
Science, Engineering, and Technology
Global Security and International Affairs
The Humanities, Arts, and Education
Exploratory Initiatives
Fellowship Programs
University Affiliates
Meetings and Events around the Country

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### Donors to the Academy
Advancing knowledge and learning in service to the nation has been the mission of the Academy since its founding in 1780. Through the study of social and scientific problems and opportunities, the Academy provides critical thinking on the most pressing challenges facing the country and the world.

As you will see in the pages that follow, the Academy is exploring issues from the future of postsecondary education, to the governance of the nuclear nonproliferation treaty regime, to the need to support research that will drive the next generation of scientific and technological advances and affect our quality of life and our understanding of the world around us. These studies draw on the intellectual resources of hundreds of our members and involve many collaborating organizations—both national and international. Our work engages members and other experts from diverse professions and disciplines and brings them together to address critical issues facing our global society.

We are grateful to the many members who support the Academy’s projects, publications, and programs. This support gives the Academy the independence to pursue important issues that advance the common good.

As always, I welcome your questions about the Academy and suggestions for its future.
The Academy’s projects in Global Security and International Affairs are conducted in collaboration with the Committee on International Security Studies (CISS). Founded by Harvey Brooks, CISS has been led by distinguished experts such as Paul Doty, Franklin A. Long, and Carl Kaysen. Previous work includes pathbreaking analyses of the implications of the Strategic Defense Initiative, the militarization of space, the relationship between environmental scarcity and violent conflict, the proliferation of small arms and light weapons, and the challenge of strengthening institutions of international justice.

Current work focuses on emerging challenges to international peace and security, with particular attention to military technological advancements, relations among great powers, nuclear weapons, and the threats arising from fragile and failing states.

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The Global Nuclear Future

The Global Nuclear Future Initiative is an interdisciplinary and multinational project that advances policies and procedures to allow for the peaceful use of nuclear power, while addressing and minimizing the potential adverse consequences of the spread of inherently risky nuclear technology. By engaging with key constituencies, particularly in Southeast Asia and the Middle East, the initiative identifies and promotes best practices to minimize the security and nonproliferation concerns associated with the spread of nuclear energy. To help reduce the risks that could result from the global expansion of nuclear energy, the Global Nuclear Future Initiative addresses a number of key policy areas, including the international nonproliferation regime, the entirety of the fuel cycle, and the problem of insider threats.

Since its beginnings in 2008, the project has made significant contributions to the development of a more-effective nuclear policy for the twenty-first century. It has encouraged innovative scholarship on a wide range of issues, including solutions to manage most effectively the back-end of the nuclear fuel cycle and strategies to strengthen the global nuclear nonproliferation regime. It has also fostered dialogue and conversations at the regional level in Asia Pacific and the Middle East, bringing together stakeholders from the government and non-government sector. It has trained journalists and experts from these regions to write and examine nuclear-related issues in greater depth. It has produced a guide for nuclear laboratories on how to address the problem of insider threats, and it has continued to raise awareness of the many responsibilities that countries face when they decide to pursue a nuclear power program.

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Flora Family Foundation
William and Flora Hewlett Foundation
The Kavli Foundation
John D. and Catherine T. MacArthur Foundation
Alfred P. Sloan Foundation
Publications


Nuclear Power in Vietnam: International Responses and Future Prospects, Tanya Ogilvie-White (American Academy of Arts and Sciences, 2014)

Nuclear Liability: A Key Component of the Public Policy Decision to Deploy Nuclear Energy in Southeast Asia, Mohit Abraham (American Academy of Arts and Sciences, 2014)


Lessons Learned from “Lessons Learned”: The Evolution of Nuclear Power Safety after Accidents and Near-Accidents, Edward D. Blandford and Michael M. May (American Academy of Arts and Sciences, 2012)

Nuclear Collisions: Discord, Reform & the Nuclear Nonproliferation Regime, essay by Steven E. Miller, with responses by Wael Al-Assad, Jayantha Dhanapala, C. Raja Mohan, and Ta Minh Tuan (American Academy of Arts and Sciences, 2012)


Game Changers for Nuclear Energy, Kate Marvel and Michael May (American Academy of Arts and Sciences, 2011)

Nuclear Reactors: Generation to Generation, Stephen M. Goldberg and Robert Rosner (American Academy of Arts and Sciences, 2011)


Challenges to the NPT Review Conference: Lessons from the Past; Opportunities for the Future (confidential report, May 2010)

Nuclear Energy in the Middle East: Implications, Challenges, Opportunities (American Academy of Arts and Sciences, 2010)

Multinational Approaches to the Nuclear Fuel Cycle, Charles McCombie & Thomas Isaacs, Noramly Bin Muslim, Tariq Rauf, Atsuyuki Suzuki, Frank von Hippel, and Ellen Tauscher (American Academy of Arts and Sciences, 2010)


Project Meetings and Workshops

Nuclear Energy Briefings

January 18 – 22, 2015
Abu Dhabi, United Arab Emirates

This set of briefings was designed to engage policymakers and nuclear experts in the United Arab Emirates in closed-door conversations on topics ranging from nuclear safety and nuclear liability, to the back-end of the nuclear fuel cycle, to capacity building and human resources development.

Participants

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At a session on capacity building and human resources development in the nuclear field (clockwise from 12 o’clock): Jonathan F. Fanton (American Academy), Sultan Al Dhaheri (Federal Authority for Nuclear Regulation), Mohamed Al Zaabi (Federal Authority for Nuclear Regulation), Turky Othman Al Mesmari (Federal Authority for Nuclear Regulation), Mohit Abraham (Khaitan & Co.; Supreme Court of India), James Malone (Lightbridge), Robert Rosner (University of Chicago), Robert Castle (Emirates Nuclear Energy Corporation), Humaid Al Dhaheri (Federal Authority for Nuclear Regulation), Charles McCombie (MCM Consulting; Arius Association), Page Stoutland (Nuclear Threat Initiative), Steven E. Miller (Harvard University), Shaima Al Mansoori (Federal Authority for Nuclear Regulation)
Project Meetings and Workshops

Dual-Use Technologies: Current and Future Governance Prospects

March 16 – 17, 2015
Chicago, IL

The purpose of this meeting was to identify best practices and lessons learned in the governance of three key technology areas: biotechnology, nuclear energy, and cyber technology.

The participants discussed the challenges that the governance of each area presents and examined the current state of national and international oversight and regulation of the broad dual-use technology domain.

Participants

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Global Cyber Risk, LLC; Georgia Institute of Technology
Roundtable Discussion: The NPT Grand Bargain—Its Historical Evolution, Its Present Challenges, and Its Future Opportunities

May 5, 2015
New York, NY

The Global Nuclear Future Initiative convened senior-level government representatives who were gathered for the 2015 Nuclear Non-Proliferation Treaty Review Conference in New York. The participants met at Carnegie Corporation of New York and discussed the constraints and opportunities to advance the global nuclear disarmament agenda, as well as policies and strategies to strengthen the NPT amid the spread of nuclear power worldwide.

Participants

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Project Meetings and Workshops

Advancing Discourse among Nuclear Energy Experts, the Government, and the Public

July 13 – 15, 2015
New Delhi, India

Nuclear experts, government officials, and representatives of the media and civil society met in New Delhi, India, to discuss the current frameworks within which communication about nuclear energy occurs around the world and especially in India, assess the utility of these frameworks within the lens of current dilemmas, and adapt the frameworks to present-day and prospective challenges.

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New Dilemmas in Ethics, Technology, and War

The project on New Dilemmas in Ethics, Technology, and War explores the linkage between contemporary political developments and changes in military technology, and the resulting moral and ethical dilemmas that arise in war and postwar settings as a result of these advances. This study of the relationship between ethics, technology, and war follows from the observation that although technological innovations and political developments are changing the way in which modern wars are conducted, efforts to align just war doctrine with this evolving context have lagged behind. The project addresses the growing gap between the scholarship on new wars and technologies and the needs of decision-makers in government. It fosters dialogue among different groups and creates policy outreach initiatives that explore the evolution of just war doctrine and its potential applications to real world security problems.

The study will produce a multidisciplinary, two-volume Daedalus issue that will inform the ongoing debate surrounding the acceptable use of modern instruments of war, and will provide a useful teaching tool for both universities and military service academies.
Global Security and International Affairs

Project Meetings and Workshops

New Dilemmas in Ethics, Technology, and War Authors’ Workshop

June 29 – July 1, 2015
Palo Alto, CA

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Allen Weiner (Stanford University), Joseph Felter (Stanford University), Mark Martins (U.S. Army), and Tanisha Fazal (University of Notre Dame)
Academy projects in Science, Engineering, and Technology advance critical thinking about the evolving landscape for scientific research. Drawing on the expertise of leading scientists, policy-makers, social scientists, humanists, and technical experts from both academia and industry, the studies explore how science and technology are changing, how to help the public understand those changes, and how society can better adapt to those changes. Areas of interest include the nation’s productivity in science and technology; the social and regulatory factors that influence the adoption of new technologies; and public understanding of, and trust in, science and medicine.

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New Models for U.S. Science and Technology Policy

Scientific and technological advances are fundamental to the prosperity, health, and security of America. Innovation and rapid integration of new knowledge and technologies emerge from investments in research and development, and rely on the partnership among universities, federal and state governments, and industry. Staying globally competitive will require a stronger partnership and a greater focus on long-term planning in scientific and engineering research.

In September 2014, the New Models committee unveiled its report, *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*. The report offers actionable recommendations to all sectors—including federal and state governments, philanthropic and nongovernmental organizations, public and private research universities, and business and industry—to:

- Secure America’s leadership in science and engineering research—especially basic research—by providing sustainable federal investments;
- Ensure that the American people receive maximum benefits from federal investments in research; and
- Regain America’s standing as an innovation leader by establishing a more robust national government-university-industry research partnership.

Among its recommendations, the report calls for sustaining a national focus on long-term science policy by developing a common message about the importance of science and engineering research; and maintaining the visibility of forward-looking policy recommendations. The Academy has established a series of collaborations to pursue these goals.

Highlights of outreach activities include:

- More than 10,000 copies of the report have been distributed to governmental offices, nongovernmental organizations, business leaders, academic leaders, and American Academy Fellows. Digital copies of the report have been downloaded over 2,000 times.
- The American Academy has assembled a group of nine leading nongovernmental organizations, including AAAS, AAU, APLU, Research!America, the Council on Competitiveness, ASTRA, and the National Academies, to explore ways to equip organizations across America with the resources they need to elevate the importance of research in the minds of the public, business leaders, policy-makers, and others.
- More than forty articles have appeared in national and local news media since the report’s release, including an op-ed in *The Wall Street Journal* by committee members and Nobel Laureates Thomas R. Cech and Steven Chu.
• **Restoring the Foundation** inspired a bipartisan budget resolution sponsored by thirty-two Senators in support of a deficit-neutral fund for basic research, passed on a unanimous floor vote.

• Since the release of Restoring the Foundation, the American Academy has organized seventeen roundtables, workshops, and public symposia to explore ways to implement the report’s recommendations. Held at universities across the country and in our nation’s capital, these meetings have engaged Academy Fellows and leaders in academia, government, and business in a robust conversation about the future of America’s research system.

• In June 2015, ten CEOs and more than 250 organizations signed on to “Innovation: An American Imperative,” a statement inspired by **Restoring the Foundation** that calls for action on several key report recommendations. The signers include **Restoring the Foundation** cochair Norman R. Augustine and committee member Charles O. Holliday (Royal Dutch Shell plc), as well as Samuel R. Allen (John Deere), Marillyn A. Hewson (Lockheed Martin Corporation), Satya Nadella (Microsoft), Wesley Bush (Northrop Grumman), Joseph Jimenez (Novartis), Jay Timmons (National Association of Manufacturers), Kenneth C. Frazier (Merck & Co., Inc.), and W. James McNerney, Jr. (The Boeing Company).

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John D. and Catherine T. MacArthur Foundation  
Gordon and Betty Moore Foundation  
Alfred P. Sloan Foundation

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**Publications**

*Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*  
(American Academy of Arts and Sciences, 2014)


Norman R. Augustine and Neal F. Lane, “What if America had a plan for scientific research?” *InsideSources*, April 28, 2014
Project Meetings and Workshops

Public Release of Restoring the Foundation: The Vital Role of Research in Preserving the American Dream

September 16, 2014
Washington, D.C.

Speakers

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Congressional Briefing on Restoring the Foundation: The Vital Role of Research in Preserving the American Dream

September 16, 2014
Washington, D.C.

Speakers

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RUSH HOLT
U.S. House of Representatives; currently, American Association for the Advancement of Science

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Norman R. Augustine (Lockheed Martin Corporation, ret.), Rush Holt (American Association for the Advancement of Science; then U.S. House of Representatives), and Neal Lane (Rice University) brief members of Congress and their staff on Restoring the Foundation.
Project Meetings and Workshops

First NGO Coordination Meeting on *Restoring the Foundation* Outreach

September 16, 2014
Washington, D.C.

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Research!America

*Restoring the Foundation* cochairs Neal Lane and Norman Augustine discuss the report’s findings with leaders from federal agencies, universities, and nongovernmental organizations. Pictured (around the table, front right to left): Alan Leshner (American Association for the Advancement of Science), Peter McPherson (APLU), Bob Boege (ASTRA), Mary Woolley (Research!America), Robert Rosner (University of Chicago), Matthew Scott (Carnegie Institution for Science), M.R.C. Greenwood (University of Hawaii System, ret.), Neal Lane (Rice University), Norman R. Augustine (Lockheed Martin Corporation, ret.), Victor Dzau (National Academy of Medicine), Anthony DeCrappeo (Council on Governmental Relations), Bart Gordon (K&L Gates), C.D. Mote, Jr. (National Academy of Engineering), Jonathan F. Fanton (American Academy of Arts and Sciences), and Hunter Rawlings (AAU).
Project Meetings and Workshops

Roundtable Discussion on Public-Private Sector Partnerships with the National Laboratories

November 6, 2014
Chicago, IL

Participants

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Rice University

MICHELLE LARSON
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ELLEN WILLIAMS
Office of the Secretary of Energy at U.S. Department of Energy

Project Meetings and Workshops

Workshop on “The Unstable Biomedical Research Ecosystem: How Can It Be Made More Robust?”

February 24, 2015
Durham, NC

Participants

HASHIM AL-HASHIMI
Duke University; Duke Center for RNA Biology

NANCY C. ANDREWS
Duke University School of Medicine

TANIA BAKER
Massachusetts Institute of Technology

DIEGO BOHÓRQUEZ
Duke University

SAMIRA BROOKS
UNC—Chapel Hill

LAWRENCE CARIN
Duke University

KATHLEEN CARON
UNC—Chapel Hill

JONATHAN F. FANTON
American Academy of Arts and Sciences

JEROME FEDERSPIEL
UNC—Chapel Hill

MARK C. FISHMAN
Novartis Institutes for BioMedical Research

JOSEPH HEITMAN
Duke University
Project Meetings and Workshops

Workshop on “The Unstable Biomedical Research Ecosystem: How Can It Be Made More Robust?” continued

WILLIAM JECK
UNC – Chapel Hill

JEREMY KAY
Duke University

MELISSA KEENAN
Duke University

MARY KLOTMAN
Duke University School of Medicine; Duke University Medical Center

SALLY KORNBLUTH
Duke University

DOROTHY KOVEAL
American Academy of Arts and Sciences

DANIEL LEW
Duke University

QI-JING LI
Duke University

JON LORSCH
National Institute of General Medical Sciences

DAVID MACALPINE
Duke University

TERRY MAGNUSON
UNC—Chapel Hill; UNC Lineberger Comprehensive Cancer Center

COLLEEN MCLEAN
Duke University

DONALD McDONNELL
Duke University

CHRISTOPHER NICCHITTA
Duke University Medical Center

JOHN RANDELL
American Academy of Arts and Sciences

KIM RATHMELL
UNC Lineberger Comprehensive Cancer Center

PATRICK SEED
Duke University

HAROLD VARMUS
National Cancer Institute; currently, Weill Cornell Medical College, Cornell University

BENJAMIN VINCENT
UNC School of Medicine

SUSAN R. WENTE
Vanderbilt University

ANNE WEST
Duke University

Jonathan F. Fanton (American Academy of Arts and Sciences) and co-moderators Nancy C. Andrews (Duke University School of Medicine) and Sally Kornbluth (Duke University) discuss “The Unstable Biomedical Research Ecosystem: How Can It Be Made More Robust?” at Duke University.

(left to right): Mark C. Fishman (Novartis Institutes for Biomedical Research), Nancy C. Andrews (Duke University School of Medicine), Sally Kornbluth (Duke University), Susan R. Wente (Vanderbilt University), Richard H. Brodhead (Duke University), Harold Varmus (National Cancer Institute; currently, Weill Cornell Medical College, Cornell University), Tania Baker (Massachusetts Institute of Technology), and Jonathan F. Fanton (American Academy of Arts and Sciences)
**Project Meetings and Workshops**

**Congressional Roundtable on a proposed “National Research Initiative”**

February 25, 2015  
Washington, D.C.

**Participants**

RALPH CICERONE  
National Academy of Sciences

CHRIS COONS  
U.S. Senate

DICK DURBIN  
U.S. Senate

VICTOR DZAU  
National Academy of Medicine

JOHN ENGLER  
Business Roundtable

AMY ERICSON  
Alstom

JONATHAN F. FANTON  
American Academy of Arts and Sciences

MARK C. FISHMAN  
Novartis Institutes for BioMedical Research

BART GORDON  
K&L Gates; formerly, U.S. House of Representatives

RANDY HULTGREN  
U.S. House of Representatives

GENE IRISARI  
Texas Instruments Incorporated

ANDY KARSNER  
Manifest Energy

PRAMOD P. KHARGONEKAR  
National Science Foundation

DEREK KILMER  
U.S. House of Representatives

KEI KOIZUMI  
White House Office of Science and Technology Policy

NEAL LANE  
Rice University

PETER McPHERSON  
Association of Public and Land-grant Universities (APLU)

DAVID W. MILLER  
NASA

MARK MYKITYSHYN  
Tangible Software

DAVID PAREKH  
United Technologies Corporation

JIM PHILLIPS  
NanoMech, Inc.

MICHAEL PLONSKY  
Alcoa

BILL PROVINE  
DuPont

HUNTER RAWLINGS  
Association of American Universities (AAU)

BRIAN J. RAYMOND  
National Association of Manufacturers

DEBORAH WINCE-SMITH  
Council on Competitiveness

MARY WOOLLEY  
Research!America

**Project Meetings and Workshops**

**Second NGO Coordination Meeting on Restoring the Foundation Outreach**

February 25, 2015  
Washington, D.C.

**Participants**

ROBERT BOEGE  
The Alliance for Science & Technology Research in America (ASTRA)

JOANNE CARNEY  
American Association for the Advancement of Science

LEIGH CARROLL  
National Academy of Medicine

JOHN C. CROWLEY  
Charlottesville, Virginia

ELLIE DEHONEY  
Research!America

VICTOR DZAU  
National Academy of Medicine

JONATHAN F. FANTON  
American Academy of Arts and Sciences

MARY GOOD  
The Alliance for Science & Technology Research in America (ASTRA); University of Arkansas

BART GORDON  
K&L Gates; formerly, U.S. House of Representatives

RUSH HOLT  
American Association for the Advancement of Science; formerly, U.S. House of Representatives

DOROTHY KOVEAL  
American Academy of Arts and Sciences

NEAL LANE  
Rice University
Project Meetings and Workshops

Second NGO Coordination Meeting on *Restoring the Foundation* Outreach, continued

PETER McPHERSON  
Associate of Public and Land-grant Universities (APLU)  

JENNIFER POULAKIDAS  
Association of Public and Land-grant Universities (APLU)  

JOHN RANDELL  
American Academy of Arts and Sciences  

HUNTER RAWLINGS  
Association of American Universities (AAU)  

ANDREW STEIGERWALD  
Council on Competitiveness  

DEBORAH WINCE-SMITH  
Council on Competitiveness  

MARY WOOLLEY  
Research!America  

STEVE GOLDBLATT  
Suffolk Group  

FELICIA KNIGHT  
Knight-Canney Group

Project Meetings and Workshops

A Conversation on *Restoring the Foundation*: The Important Role of Central and Southern Plains Institutions in Driving National Change

May 28, 2015  
Rosemont, IL

Participants

JASMINE ALMOAYED  
City of Cedar Rapids, IA  

SHERI ANDERSON  
North Dakota State University  

KEN BAYLES  
University of Nebraska Medical Center  

MARY T. BERRY  
University of South Dakota  

KAREN BURG  
Kansas State University  

BARRY BUTLER  
University of Iowa  

SAMANTHA CARNEY  
American Academy of Arts and Sciences  

VIMAL CHAITANYA  
New Mexico State University  

ARCHIE CLUTTER  
University of Nebraska  

DAVID CONRAD  
University of Iowa  

MARY JO DANIEL  
NM EPSCoR; University of New Mexico  

JIM DOOLITTLE  
South Dakota State University  

KELVIN K. DROEGEMEIER  
University of Oklahoma; National Science Board  

ROB DUNCAN  
Texas Tech University  

STEPHEN FRAYSER  
Texas State University  

HOWARD GOBSTEIN  
Association of Public and Land-grant Universities (APLU)  

STEVE GODDARD  
University of Nebraska-Lincoln  

BETH INGRAM  
North Dakota State University  

CHRISTA JOHNSON  
Colorado State University  

Rachel Johnson American Academy of Arts and Sciences  

MICHAEL KHONSARI  
Louisiana EPSCoR; Louisiana Board of Regents  

DOROTHY KOVEAL  
American Academy of Arts and Sciences  

NEAL LANE  
Rice University  

BRANDON LIPPS  
Texas Tech University System  

SOPHIA MAGILL  
Iowa State University  

JERRY MALAYER  
Oklahoma EPSCoR; Oklahoma State University  

KEVIN MALLOY  
University of New Mexico  

SALLY MASON  
University of Iowa  

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Arkansas EPSCoR; Arkansas Science & Technology Authority  

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State of Oklahoma; Oklahoma State University  

MATHEW MUÑOZ  
University of New Mexico  

SARAH NUSSE  
University of Iowa
**Project Meetings and Workshops**

**A Conversation on *Restoring the Foundation*: The Important Role of Central and Southern Plains Institutions in Driving National Change, continued**

PREM S. PAUL  
University of Nebraska-Lincoln

JAN PUSZYNSKI  
South Dakota School of Mines and Technology

JOHN RANDELL  
American Academy of Arts and Sciences

JIM RANKIN  
University of Arkansas

DANIEL A. REED  
University of Iowa

KELLY RUSCH  
North Dakota State University; North Dakota EPSCoR

KENNETH SEWELL  
Oklahoma State University

TOBIN SMITH  
Association of American Universities

KALLIAT T. VALSARAJ  
Louisiana State University

Sally Mason (University of Iowa) addressing university vice presidents for research from the plains states on how a regional working group could implement *Restoring the Foundation’s* recommendations.

Oklahoma Secretary of Science & Technology Stephen McKeever (Oklahoma State University) speaks during a breakout session on STEM education at the May 28 workshop in Chicago. Others pictured (clockwise from McKeever): Howard Gobstein (Association of Public and Land-grant Universities), Christa Johnson (Colorado State University), Karen Burg (Kansas State University), Rachel Johnson (American Academy), and Gail McClure (Arkansas Science & Technology Authority).
Project Meetings and Workshops

Third NGO Coordination Meeting on Restoring the Foundation Outreach

June 15, 2015
Washington, D.C.

Participants

ROBERT BOEGE
The Alliance for Science & Technology
Research in America (ASTRA)

JOANNE CARNEY
American Association for the Advancement of Science

ANNE CLAIBORNE
National Academy of Medicine

VICTOR DZAU
National Academy of Medicine

JONATHAN F. FANTON
American Academy of Arts and Sciences

MARY GOOD
The Alliance for Science & Technology
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K&L Gates; formerly, U.S. House of Representatives

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MARC KASTNER
Science Philanthropy Alliance

FELICIA KNIGHT
Knight-Canney Group

DOROTHY KOVEAL
American Academy of Arts and Sciences

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Rice University

JEFF LIEBERSON
Association of Public and Land-grant Universities (APLU)

PETER McPHERSON
Association of Public and Land-grant Universities (APLU)

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National Academy of Engineering; University of Maryland

MATT OWENS
Association of American Universities (AAU)

JENNIFER POULAKIDAS
Association of Public and Land-grant Universities (APLU)

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HUNTER RAWLINGS
Association of American Universities (AAU)

ANDREW STEIGERWALD
Council on Competitiveness

DEBORAH WINCE-SMITH
Council on Competitiveness

MARY WOOLLEY
Research!America

Meetings Around the Country

Discussion with Academy Fellows on Restoring the Foundation

November 6, 2014
Northwestern University
Evanston, IL

Speakers

JONATHAN F. FANTON
American Academy of Arts and Sciences

NEAL LANE
Rice University

Discussion with Academy Fellows on Restoring the Foundation

December 3, 2014
Princeton University
Princeton, NJ

Speakers

JONATHAN F. FANTON
American Academy of Arts and Sciences

SHIRLEY TILGHMAN
Princeton University
Meetings Around the Country

Discussion with Academy Fellows on Restoring the Foundation
December 4, 2014
University of Pennsylvania
Philadelphia, PA

Speakers
JONATHAN F. FANTON
American Academy of Arts and Sciences
UMA CHOWDHRY
E.I. du Pont de Nemours & Company, ret.

Stated Meeting on “Replenishing the Innovation Pipeline: The Role of University Research”
February 3, 2015
Stanford University
Stanford, CA

Speakers:
ANN M. ARVIN
Stanford University
JONATHAN F. FANTON
American Academy of Arts and Sciences
JOHN L. HENNESSY
Stanford University
PETER S. KIM
Stanford University
CARLA J. SHATZ
Stanford University

Discussion with Academy Fellows on Restoring the Foundation
February 5, 2015
University of Southern California
Los Angeles, CA

Speakers
JONATHAN F. FANTON
American Academy of Arts and Sciences
ERIC FRIEDLANDER
University of Southern California

Discussion with Academy Fellows on Restoring the Foundation
February 6, 2015
California Institute of Technology
Pasadena, CA

Speakers
JONATHAN F. FANTON
American Academy of Arts and Sciences
THOMAS F. ROSENBAUM
California Institute of Technology
MAXINE L. SAVITZ
Honeywell, Inc., ret.

Shirley Tilghman (Princeton University) discussing one of the figures published in Restoring the Foundation.

Ann M. Arvin (Stanford University), Carla J. Shatz (Stanford University), and Peter S. Kim (Stanford University)
Meetings Around the Country

Stated Meeting on “The Unstable Biomedical Research Ecosystem: How Can It Be Made More Robust?”
February 24, 2015
Duke University
Durham, NC

Speakers
NANCY C. ANDREWS
Duke University School of Medicine
TANIA BAKER
Massachusetts Institute of Technology
RICHARD H. BRODHEAD
Duke University
JONATHAN F. FANTON
American Academy of Arts and Sciences
MARK C. FISHMAN
Novartis Institutes for BioMedical Research
SALLY KORNBLUTH
Duke University
HAROLD VARMUS
National Cancer Institute; currently, Weill Cornell Medical College, Cornell University
SUSAN R. WENTE
Vanderbilt University

Civic Scientist Lecture on Restoring the Foundation: Reviving the U.S. Science, Engineering and Technology Enterprise
April 30, 2015
Rice University
Houston, TX

Speakers
JONATHAN F. FANTON
American Academy of Arts and Sciences
NEAL LANE
Rice University
NORMAN R. AUGUSTINE
Lockheed Martin Corporation, ret.
STEVEN CHU
Stanford University; formerly, U.S. Department of Energy

Maxine L. Savitz (Honeywell, Inc., ret.) and Gene D. Block (University of California, Los Angeles)
Neal Lane (Rice University), Norman R. Augustine (Lockheed Martin Corporation, ret.), and Steven Chu (Stanford University; formerly, U.S. Department of Energy)
The Alternative Energy Future

The Alternative Energy Future project examines the social and regulatory barriers to the adoption of new energy technologies and how these barriers might be overcome. Changing the existing energy infrastructure to address economic and environmental challenges will also require addressing these societal considerations, which to date have not been adequately considered by policy-makers.

The Alternative Energy Future project is currently focused on the following two goals:

• Demonstrating the value of social science in accelerating the process of designing and adopting innovations in the physical energy system; and

• Creating a research program aimed at understanding how governing institutions and policy design must adapt to the demands of a changing energy infrastructure. This objective requires building both scholarly and financial support for studying issues that have not received much attention.

Three publications of the Alternative Energy Future project document the importance of these goals, and the complexity of the problems they address. The 2011 report Beyond Technology: Strengthening Energy Policy through Social Science outlines the value of social science and recommends strategies for enhancing collaboration between social scientists and policy-makers. In the Spring 2012 and Winter 2013 issues of *Dædalus*, the Journal of the American Academy, over thirty distinguished scholars examine the coming societal change from a variety of viewpoints. And a consensus statement from a 2013 workshop on energy policy design highlights the need to research the institutional changes that will be required to manage the climate problem.

Last year, a two-day workshop on Applying Behavioral Strategies to Energy Decisions and Behaviors highlighted the potential of behavior strategies to increase participation in clean energy programs and to improve overall program effectiveness. This year, two meetings furthered the breadth and depth of the Alternative Energy Future project’s objectives. The first meeting of a working group to discuss the durability and adaptability of energy policy explored how more than four decades of experience with the Clean Air Act could offer generalizable lessons for future energy policy development. At the second meeting, the Academy convened representatives from over a dozen foundations and the federal government to discuss emerging issues in social science research; examine how the field’s methods and tools can be applied to environmental questions; hear from current researchers, practitioners, and other funders; and develop practical approaches to integrating social sciences into their individual grant portfolios.

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Cynthia and George Mitchell Foundation

National Science Foundation

New York State Energy Research and Development Authority (NYSERDA)

Skoll Global Threats Fund

Alfred P. Sloan Foundation

United States Department of Energy

**Publications**


Beyond Technology: Strengthening Energy Policy through Social Science (American Academy of Arts and Sciences, 2011)

† Deceased
Project Meetings and Workshops

Durability and Adaptability in Energy Policy

December 15, 2014
Cambridge, MA

Participants

JOSEPH ALDY
Harvard University; Resources for the Future; National Bureau of Economic Research

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DALLAS BURTRAW
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BARRY RABE
University of Michigan; Brookings Institution

JOHN RANDELL
American Academy of Arts and Sciences

MAXINE L. SAVITZ
Honeywell, Inc., ret.

KENNETH SHEPSLE
Harvard University

ELIZABETH WILSON
University of Minnesota

Dallas Burtraw (Resources for the Future) and Ann Carlson (University of California, Los Angeles) discuss durability and adaptability in energy policy.
Project Meetings and Workshops

Philanthropic Leadership Symposium: Integrating Social Sciences into Environmental Grantmaking

February 26 – 27, 2015
Cambridge, MA

Participants

MATT BAKER
William and Flora Hewlett Foundation; formerly, Colorado Public Utilities Commission

JANE BLOCH
Skoll Global Threats Fund

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American Academy of Arts and Sciences

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BETH KARLIN
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IRENE KRARUP
V. Kann Rasmussen Foundation

GINNY KREITLER
National Audubon Society

TODD KUIKEN
Woodrow Wilson International Center for Scholars

DIANA LIVERMAN
University of Arizona

AMY LUERS
Skoll Global Threats Fund

BREWSTER MCCrackEN
Pecan Street Inc.

ALAN MEIER
Lawrence Berkeley National Laboratory

Evan MICHELSOn
Alfred P. Sloan Foundation

ED MILLER
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GRANGER MORGAN
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RAMSAY RAVENEL
Grantham Foundation

TODD ROGERS
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MAXINE L. SAVITZ
Honeywell, Inc., ret.

DAVID THAYER
Pacific Gas and Electric

DAVID TUFT
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CIVIS Analytics
The Academy is collaborating with organizations across the country—colleges and universities, learned societies, libraries, state councils, museums, and government—to develop policy recommendations and resources that strengthen American education from kindergarten through graduate school. Current projects examine the future of postsecondary education and the importance of supporting public universities. The Academy’s ongoing initiative for the humanities includes the Commission on the Humanities and Social Sciences, the Humanities Indicators data project, and a new Commission on Language Learning. All of this work reaffirms the Academy’s underlying commitment to education as a prerequisite for a well-functioning democracy.

Commission on the Humanities and Social Sciences

In 2010, a bipartisan group of Congressional leaders called upon the Academy to organize an examination of the importance of the humanities and social sciences to American democracy and competitiveness. They asked the Academy to consider the following question:

What are the top actions that Congress, state governments, universities, foundations, educators, individual benefactors, and others should take now to maintain national excellence in humanities and social scientific scholarship and education, and to achieve long-term national goals for our intellectual and economic well-being; for a stronger, more vibrant civil society; and for the success of cultural diplomacy in the 21st century?

To meet this challenge, in 2011 the Academy established the Commission on the Humanities and Social Sciences. The Commission convened leaders from the sciences, business, public affairs, social sciences, humanities, and the arts to advance a new conversation about the importance of these disciplines to the nation’s intellectual and economic strength, its public institutions, and its civil society. The Commission’s report, The Heart of the Matter, was released on June 19, 2013.

Highlights of the Commission’s outreach include:

- Nearly 200,000 copies of The Heart of the Matter have been distributed online and in print to individuals and at large-scale humanities events across the country. The companion film has been viewed over 33,000 times online.
- Colleges and universities have used The Heart of the Matter to bolster their own humanities activities. Several national organizations have launched their own, complementary liberal arts initiatives.
- The Heart of the Matter report has been used to inform the governing boards at academic associations, including the National Humanities Alliance, Federation of State Humanities Councils, Phi Beta Kappa, and the National Endowment for the Humanities.
- The report has been the focus of a series of public events in communities around the country.
- With cooperation from state humanities councils and learned societies, Commission members have participated in ongoing outreach activities on campuses, in libraries, on radio and television programs, and in print and online news sources nationwide.
- In October 2014, Representative Rush Holt (D-New Jersey) proposed a bill based on a recommendation from The Heart of the Matter for a K–12 Master Teacher Program that would encompass all disciplines, expanding President Obama’s 2012 proposal for a STEM Master Teacher Corps.
- In November 2014, the Academy received two letters expressing a bipartisan request from members of the United States Senate and House of Representatives that the Academy undertake a new study of the nation’s language education needs as a follow-up to The Heart of the Matter.
Commission members have spoken about *The Heart of the Matter* at events around the country, including:

- Richard H. Brodhead, John W. Rowe, and Diane P. Wood at the first Chicago Humanities Summit, a collaboration with the Modern Language Association and the Chicago Humanities Festival, January 9, 2014
- Annette Gordon-Reed at University of Maryland-College Park, Worldwide: Arts & Humanities Lecture Series, February 27, 2014
- Richard H. Brodhead, Karl Eikenberry, and Representative David Price at North Carolina State University, March 7, 2014
- Pauline Yu at Arizona State University, Humanities Program, March 17, 2014
- Francisco Cigarroa at the National Humanities Alliance, Annual Meeting, March 10, 2014
- Norman Augustine and Hunter Rawlings at Carnegie Mellon University, Presidential Lecture Series, April 21, 2014
- Earl Powell at University of Maine Humanities Center event in Washington, D.C., May 12, 2014

- David Souter at Carnegie Mellon University, John and Mary Lou Lehoczky Lecture Series in the Humanities and Social Sciences, October 10, 2014
- David Skorton in an interview by Philip Kennicott (*The Washington Post*), October 29, 2014
- Karl Eikenberry at the Twenty-Fifth Anniversary of the Chicago Humanities Festival, November 8, 2014
- G. Wayne Clough at the Teaching Digital Humanities Conference in partnership with Emory University, April 2, 2015

**Forthcoming Publication**

*The Heart of the Matter Around the Country*
Commission on the Humanities and Social Sciences

**Project Chairs**

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Harvard University

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PETER KARDON

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Carnegie Corporation of New York

Andrew W. Mellon Foundation

† Deceased
The Humanities Indicators

The Humanities Indicators (www.humanitiesindicators.org) are a resource for educators, policy-makers, journalists, and others seeking data to assess the welfare of the humanities. Drawing on existing data sets and original research, the Indicators offer trend data and analysis ranging from primary and secondary education to wider engagement with the humanities in American society. The Indicators are regularly updated to assure their continuing vitality and utility to the ongoing national conversation about the state of the field.

**Project Chair**

NORMAN M. BRADBURN
National Opinion Research Center;
University of Chicago

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**Fundees**

Andrew W. Mellon Foundation
National Endowment for the Humanities

**With advice and assistance from:**

American Academy of Religion
American Council of Learned Societies
American Historical Association
American Philosophical Association
American Political Science Association
College Art Association
Federation of State Humanities Councils
History of Science Society
Linguistic Society of America
Modern Language Association of America
National Communication Association
National Humanities Alliance
Society for Biblical Literature

Average SAT Scores, 1968 – 2014

Associate’s Degree Completions, by field, 1987 – 2013
Project Meetings and Workshops
- “What Are the Humanities Good For?” (cosponsored with the National Humanities Alliance and Phi Beta Kappa), Washington, D.C., November 14, 2014
- Humanities Indicators Advisory Committee, Washington, D.C., January 5, 2015

Recent Publications
- Findings from the 2013 Humanities Department Survey (September 2014)

Forthcoming Publications
- The State of the Humanities in American Life 2016

Recent Appearances in the Media
- “If You’re Thinking about Grad School, This Chart Will Scare You,” Vox (March 21, 2015)
- “An Academic Job Slump is Making Graduate Students Depressed,” Bloomberg Business (April 24, 2015)
- “Technology Edging Out Humanities at Ohio Colleges,” Columbus Dispatch (May 9, 2015)
- “Cutting the Liberal Arts Undermines Our Cultural Traditions,” Washington Post (June 19, 2015)
Commission on Postsecondary Education

Postsecondary education continues to be one of the most important avenues of opportunity in American society. But the education landscape is changing rapidly. There are more options for how and when Americans receive their postsecondary education. New populations, for whom the traditional four-year degree was once an impossibility, can now pursue undergraduate education in two-year, four-year, for-profit, and online institutions, according to schedules that fit their own lives. And technological advances offer new approaches to student instruction and collaboration. At the same time, rising costs are challenging the affordability of traditional postsecondary degrees.

Chair
MICHAEL S. McPHERSON
Spencer Foundation

Funder
Carnegie Corporation of New York

Commission on Language Learning

The American Academy has received two letters expressing a bipartisan request from members of the United States Senate and House of Representatives to undertake a new study of the nation’s language education needs. Signed by Senators Tammy Baldwin (D-Wisconsin), Mark Kirk (R-Illinois), Orrin Hatch (R-Utah), and Brian Schatz (D-Hawaii), and Representatives Rush Holt (D-New Jersey), Leonard Lance (R-New Jersey), David Price (D-North Carolina), and Don Young (R-Alaska), the letters ask the Academy to provide answers to the following questions:

How does language learning influence economic growth, cultural diplomacy, the productivity of future generations, and the fulfillment of all Americans?

What actions should the nation take to ensure excellence in all languages as well as international education and research, including how we may more effectively use current resources to advance language attainment?

Chair
PAUL LeCLERC
Columbia University

Funder
Andrew W. Mellon Foundation
The Lincoln Project: Excellence and Access in Public Higher Education

The Lincoln Project is considering the implications of reduced state funding for public higher education, examining the role of the federal government in funding our great public research universities, and developing recommendations for ensuring that public universities continue to serve the nation as engines of economic development and opportunity for Americans from all backgrounds.

In meetings held around the country, the Lincoln Project has brought together local leaders representing public higher education, government, policy, business, and philanthropy to identify common concerns and advance innovative initiatives. Discussion topics include:

- How public universities can address financial challenges while fulfilling their commitment to providing an accessible and affordable undergraduate education;
- How public universities can maintain the education of graduate students, essential to the research mission and the production of faculty, while best serving the needs of undergraduate students;
- How public universities should respond to changing demographics and evolving student needs to ensure success for all students;
- What role the federal government, the business sector, and philanthropy should play in sustaining the excellence of America’s public research universities.

Project Chairs
ROBERT J. BIRGENEAU
University of California, Berkeley
MARY SUE COLEMAN
University of Michigan

Advisory Committee
LAWRENCE S. BACOW
Tufts University
GENE D. BLOCK
University of California, Los Angeles
HENRY BRADY
University of California, Berkeley
PHILIP BREDESEN
former Governor of Tennessee
NANCY CANTOR
Rutgers University-Newark
JOHN T. CASTEEN III
University of Virginia
JONATHAN COLE
Columbia University
GRAY DAVIS
former Governor of California
PATRICK DOYLE
Domino’s Pizza, Inc.
DAVID B. FROHNMAVER †
University of Oregon
E. GORDON GEE
West Virginia University
MATTHEW GOLDSTEIN
The City University of New York
DONALD GRAHAM
Graham Holdings Company
CARL GUARDINO
Silicon Valley Leadership Group
ROBERT D. HAAS
Levi Strauss & Co.
JIM HACKETT
Steelcase
ANN WEAVER HART
University of Arizona
MICHAEL HOUT
New York University
KAY BAILEY HUTCHISON
former U.S. Senator, Texas
JAMES LEACH
University of Iowa
EARL LEWIS
The Andrew W. Mellon Foundation
ANN MARIE LIPINSKI
Niem Foundation for Journalism at Harvard
GEORGE MILLER
former U.S. Representative, California
WILLIAM POWERS, JR.
The University of Texas at Austin
JOHN W. ROGERS, JR.
Ariel Investments
THOMAS SIEBEL
C3; First Virtual Group
SHIRLEY M. TILGHMAN
Princeton University
PHYLLIS M. WISE
University of Illinois at Urbana-Champaign
FRANK YEARY
CamberView Partners LLC
PAULINE YU
American Council of Learned Societies

Project Staff
JOHN TESSITORE
SAMANTHA CARNEY
ELIZA BERG

Funders
Carnegie Corporation of New York
Robert and Colleen Haas
William and Flora Hewlett Foundation
Thomas and Stacey Siebel Foundation
The Spencer Foundation

† Deceased
Project Activities

First Regional Forum

October 26, 2014
Charlottesville, VA

Participants

GERALD L. BALILES
The Miller Center

ROBERT J. BIRGENEAU
University of California, Berkeley

PETER BLAKE
State Council of Higher Education for Virginia

GENE D. BLOCK
University of California, Los Angeles

HENRY BRADY
University of California, Berkeley

PHILIP BREDESEN
former Governor of Tennessee

SAMANTHA CARNEY
American Academy of Arts and Sciences

JOHN T. CASTEEN III
University of Virginia

JONATHAN COLE
Columbia University

MARY SUE COLEMAN
University of Michigan

JOHN C. CROWLEY
Charlottesville, Virginia

JONATHAN F. FANTON
American Academy of Arts and Sciences

CAROL FOLT
University of North Carolina at Chapel Hill

MATTHEW GOLDSMITH
The City University of New York

CARL GUARDINO
Silicon Valley Leadership Group

ROBERT D. HAAS
Levi Strauss & Co.

JAMES HACKETT
Steelcase

MICHAEL HOUT
New York University

FELICIA KNIGHT
Knight Vision International

EARL LEWIS
The Andrew W. Mellon Foundation

MICHAEL RAO
Virginia Commonwealth University

HUNTER RAWLINGS
Association of American Universities

LINWOOD ROSE
Virginia Business Higher Education Council

TIMOTHY SANDS
Virginia Tech

RAY SCHEPPACH
The Miller Center

TERESA SULLIVAN
University of Virginia

JOHN TESSITORE
American Academy of Arts and Sciences

PAULINE YU
American Council of Learned Societies
Project Activities

Third Full Committee Meeting

October 27, 2014
Charlottesville, VA

Participants
Gerald Baliles
The Miller Center

Robert J. Birgeneau
University of California, Berkeley

Mary Sue Coleman
University of Michigan

Jonathan F. Fanton
American Academy of Arts and Sciences

Lawrence S. Bacow
Tufts University

Gene D. Block
University of California, Los Angeles

Henry Brady
University of California, Berkeley

Philip Bredesen
former Governor of Tennessee

Samantha Carney
American Academy of Arts and Sciences

Jonathan Cole
Columbia University

John C. Crowley
Charlottesville, Virginia

Carol Folt
University of North Carolina at Chapel Hill

David Frohnmayer
University of Oregon

Matthew Goldstein
The City University of New York

Carl Guardino
Silicon Valley Leadership Group

Robert D. Haas
Levi Strauss & Co.

James Hackett
Steelcase

Ann Weaver Hart
University of Arizona

Michael Hout
New York University

Felicia Knight
Knight Vision International

Earl Lewis
The Andrew W. Mellon Foundation

Peter McPherson
Association of Public and Land-grant Universities

Hunter Rawlings
Association of American Universities

Pauline Yu
American Council of Learned Societies

Project Activities

Second Regional Forum

March 26, 2015
Austin, TX

Participants
Robert J. Birgeneau
University of California, Berkeley

Henry Brady
University of California, Berkeley

Philip Bredesen
former Governor of Tennessee

Samantha Carney
American Academy of Arts and Sciences

Mary Sue Coleman
University of Michigan

David Daniel
The University of Texas at Dallas

Larry Faulkner
The University of Texas at Austin

(From left to right) James Henderson (University of Louisiana at Lafayette), Diana Natalicio (The University of Texas at El Paso), Robert J. Birgeneau (University of California, Berkeley), Kay Bailey Hutchison (former U.S. Senator, Texas), Henry Brady (University of California, Berkeley), and Vistasp Karbhari (The University of Texas at Arlington)
Project Activities

Second Regional Forum, continued

JOHN FITZPATRICK  
Educate Texas

JAMES HENDERSON  
University of Louisiana at Lafayette

KAY BAILEY HUTCHISON  
former U.S. Senator, Texas

VISTASP KARBHARI  
The University of Texas at Arlington

HARRISON KELLER  
The University of Texas at Austin

DIANA NATALICIO  
The University of Texas at El Paso

MARK ROSENBERG  
Florida International University

M. DAVID RUDD  
University of Memphis

DOUG SHIPMAN  
Center for Civil and Human Rights

JOHN TESSITORE  
American Academy of Arts and Sciences

JAMES W. WAGNER  
Emory University

RAYMUND PAREDES  
Texas Higher Education Coordinating Board

WILLIAM POWERS, JR.  
The University of Texas at Austin

AMY WOHLERT  
The University of New Mexico

Project Activities

Third Regional Forum

April 2, 2015  
Atlanta, GA

Participants

MARK BECKER  
Georgia State University

ROBERT J. BIRGENEAU  
University of California, Berkeley

CARLTON BROWN  
Clark Atlanta University

SAMANTHA CARNEY  
American Academy of Arts and Sciences

MARY SUE COLEMAN  
University of Michigan

JONATHAN F. FANTON  
American Academy of Arts and Sciences

ROBERT FRANKLIN  
Morehouse College; Emory University

KENT McGUIRE  
Southern Education Foundation

PETER McPHERSON  
Association of Public and Land-grant Universities

JERE W. MOREHEAD  
University of Georgia

G.P. “BUD” PETERSON  
Georgia Institute of Technology

MARK ROSENBERG  
Florida International University

M. DAVID RUDD  
University of Memphis

DOUG SHIPMAN  
Center for Civil and Human Rights

JOHN TESSITORE  
American Academy of Arts and Sciences

JAMES W. WAGNER  
Emory University

Robert Franklin (Morehouse College; Emory University) and Doug Shipman (Center for Civil and Human Rights)
Project Activities

Fourth Regional Forum

April 6, 2015
New York, NY

Participants

DENNIS ASSANIS
Stony Brook University

LAWRENCE S. BACOW
Tufts University

ROBERT J. BIRGENEAU
University of California, Berkeley

GENE D. BLOCK
University of California, Los Angeles

PHILIP BREDESEN
former Governor of Tennessee

SAMANTHA CARNEY
American Academy of Arts and Sciences

MARY SUE COLEMAN
University of Michigan

FADI DEEK
New Jersey Institute of Technology

PATRICK DOYLE
Domino’s Pizza, Inc.

RICHARD EDWARDS
Rutgers University-New Brunswick

JONATHAN F. FANTON
American Academy of Arts and Sciences

MATTHEW GOLDSMITH
The City University of New York

CARL GUARDINO
Silicon Valley Leadership Group

ROBERT D. HAAS
Levi Strauss & Co.

MICHAEL HOUT
New York University

ROBERT JONES
University at Albany, State University of New York

HELENE KAPLAN
formerly, Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates

MARK KAPLAN
Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates

FELICIA KNIGHT
Knight Vision International

JASON LANE
The State University of New York

JAMES LEACH
University of Iowa

NICHOLAS LEMANN
Columbia University

DANIEL ROSE
Rose Associates, Inc.

THOMAS RUDIN
National Academy of Sciences

JOHN TESSITORE
American Academy of Arts and Sciences

KENNETH WALLACH
Central National-Gottesman, Inc.

SUSAN WALLACH
Susan S. and Kenneth L. Wallach Foundation

PAULINE YU
American Council of Learned Societies

CHARLES ZUKOSKI
University at Buffalo

Project Activities

Fourth Full Committee Meeting

April 7, 2015
New York, NY

Participants

F. KING ALEXANDER
Louisiana State University

LAWRENCE S. BACOW
Tufts University

ROBERT J. BIRGENEAU
University of California, Berkeley

GENE D. BLOCK
University of California, Los Angeles

HENRY BRADY
University of California, Los Angeles

PHILIP BREDESEN
former Governor of Tennessee

NANCY CANTOR
Rutgers University-Newark

SAMANTHA CARNEY
American Academy of Arts and Sciences

MARY SUE COLEMAN
University of Michigan

JOHN C. CROWLEY
Charlottesville, Virginia

PATRICK DOYLE
Domino’s Pizza, Inc.

JONATHAN F. FANTON
American Academy of Arts and Sciences

MATTHEW GOLDSMITH
The City University of New York

CARL GUARDINO
Silicon Valley Leadership Group
Project Activities

Fourth Full Committee Meeting, continued

ROBERT D. HAAS
Levi Strauss & Co.

MICHAEL HOUT
New York University

MARTHA KANTER
New York University

FELICIA KNIGHT
Knight Vision International

JULIA LANE
American Institutes for Research

JAMES LEACH
University of Iowa

ELISSA LU
American Academy of Arts and Sciences

PETER MCPPHERSON
Association of Public and Land-grant Universities

JASON OWEN-SMITH
University of Michigan

JOHN W. ROGERS, JR.
Ariel Investments

THOMAS RUDIN
National Academy of Sciences

JOHN TESSITORE
American Academy of Arts and Sciences

PHYLLIS WISE
University of Illinois at Urbana-Champaign

FRANK YEARY
CamberView Partners LLC

PAULINE YU
American Council of Learned Societies

Project Activities

Fifth Regional Forum

May 7, 2015
Chapel Hill, NC

Participants

NANCY ALLBRITTON
University of North Carolina at Chapel Hill

VALERIE ASHBY
University of North Carolina at Chapel Hill

GENE D. BLOCK
University of California, Los Angeles

ROBERT BLOUIN
University of North Carolina at Chapel Hill

SAMANTHA CARNEY
American Academy of Arts and Sciences

JONATHAN COLE
Columbia University

JUDITH CONE
University of North Carolina at Chapel Hill

JOSEPH DESIMONE
University of North Carolina at Chapel Hill; North Carolina State University

FRED ESHELMAN
Eshelman Ventures LLC

MATTHEW FAJACK
University of North Carolina at Chapel Hill

CAROL FOLT
University of North Carolina at Chapel Hill

ROBERT GEOLAS
The Research Triangle Park

ANN GOODNIGHT
SAS Institute

RICK GUNN
North Carolina General Assembly

KEVIN GUSKIEWICZ
University of North Carolina at Chapel Hill

ZHI HONG
GlaxoSmithKline

MARK KATZ
University of North Carolina at Chapel Hill

JAMES LEACH
University of Iowa

TOM MARSICO
Marsico Capital Management

BEAU MILLS
University of North Carolina at Chapel Hill

DAVID PRICE
U.S. House of Representatives

DAVID ROUTH
University of North Carolina at Chapel Hill

DEBRA SAUNDERS-WHITE
North Carolina Central University

ANNA SPANGLER NELSON
University of North Carolina Board of Governors

JOHN TESSITORE
American Academy of Arts and Sciences

CLAY THORP
Hatteras Venture Partners

RANDY WOODSON
North Carolina State University
Publications


Forthcoming Publications

- An overview of the state appropriations process and where higher education falls within it (September 2015)
- An examination of current financial models of public research universities (October 2015)
- An exploration of the ways in which public research universities serve as a public good (November 2015)
- A final report with recommendations and strategies to secure the future of public research universities (February 2016)
The Exploratory Fund supports Fellows who want to work together to look over the horizon for issues and opportunities not well understood, to think of problems in a fresh way, and to search for connections between research and policy that advance the common good. By encouraging smaller scale initiatives in a variety of venues, the Academy assists Fellows in pursuing the subjects that concern them most.

The Fund provides up to $30,000 for a limited number of projects each year. Funds can be used in any way that furthers the proposed work, including covering costs associated with the organization of meetings, symposia, and conferences that can be held at the Academy’s headquarters in Cambridge, at the home institutions of interested Fellows, or at other locations relevant to discussion topics. Recipients also receive the organizational and logistical support of the Academy staff.

Current Exploratory Initiatives include:

- A discussion of the future of jazz in American life, addressing both the failing economics of jazz—from the struggling recording industry to the decline in performance venues—as well as new opportunities for educational institutions and other organizations to broaden access to jazz education for young people.
  
  **Organizers**
  
  FELTON EARLS
  Harvard University
  
  WILLIAM DAMON
  Stanford University

- A meeting on understanding the new nuclear age, convening experts in international security to examine recent changes in the dynamics of the nuclear order, explore the effect of new technologies on nuclear strategies, and assess how future arms control agreements may be designed in order to address these contextual changes.
  
  **Organizer**
  
  ROBERT LEGVOLD
  Columbia University

- A conference of judges, lawyers, and legal scholars concerned about the state of legal services for the poor. Conference participants will examine obstacles to access in both the civil and the criminal justice systems, evaluate the most recent research, and discuss possible solutions.
  
  **Organizers**
  
  JOHN LEVI
  Legal Services Corporation
  
  MARTHA MINOW
  Harvard Law School
  
  LANCE LIEBMAN
  Columbia Law School

- A meeting of the Collaborative on Autism and Sign Language that seeks to apply recent advances in communication among the deaf to problems of communication with and among people with autism.
  
  **Organizers**
  
  MARK ARONOFF
  State University of New York at Stony Brook
  
  SUSAN GOLDIN-MEADOW
  University of Chicago
  
  CHARLES NELSON
  Harvard University
Special Meetings

Understanding the New Nuclear Age

Exploratory Meeting
June 19, 2015
Cambridge, MA

This exploratory meeting on Understanding the New Nuclear Age focused on how the dynamics of the nuclear order have shifted since the first nuclear age; explored how nuclear calculations are being impacted by technological developments in both the nuclear and conventional spaces, and by geostrategic crises involving nuclear powers; and assessed how future arms control agreements may be designed in order to address these contextual changes.

Chair
ROBERT LEGVOLD
Columbia University

Participants
JAMES ACTON
Carnegie Endowment for International Peace

FRANCESCA GIOVANNINI
American Academy of Arts and Sciences

SUMMERS HAMMEL
American Academy of Arts and Sciences

CATHERINE KELLEHER
University of Maryland; Brown University

MICHAEL KREPON
The Stimson Center

KATHRYN MOFFAT
American Academy of Arts and Sciences

NINA TANNENWALD
Brown University

BARRY POSEN
Massachusetts Institute of Technology

MICHAEL D. SWAINE
Carnegie Endowment for International Peace

Barry Posen (Massachusetts Institute of Technology), Robert Legvold (Columbia University), and Michael D. Swaine (Carnegie Endowment for International Peace)
The Visiting Scholars Program

This interdisciplinary fellowship program, housed at the Academy headquarters in Cambridge, Massachusetts, is open to untenured junior faculty or postdoctoral researchers who are working on projects in the humanities and social sciences relating to American history, culture, and public policy.

The program offers scholars a year for research and writing free from teaching and administrative duties, a collaborative environment, and the opportunity to interact with Fellows of the Academy, senior scholars, and publishing experts. The Visiting Scholars use their fellowship year to transform a dissertation into a book, prepare journal articles, or begin a second project.

Visiting Scholars Program Selection Committee

LAWRENCE BUELL
Harvard University

AMANDA CLAYBAUGH
Harvard University

JANE KAMENSKY
Brown University

HARRIET RITVO
Massachusetts Institute of Technology

JAMES STIMSON
University of North Carolina at Chapel Hill

ALAN TRACHTENBERG
Yale University

2015–2016 Visiting Scholars

LESLIE EMIL BELDO, JR.
Lecturer, University of Chicago. Ph.D., Comparative Human Development, University of Chicago. Project title: “Makah Whaling: An Ethnography of Conflict.”

MERVE GUL EMRE
Ph.D., English, Yale University. Project title: “Paraliterary Institutions.”

RACHEL M. GUBERMAN

KATHERINE MARIE MARINO
Assistant Professor, Departments of History and Women’s, Gender, and Sexuality Studies, Ohio State University. Ph.D., American History, Stanford University. Project title: “La Vanguardia Feminista: Pan-American Feminism and the Rise of International Women’s Rights, 1915–1946.”

EMILY ALYSSA OWENS

JOY MARIE LISI RANKIN

LUKAS RIEPEL

RACHEL ANN WISE
Presidential Excellence Postdoctoral Fellow, University of Texas, Austin. Ph.D., American Literature, University of Texas, Austin. Project title: “Losing Appalachia: Literature, Material Culture, and the Fate of Regional Writing.”
The Hellman Fellowship in Science and Technology Policy

As part of the Academy’s Initiative for Science, Engineering, and Technology, the Hellman Fellowship in Science and Technology Policy provides an opportunity for an early-career professional with training in science or engineering to learn about a career in public policy and administration. While in residence, Hellman Fellows work with senior scientists and policy experts on critical national and international policy issues related to science, engineering, and technology.

Hellman Fellows contribute to one or more of the ongoing projects under the Academy’s Initiative for Science, Engineering, and Technology. The studies explore how science and technology are evolving, how to help the public understand those changes, and how society can better adapt to those changes. The Initiative convenes leading scientists and public policy experts from both academia and industry to advance critical thinking about the evolving landscape for scientific research.

The Hellman Fellowship program has three objectives:

- To support and guide an early-career professional who wants to develop expertise on issues of science, engineering, and technology;
- To increase the number of science-policy professionals who are engaged in substantive discussion of science and engineering research questions, with a broad understanding of their social implications; and
- To expand the scale of Academy projects and studies focused on challenges facing scientific research and science education.

2015–2016 Hellman Fellows

ALISON E. LEAF
Ph.D., Cell Biology, University of California, San Francisco; B.A., Biochemistry, Cornell University. As a graduate student at UCSF, she investigated how signaling receptors are delivered to the primary cilium, an antennae-like extension from the cell that is critical for appropriate cell signaling. Additionally, she worked to raise awareness on science policy issues in the UCSF community, and was a leader for the graduate student-led National Science Policy Group. She was also active in science education outreach efforts in San Francisco.

KEERTHI SHETTY
Ph.D., Immunobiology, Yale University; A.B., Molecular Biology, Princeton University. Her thesis research involved studying the recruitment of RAG1 and RAG2, two important proteins of the immune system that help create antibodies, to chromatin. At Yale, she was Co-President of the Yale Science Diplomats, a science policy group, where she helped develop a science lecture series for local high schools and the general public, organized policy writing workshops and seminars, and contacted local legislators about funding issues concerning biomedical research. She was also an intern through the State Department’s Virtual Student Foreign Service program, where she wrote about global science and technology issues.
The University Affiliates is a partnership between the Academy and the nation’s leading cultural institutions and institutions of higher education. Sixty-three organizations are collaborating with the Academy by participating in its studies on higher education and by helping to support its fellowships and outreach programs.
University Affiliates

Stanford University
John L. Hennessy,
President

University of Florida
W. Kent Fuchs, President

University of Southern California
C. L. Max Nikias,
President

Syracuse University
Kent D. Syverud,
Chancellor and President

University of Texas at Austin
William Powers Jr.,
President

Tufts University
Anthony P. Monaco,
President

University of Virginia
Teresa A. Sullivan,
President

University of Arizona
Ann Weaver Hart,
President

University of Wisconsin-Madison
Rebecca M. Blank,
Chancellor

University of California, Berkeley
Nicholas B. Dirks,
Chancellor

Virginia Commonwealth University
Michael Rao, President

University of California, Davis
Linda P.B. Katehi,
Chancellor

Virginia Polytechnic Institute and State University
Timothy D. Sands, President

University of California, Irvine
Howard Gillman,
Chancellor

Washington University in St. Louis
Mark S. Wrighton,
Chancellor

University of California, Los Angeles
Gene D. Block,
Chancellor

Wellesley College
H. Kim Bottomly,
President

University of California, San Diego
Pradeep Khosla,
Chancellor

Wesleyan University
Michael S. Roth,
President

University of Notre Dame
Rev. John I. Jenkins, C.S.C.,
President

Yale University
Peter Salovey, President

University of North Carolina at Chapel Hill
Carol L. Folt, Chancellor

Cultural Institutions

University of Miami
Julio Frenk, President

The J. Paul Getty Trust
James Cuno, President and CEO

University of Minnesota
Eric W. Kaler, President

University of Michigan
Mark S. Schlissel,
President

University of North Carolina at Chapel Hill
Carol L. Folt, Chancellor

University of Oregon
Sally Mason, President
Meetings and Events Around the Country

Academy projects, as well as the research and writings of Academy members, are the focus of meetings held across the country each year. The House of the Academy, university campuses, research institutes, museums, and corporate headquarters serve as venues for these meetings. The Academy sponsors formal lectures, panel discussions, and informal gatherings that highlight topics ranging from challenges facing higher education, to the state of the humanities and social sciences, to global security, to U.S. science and technology policy, to the future of energy.

Berkeley, California
February 4, 2015
University of California, Berkeley
Policy Perspectives on Police Use of Lethal Force
Featured Speakers: Nicholas B. Dirks (University of California, Berkeley), Andrea Roth (University of California, Berkeley School of Law), Franklin E. Zimring (University of California, Berkeley School of Law)

Palo Alto, California
February 3, 2015
Stanford University
Replenishing the Innovation Pipeline: The Role of University Research
Featured Speakers: John L. Hennessy (Stanford University), Ann M. Arvin (Stanford University), Carla J. Shatz (Stanford University), Peter S. Kim (Stanford University)

Los Angeles, California
February 5, 2015
University of California, Los Angeles
Reception for Southern California Area Members and discussion of the Lincoln Project: Excellence and Access in Public Higher Education and of the Academy report Restoring the Foundation: The Vital Role of Research in Preserving the American Dream
Featured Speakers: Gene D. Block (University of California, Los Angeles) and Maxine L. Savitz (Honeywell, Inc., ret.)

Houston, Texas
April 30, 2015
Rice University
Baker Institute Civic Scientist Symposium, featuring Restoring the Foundation
Featured Speakers: Norman R. Augustine (Lockheed Martin Corporation, ret.), Steven Chu (Stanford University), Neal Lane (Rice University)

Chicago, Illinois
November 6, 2014
University of Chicago
Reception for Chicago Area Members

Chicago, Illinois
November 8, 2014
University of Illinois at Chicago, UIC Forum in collaboration with the Chicago Humanities Festival
The Humanities and “Soft Power”
Featured Speaker: Karl W. Eikenberry (Stanford University)

March 5, 2015
Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates
40 Years of Evolution
Featured Speakers: Trevor Price (University of Chicago); via video: B. Rosemary Grant (Princeton University), Peter R. Grant (Princeton University), Jonathan B. Losos (Harvard University)
Meetings and Events Around the Country

Franklin E. Zimring (University of California, Berkeley School of Law) and Andrea Roth (University of California, Berkeley School of Law)

John L. Hennessy (Stanford University), Ann M. Arvin (Stanford University), Carla J. Shatz (Stanford University), and Peter S. Kim (Stanford University)

Jonathan F. Fanton (American Academy) addresses Members and guests at a reception at the University of California, Los Angeles

Chicago Area Members gather at a reception at the University of Chicago

Trevor Price (University of Chicago) leads a discussion with Chicago area Members and guests following a video presentation by Peter Grant and B. Rosemary Grant on 40 Years of Evolution.

Nancy C. Andrews (Duke University School of Medicine), Harold Varmus (then National Cancer Institute; currently Weill Cornell Medical College), Susan R. Wente (Vanderbilt University), and Tania Baker (Massachusetts Institute of Technology)
Stephen Holmes (New York University School of Law) leads a discussion with Members and guests in New York City following the live stream of the panel discussion on “Russia: At the Crossroads Again?”

Victor Navasky (The Nation; Columbia University), Louis Nelson (New York, NY), Judith Collins (New York, NY), Louise Hirschfeld Cullman (New York, NY), Jonathan Fanton (American Academy), Lewis Cullman (Cullman Ventures, LLC), Henry Arnhold (Arnhold and S. Bleichroeder Holdings, Inc.)

Edward J. Hall (Harvard University), Lisa Sowle Cahill (Boston College), and Alan Lightman (Massachusetts Institute of Technology)

Valerie Bunce (Cornell University), George W. Breslauer (University of California, Berkeley), and Timothy J. Colton (Harvard University)

Robert D. Ballard (Ocean Exploration Trust; Center for Ocean Exploration; University of Rhode Island Graduate School of Oceanography)

Ellen T. Harris (American Musicological Society; Massachusetts Institute of Technology)

John W. Rogers, Jr. (Ariel Investments)

Jill Lepore (Harvard University; The New Yorker)
Atlanta, Georgia

April 2, 2015
Emory University

Teaching and the Digital Humanities

Featured Speakers: James W. Wagner (Emory University), Erika Farr (Emory University), William G. Thomas (University of Nebraska-Lincoln), Anne Cong-Huyen (Whittier College), Angel Nieves (Hamilton College), Jessica Johnson (Michigan State University), Stephen Nichols (Johns Hopkins University), G. Wayne Clough (formerly, Smithsonian Institution and Georgia Institute of Technology)

Durham, North Carolina

February 24, 2015
Duke University

The Unstable Biomedical Research Ecosystem: How Can It Be Made More Robust?

Featured Speakers: Richard H. Brodhead (Duke University), Nancy C. Andrews (Duke University School of Medicine), Sally Kornbluth (Duke University), Harold Varmus (then National Cancer Institute; currently, Weill Cornell Medical College), Susan R. Wente (Vanderbilt University), Tania Baker (Massachusetts Institute of Technology), Mark C. Fishman (Novartis Institutes for BioMedical Research)

Charlottesville, Virginia

October 27, 2014
Robert H. Smith Center at Montalto in partnership with the Thomas Jefferson Foundation

The Jeffersonian Tradition of Higher Education

Featured Speakers: John T. Casteen III (University of Virginia), Jonathan R. Cole (Columbia University), Peter S. Onuf (University of Virginia; Robert H. Smith International Center for Jefferson Studies at Monticello)

Washington, D.C.

September 17, 2014
Newseum

Constitution Day Panel Discussion on Stewarding America: Institutions and Civic Life

Featured Speakers: Norman Ornstein (American Enterprise Institute), Mickey Edwards (Aspen Institute; formerly, U.S. House of Representatives), Stephen Heintz (Rockefeller Brothers Fund), Joel I. Klein (Amplify; formerly, New York City Department of Education), Patricia McGowan Wald (former Chief Judge of the U.S. Court of Appeals, District of Columbia Circuit)

Keynote Address: William “Bro” Adams (National Endowment for the Humanities)

June 15, 2015
The Ritz-Carlton Georgetown

Reception for Washington, D.C., Area Members and Guests and Welcome Newly Elected Members

New York City

November 12, 2014
Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates

Russia: At the Crossroads Again?

Featured Speakers: Stephen Holmes (New York University School of Law); via video: Timothy J. Colton (Harvard University), George W. Breslauer (University of California, Berkeley), and Valerie Bunce (Cornell University)

December 4, 2014
Harvard Club

The Invention of Courts

Featured Speakers: Judith Resnik (Yale Law School), Linda Greenhouse (Yale Law School), Jonathan Lippman (Chief Judge of the State of New York and Chief Judge of the Court of Appeals), Susan S. Silbey (Massachusetts Institute of Technology), Jamal Greene (Columbia Law School), Carol S. Steiker (Harvard Law School)
March 5, 2015
Skadden, Arps, Slate, Meagher & Flom LLP
& Affiliates

40 Years of Evolution

Featured Speakers: Jonathan Weiner (Columbia University School of Journalism); via video: B. Rosemary Grant (Princeton University), Peter R. Grant (Princeton University), Jonathan B. Losos (Harvard University)

May 4, 2015
The Century Association

Reception for New York Area Members and Guests and Welcome Newly Elected Members

Cambridge, Massachusetts

October 10, 2014
Harvard University

A Celebration of the Arts and Humanities

Featured Speakers and Performers: Jill Lepore (Harvard University; The New Yorker), Linda Gregerson (University of Michigan), Ralph Stanley (Musician, Composer), Maxwell K. Hearn (The Metropolitan Museum of Art), Frank Lentricchia (Duke University), El Anatsui (Artist; former University of Nigeria), Amy Hempel (Harvard University), Tere O’Connor (Tere O’Connor Dance, University of Illinois at Urbana-Champaign), Mary Jo Salter (Johns Hopkins University)

October 11, 2014
Harvard University

2014 Induction Ceremony

Featured Speakers: John Fabian Witt (Yale Law School), Linda Darling-Hammond (Stanford University), Ramamurti Shankar (Yale University), Diana H. Wall (Colorado State University), Sherry Turkle (Massachusetts Institute of Technology), Mary Kelley (University of Michigan), John W. Rogers, Jr. (Ariel Investments)

October 12, 2014
House of the Academy

Ocean Exploration: Past, Present, and Future

Featured Speaker: Robert D. Ballard (Ocean Exploration Trust; Center for Ocean Exploration; University of Rhode Island Graduate School of Oceanography)

November 12, 2014
House of the Academy

Russia: At the Crossroads Again?

Featured Speakers: Timothy J. Colton (Harvard University), George W. Breslauer (University of California, Berkeley), Valerie Bunce (Cornell University)

December 10, 2014
House of the Academy

Winter Concert

Featuring: Boston Symphony Orchestra Brass Quintet

February 11, 2015
House of the Academy

in collaboration with the Catalyst Collaborative@MIT

Mr g— The Story of Creation as Told by God

Staged reading and panel discussion featuring Alan Lightman (Massachusetts Institute of Technology), Lisa Sowle Cahill (Boston College), Edward J. Hall (Harvard University)

March 5, 2015
House of the Academy

40 Years of Evolution

Featured Speakers: B. Rosemary Grant (Princeton University), Peter R. Grant (Princeton University), Jonathan B. Losos (Harvard University)

B. Rosemary Grant (Princeton University) and Peter R. Grant (Princeton University)
March 30, 2015
House of the Academy

An Evening with Robert Levin and Ya-Fei Chuang

Featuring Robert Levin (Harvard University; Sarasota Music Festival) and Ya-Fei Chuang (Boston Conservatory; New England Conservatory)

April 16, 2015
House of the Academy

Technology, Surveillance & the Contemporary Self

Featured Speakers: Peter L. Galison (Harvard University) and Jonathan Zittrain (Harvard University)

May 11, 2015
House of the Academy

Lecture-Recital: Discovering Handel’s London Through His Music

Featuring Ellen T. Harris (Massachusetts Institute of Technology) and a performance by musicians of the Boston Early Music Festival

June 18, 2015
House of the Academy
in collaboration with IBM Watson

Symposium on Cognitive Computing

Featured Speakers: Michael Rhodin (IBM Watson), Shahram Ebadollahi (IBM Watson Health Group), Isaac Kohane (Harvard Medical School), Stanley Shaw (Massachusetts General Hospital), Mitchell Chester (Massachusetts Department of Elementary and Secondary Education), Richard Culatta (U.S. Department of Education), Stanley S. Litow (IBM; IBM International Foundation), Stefan Pryor (Rhode Island Department of Commerce; formerly, Connecticut State Department of Education)

London, United Kingdom

June 24, 2014
The British Academy

Global Power, Influence and Perception in the 21st Century

A joint event of the British Academy and the American Academy of Arts and Sciences

Featured Speakers: Karl W. Eikenberry (Stanford University; U.S. Army, ret.), Adam Roberts (British Academy; Oxford University), Martin Davidson (British Council)