areas related to science and technology. A 2014 Academy report, *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*, suggests actions that could be taken by federal and state governments, philanthropic and nongovernmental organizations, research universities, and business and industry to secure America's leadership in science and engineering research. The report is available online at www.amacad.org/restoringthefoundation.

In response to the *Restoring the Foundation* report, ten American business leaders issued a call to action titled "Innovation: An American Imperative," which urged policy-makers to act on several of the report's recommendations in order to ensure that the United States remains the global innovation leader. The statement and supporting material, including a list of over 500 organizations that have endorsed this call to action, are available online at www.innovationimperative.org.

PROJECT LEADERS: **Norman R. Augustine** (Lockheed Martin Corporation, ret.) and **Neal Lane** (Rice University)

The Alternative Energy Future

www.amacad.org/aef

The Academy is developing a cohesive understanding of the legal, social, and economic factors that can either inhibit or facilitate transformative change in the U.S. energy system. The objectives of this project are: 1) to demonstrate the value of the social and

behavioral sciences in accelerating the process of designing and adopting innovations in the physical energy system; and 2) to understand better how governing institutions and policy design must adapt to the demands of a changing energy infrastructure.

PROJECT LEADERS: Maxine L. Savitz (Honeywell, Inc., ret.) and M. Granger Morgan (Carnegie Mellon University)

Public Trust in Vaccines

www.amacad.org/vaccines

The Public Trust in Vaccines project brought together experts from medicine, behavioral science, communications, science history, and journalism to define a research agenda for immunization trust studies and to suggest approaches to build trust and facili-

tate effective communication between health care providers and parents. An Academy report in 2014 on *Public Trust in Vaccines: Defining a Research Agenda* examined public perceptions of childhood vaccines in the United States and around the world.

PROJECT LEADERS: Barry Bloom (Harvard School of Public Health); Edgar Marcuse (University of Washington and Seattle Children's Hospital, ret.); and Seth Mnookin (Massachusetts Institute of Technology)

Human Performance Enhancement

www.amacad.org/hpe

This exploratory study convened leaders from a diverse range of academic disciplines – including neuroscience, social science, law, history, and ethics – alongside military and industry experts to review

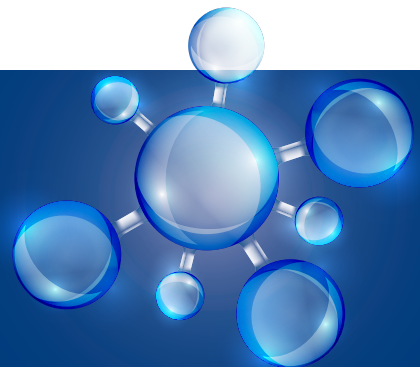
and analyze the current state of research and public discourse on human performance enhancement and identify emerging issues that require further attention from scholars and policy-makers.

PROJECT LEADER: Steven E. Hyman (Broad Institute of MIT and Harvard; Harvard University)

THE HELLMAN FELLOWSHIP IN SCIENCE AND TECHNOLOGY POLICY

Apply online: www.amacad.org/hellman

Established in 2007 as part of the Academy's Initiative on Science, Engineering, and Technology, the Hellman Fellowship in Science and Technology Policy is open to early-career professionals with training in science or engineering who are interested in transitioning to a career in public policy or administration. While in residence, Hellman Fellows work with senior scientists and policy experts on a range of national and international policy issues.



AMERICAN ACADEMY OF ARTS & SCIENCES

The American Academy of Arts & Sciences was founded during the American Revolution by John Adams, James Bowdoin, John Hancock, and other “scholar-patriots” who contributed to the establishment of the new nation. The Academy was created to provide a forum for scholars, members of the learned professions, and leaders in government and business to work together on behalf of the democratic interests of the republic.

Today, the Academy is an international learned society that brings together men and women from every field and profession to anticipate, examine, and confront critical issues facing our global society.



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