AMERICAN ACADEMY of arts & sciences



PROJECTS, PUBLICATIONS & MEETINGS OF THE ACADEMY

American Institutions, Society, and the Public Good • Education and the Development of Knowledge • Global Security and International Affairs • The Humanities, Arts, and Culture • Science, Engineering, and Technology

Meeting Places of the American Academy



n May 1780, the Massachusetts legislature enacted the Charter of the Academy and stated that the first meeting of the Academy was to be held in the Philosophy Chamber of Harvard College. For the next sixty years until ca. 1823, the new society used the Philosophy Chamber as its primary meeting place. The Academy also held meetings in several locations around Boston, including the County Courthouse (1780–1784), the Hall of the Massachusetts Bank (1785–ca. 1794), the "New" State House (1800–1814), and the Boston Marine Insurance Company (1814–1817).

During much of the nineteenth century, the Academy shared quarters with the Boston Athenæum at various locations: the Rufus Amory House (1817–1823), Pearl Street (1823–ca. 1829), and the Athenæum's current headquarters on Beacon Street (1852–1899). Between 1824 and 1906

the Academy also met intermittently at Harvard, MIT, the Massachusetts Historical Society, and even at members' homes. In 1906, the Academy purchased its first permanent headquarters at 26 Newbury Street. Within five years the adjoining property was purchased and a much larger building was erected at 26-28 Newbury. The Academy remained there until 1955.

Between 1955 and 1957 several locations – including Morse Auditorium, Boston Museum of Science, and Kresge Auditorium at MIT – served as meeting venues. The Academy then reached an agreement with the Brandegee Charitable Foundation and moved to Faulk-ner Farm in Brookline, where the Academy remained until the completion in 1981 of a new house, designed by the architectural firm Kallmann McKinnell & Wood, at 136 Irving Street in Cambridge. Both Noel Michael Kallmann and Gerhard Michael McKinnell were members of the Academy. Their work included the design of Boston's City Hall, Boston's Back Bay Station, the enlarged Hynes Convention Center, and the School of Business and Public Administration at Washington University in St. Louis.

Made possible through the vision and generosity of Edwin Land, the new House of the Academy was created to provide an intimate home for scholarly thought. Its award-winning design borrows elements from ancient Greek cities, Renaissance Tuscan villas, and the twentieth-century American and British Arts and Crafts style.

In recent years, generous individuals have continued to provide for the maintenance and restoration of the Academy's home. Between 2015 and 2020 Morton Mandel supported several capital projects, including technology upgrades, extensive kitchen and restroom renovations, and the addition of a beautiful new portico and walkway to the front entrance. In 2020, David Rubenstein made a gift to support the construction of a new addition to the Academy's building, which will house the Academy Archives and make the collections more accessible.

The Academy's national headquarters in Cambridge stands as a "House of the Mind" and a center for scholarly exchange.



Contents

From the President	3
Projects, Publications, and Meetings American Institutions, Society, and the Public Good	
Overview Commission on the Practice of Democratic Citizenship Making Justice Accessible American Political Economy and the Public Good	4 5 8 11
Education and the Development of Knowledge	
Overview The Dilemma Facing America's Schools During COVID-19 The Post-Pandemic Future of Higher Education:	13 14 14
A Convening of American Academy Affiliates	14
Global Security and International Affairs Overview	15
Meeting the Challenges of the New Nuclear Age, Phase I Meeting the Challenges of the New Nuclear Age, Phase II:	16
Deterrence and New Nuclear States	17
Rethinking the Humanitarian Health Response to Violent Conflict Promoting Dialogue on Arms Control and Disarmament	20 22
Civil Wars, Violence, and International Responses	24
The Humanities, Arts, and Culture	
Overview	27
Commission on the Arts The Humanities Indicators	28 31
Science, Engineering, and Technology	
Overview	34
Challenges for International Scientific Partnerships	35
Accelerating Climate Action Resiliency in Supply Chains	40 41
The Public Face of Science	42
New Models for U.S. Science and Technology	44
Local Program Committees and Representatives	46
Member Events	50
Affiliates of the American Academy	56
Academy Patrons	61
The Campaign for the Academy & Its Future	65
From the Chair of the Board of Directors	66
Academy Leadership	67

From the President



n the summer of 2020, we faced a future clouded with uncertainty. As an organization whose raison d'être is to convene its membership in service of the common good, the Academy faced ongoing obstacles in bringing people together. At the same time, with so many disparate needs calling for the Academy's particular set of strengths, we felt a tremendous responsibility to move swiftly and decisively forward with our work.

Looking back over the year, I am profoundly grateful to the Academy's membership and staff for overcoming the challenges of the pandemic to accomplish more and greater things than we dared hope.

Nearly twice as many people participated in our project and membership events than in any previous year, representing a greater diversity of gender, race, geography, and institution. Progress on all our projects moved forward apace, resulting in thought-provoking publications, policy briefings, institutional partnerships, and member and community engagements. We are now preparing to launch two significant new commissions: The Commission on Accelerating Climate Action and the Commission on American Political Economy and the Public Good.

I am humbled and grateful for the philanthropic support of our members and foundations that makes this work possible. This year, the Academy received over \$21 million – a new record – that will support each of our program areas and staff leaders as well as capital improvements and technology advancements.

I am delighted to share this report of projects, publications, and meetings over the past year. Thank you for your involvement and for all you do for the American Academy of Arts and Sciences.

David W. Oxtoby

American Institutions, Society & the Public Good



ince its founding, the American Academy of Arts and Sciences has worked to promote a strong and virtuous nation. Our charter states that the "end and design" of the American Academy is to "cultivate every art and science which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people." Today, this effort involves projects designed to advance knowledge about the nation's institutions and to develop innovative solutions to problems facing American society. Projects in this area interpret the term "institution" broadly, focusing on all of the constituent elements of government and civil society. These projects address how Americans interact with social structures, how these experiences prepare people to make a positive contribution to a diverse nation, and how these institutions might operate differently in the twenty-first century. The Academy shares this research through publications, conferences, and active outreach.

PROGRAM ADVISORY COMMITTEE

CHAIR

Frances McCall Rosenbluth Yale University

MEMBERS

Danielle Allen Harvard University Thomas Bender New York University

Alan M. Dachs Fremont Group

Lee Epstein Washington University in St. Louis **Susan Hanson** Clark University

Antonia Hernández California Community Foundation

William Poorvu Harvard Business School Kenneth Prewitt Columbia University

James M. Stone Plymouth Rock Companies

PROJECT Commission on the Practice of Democratic Citizenship



The Commission on the Practice of Democratic Citizenship launched in 2018 to explore the factors that encourage and discourage people from becoming engaged in their communities. The Commission's work sheds light on the mechanisms that help people connect across demographic and ideological boundaries; examines how the transformations in the information environment have altered what civic engagement looks like in many communities; and makes recommendations that encourage democratic participation and empower everyday citizens. The project uses a definition of "citizenship" that extends beyond simple legal status to include people who are "civic participants" in many domains within their communities. The project seeks to improve democratic engagement in the United States with a set of recommendations that reach across political institutions, civic culture, and civil society. Reform is needed in all three areas in order to successfully revitalize American democracy. Released in June 2020, *Our Common Purpose: Reinventing American Democracy for the 21st Century*, the Commission's final report, offers 31 recommendations aimed at increasing representation, empowering voters, making institutions more responsive, and restoring our civic culture. The Academy has committed to make significant progress on all 31 recommendations by 2026, the nation's 250th anniversary.

COMMISSION CHAIRS

Danielle Allen Harvard University

Stephen Heintz Rockefeller Brothers Fund

Eric Liu Citizen University

COMMISSION MEMBERS

Sayu Bhojwani The New American Leaders Project

danah boyd Data & Society

Caroline B. Brettell Southern Methodist University David B. Brooks New York Times Company

David Campbell University of Notre Dame

Alan M. Dachs Fremont Group

Dee Davis Center for Rural Strategies **Jonathan Fanton** American Academy of Arts and Sciences

Lisa Garcia Bedolla University of California, Berkeley

Sam Gill John S. and James L. Knight Foundation

CONTINUED Commission on the Practice of Democratic Citizenship

COMMISSION MEMBERS, continued

Marie Griffith Washington University in St. Louis

Hahrie Han Johns Hopkins University

Antonia Hernández California Community Foundation

Wallace Jefferson Alexander Dubose & Jefferson LLP

Joseph Kahne University of California, Riverside

Kei Kawashima-Ginsberg Tufts University

Yuval Levin American Enterprise Institute; *National Affairs*

Carolyn J. Lukensmeyer National Institute for Civil Discourse Martha McCoy Everyday Democracy

Lynn Nottage Columbia University

Steven Olikara Millennial Action Project

Norman Jay Ornstein American Enterprise Institute

Bob Peck FPR Partners

Pete Peterson Pepperdine University

Miles Rapoport Harvard University

Michael Schudson Columbia University

Sterling Speirn National Conference on Citizenship

Marcelo M. Suárez-Orozco University of Massachusetts Boston **Ben Vinson** Case Western Reserve University

Diane P. Wood United States Court of Appeals, Seventh Circuit

Judy Woodruff PBS NewsHour

Ethan Zuckerman University of Massachusetts, Amherst

PROJECT STAFF

Jonathan Cohen Program Officer

Katherine Gagen Program Associate

Darshan Goux Program Director

Tania Munz Chief Program Officer **Peter Robinson** Morton L. Mandel Director of Strategic Implementation

Elizabeth Youngling Carl & Lily Pforzheimer Foundation Fellow

FUNDERS

S. D. Bechtel, Jr. Foundation

Rockefeller Brothers Fund

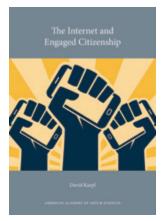
The John S. and James L. Knight Foundation

The William and Flora Hewlett Foundation

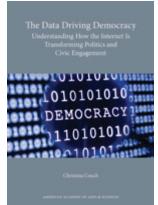
Alan Dachs and Lauren Dachs

David M. Rubenstein

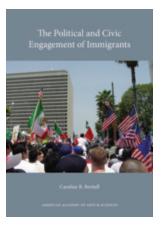
Commission Publications



The Internet and Engaged Citizenship, David Karpf (American Academy of Arts and Sciences, 2019)



The Data Driving Democracy, Christina Couch (American Academy of Arts and Sciences, 2020)



The Political and Civic Engagement of Immigrants, Caroline Brettell (American Academy of Arts and Sciences, 2020)



Our Common Purpose: Reinventing American Democracy for the 21st Century (American Academy of Arts and Sciences, 2020)

6

Commission Meetings

Since its release in June 2020, *Our Common Purpose* has solicited a great deal of interest from lawmakers, non-profit organizations, scholars, journalists, and the general public. The Academy shipped 15,600 copies of the report to interested readers, and the report has been downloaded 24,000 times and viewed an additional 150,000 times online. Commission cochairs and members have participated in more than 50 briefings and public events with targeted groups and audiences. Additionally, Commission members and staff have briefed dozens of members of Congress and numerous thought leaders and practitioners from every corner of the country. Some events focused on the entire report and its theory of change, while others focused on specific recommendations. The report has also received coverage in a wide variety of publications, from the *New Yorker* to the *Anniston Star* (Anniston, Alabama).

Selected List of Organizations that Hosted Our Common Purpose Briefings and Events

Aspen Philanthropy Group, The Aspen Institute Association of American Universities

Chicago Humanities Festival

City of Little Rock, Arkansas Council on Foreign Relations FairVote Minnesota Federation of State Humanities Councils Kiwanis Club of Eugene, Oregon

League of Women Voters, Greenwich, Connecticut Library of Congress National Academy of Public Administration

PBS NewsHour

University of Michigan

Meeting of the Commission

June 8, 2021

Members of the Commission on the Practice of Democratic Citizenship convened virtually to mark the oneyear anniversary of the release of *Our Common Purpose*. Commission cochairs and Academy leadership discussed the ongoing efforts around outreach, as well as

MEETING CHAIRS

Danielle Allen Harvard University **Stephen Heintz** Rockefeller Brothers Fund the progress on the recommendations. Members of the Commission shared their thoughts on implementation strategies and discussed the work ahead to reinvent American democracy for the twenty-first century.

Eric Liu Citizen University David W. Oxtoby American Academy of Arts and Sciences

PROJECT Making Justice Accessible



The two projects of the Making Justice Accessible initiative address the challenge of providing legal services to low-income Americans.

The first project, Designing Legal Services for the 21st Century, gathered information about the national need for improved legal access and advanced a set of clear national recommendations for closing the "civil justice gap" between supply of and demand for legal services. In September 2020, the project released its final report, *Civil Justice for All*, calling for the legal profession, the courts, law schools, tech professionals, and partners from many other fields to join together to provide legal assistance to many more people in need. The report recommends targeted investments, simplified procedures, greater coordination and new partnerships among a range of sectors, and new advocates, who are trained and encouraged to provide more accessible legal assistance. The second project, Data Collection and Legal Services for Low-Income Americans, issued its report, *Measuring Civil Justice for All*, in February 2021. The publication, a complementary white paper to the *Civil Justice for All* report, identifies sources of existing data on legal services and unrepresented civil litigation nationwide. This project creates a blueprint for future data collection efforts, including establishing a research agenda for scholars, practitioners, and policy-makers. Participants include representatives of the courts, legal aid providers, and foundations, as well as legal scholars and social scientists.

The related Winter 2019 issue of *Dædalus* on "Access to Justice" is a multidisciplinary study of the civil justice gap, examining new models for the delivery of legal aid.

DESIGNING LEGAL SERVICES FOR THE 21ST CENTURY PROJECT CHAIRS

John G. Levi Legal Services Corporation; Sidley Austin LLP

Martha Minow Harvard Law School

Kenneth C. Frazier Merck & Co.

DATA COLLECTION AND LEGAL SERVICES FOR LOW-INCOME AMERICANS PROJECT CHAIRS

Mark Hansen University of Chicago

Rebecca Sandefur Arizona State University

PROJECT STAFF

Katherine Gagen Program Associate

Darshan Goux Program Director

Tania Munz Chief Program Officer

John Tessitore Consultant

FUNDER

David M. Rubenstein

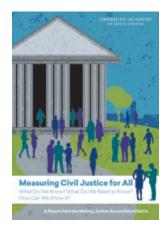
Project Publications



"Access to Justice," *Dædalus*, edited by Lincoln Caplan, Lance Liebman & Rebecca Sandefur (2019)



Civil Justice for All (American Academy of Arts and Sciences, 2020)



Measuring Civil Justice for All (American Academy of Arts and Sciences, 2021)

Project Meetings

Launching A New Report, *Civil Justice for All* September 24, 2020

A vast civil justice gap exists between the number of Americans who need civil legal assistance and the few who receive it. A lack of access to civil justice can be devastating, especially for low-income Americans who cannot afford representation and – as a result – may experience eviction, family separation, job loss, disrupted health care, and other hardships. The impact of COVID-19 increases the urgency of understanding and addressing the nation's inadequate civil justice system. This event marked the launch of *Civil Justice for All*, which illuminates the civil justice gap and recommends closing it with programs, partnerships, innovations, and a significant shift in mindset that extends the duty and capacity to assist those with legal need beyond lawyers.

SPEAKERS

Kenneth C. Frazier Merk & Co. Martha Minow Harvard Law School

John G. Levi Legal Services Corporation; Sidley Austin LLP David M. Rubenstein The Carlyle Group David W. Oxtoby American Academy of Arts and Sciences **CONTINUED** Making Justice Accessible

Civil Justice for All: Law Schools and the Civil Justice Gap

October 27, 2020

Law school faculty and students joined from around the country for a briefing and discussion of the American Academy's report, *Civil Justice for All*. The discussion focused on the role of law schools – students, faculty, clinics, and special programs – in closing the civil justice gap.

SPEAKERS

Tonya L. Brito

University of Wisconsin Law School; Institute for Research on Poverty, University of Wisconsin

Margaret H. Marshall

Choate, Hall & Stewart LLP; formerly, Massachusetts Supreme Judicial Court

Dayna Bowen Matthew George Washington University Law School **Martha Minow** Harvard Law School

Andrew M. Perlman Suffolk University Law School

Quinten Steenhuis Suffolk University Law School

David W. Oxtoby American Academy of Arts and Sciences

Health and Civil Justice: Innovative Partnerships Between Medicine and the Law December 8, 2020

The high incidence of socially determined health issues – due to employment or benefits issues, substandard housing, domestic violence, and a range of other problems – suggests that legal help could make a notable difference in addressing health-related problems. This discussion, based on the *Civil Justice for All* report, examined the relationship between health and civil justice, paying special attention to recent innovations in Medical-Legal Partnerships.

SPEAKERS

Jay Chaudhary Indiana Division of Mental Health and Addiction

Bethany Hamilton National Center for Medical-Legal Partnership, George Washington University Milken Institute School of Public Health

Sharad Kohli People's Community Clinic, Austin, Texas **David W. Oxtoby** American Academy of Arts and Sciences

Allison Rice Health Justice Clinic, Duke University

Keegan Warren-Clem TLSC Medical-Legal Partnerships; The University of Texas

Introducing *Measuring Civil Justice for All* February 9, 2021

The civil justice gap – the difference between the number of Americans who need civil legal assistance and the very few who receive help of any kind – has been widening for decades. One of the most significant challenges we face as we try to close this gap is the absence of basic, reliable national data about the people who need help

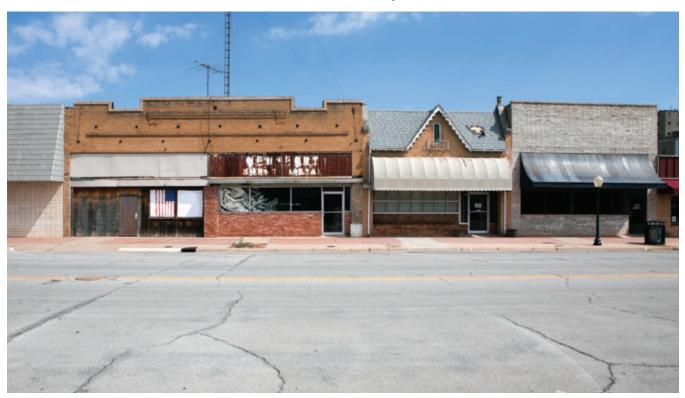
SPEAKERS

Mark Hansen University of Chicago David W. Oxtoby American Academy of Arts and Sciences most, the kinds of help they need, and the innovations and interventions that would be most beneficial.

The event discussed *Measuring Civil Justice for All*, an Academy white paper that provides a blueprint for the collection of data about civil justice activity in the United States.

Rebecca Sandefur Arizona State University; American Bar Foundation James J. Sandman University of Pennsylvania Carey Law School; formerly, Legal Services Corporation

PROJECT American Political Economy and the Public Good



For many Americans, the first two decades of the twentyfirst century have been marked by economic uncertainty. Even before the COVID-19 pandemic and the social unrest of the last year highlighted the life-and-death consequences of structural inequality, Americans across the country faced severe financial challenges. Financial conditions have threatened lives and livelihoods and exacerbated distrust in political, economic, and community institutions. As noted in Our Common Purpose, the Academy's report on the practice of democratic citizenship, economic conditions influence democratic engagement and trust in institutions. Historically high levels of inequality give some people a far louder voice than others in the political conversation, and financial insecurity keeps many Americans from participating in the democratic process altogether. Similarly, the

COMMISSION CHAIRS

PROJECT STAFF

Katherine Cramer University of Wisconsin-Madison

Ann Fudge formerly, Young & Rubicam Brands

Nicholas Lemann Columbia University **Jonathan Cohen** Program Officer Tania Munz

Chief Program Officer

Elizabeth Youngling

Foundation Fellow

Carl & Lily Pforzheimer

Katherine Gagen Program Associate

Darshan Goux Program Director years since the 2008 financial crisis have been marked by skepticism of the free market, financial institutions, and an economic system that has concentrated wealth and opportunity in certain parts of the country.

The multiyear Commission on the American Political Economy and the Public Good will study the relationship between economic conditions and social and institutional trust in the United States. In the face of a global pandemic and the fallout from the 2020 election, addressing these issues is especially urgent. This project will explore how to confront the distrust wrought by the economic cleavages of the last fifty years and how the nation can craft a model of good political and economic citizenship that repairs rather than rends the social fabric. This project completed a one-year planning phase in the summer of 2021.

FUNDERS

William and Flora Hewlett Foundation

C&P Buttenwieser Foundation

David M. Rubenstein

CONTINUED American Political Economy and the Public Good

Commission Meetings

Scoping Conversations

Between July 2020 and March 2021, the Academy convened 15 group conversations – as well as additional individual conversations – with scholars, business leaders, practitioners, and other experts regarding the proposed Commission on the American Political Economy and the Public Good. Sixty of the 103 participants in these conversations are Academy members. Some conversations centered on the political economy generally, while others focused on specific topics, including education, health care, and systemic racism. These conversations helped identify other projects underway in this space, unique opportunities for impact for the Academy, and the audiences this project could reach.

Education & the Development of Knowledge

Projects in the Education and the Development of Knowledge program area inform policy and practice in support of high-quality, lifetime educational opportunities for all Americans. The program area continues the Academy's enduring focus on the vital role education and knowledge development play in our nation and in our world. From advancing equitable educational outcomes to leveraging new developments in the learning sciences and digital technologies to questioning how domestic and international scholarly work may be affected by advances in machine learning, the Education and the Development of Knowledge program area draws upon scholars and practitioners from various fields and disciplines to explore the conditions that foster the creation, transfer, and preservation of knowledge in a global context.

PROGRAM ADVISORY COMMITTEE

CHAIR

Michael McPherson formerly, Spencer Foundation

MEMBERS

Deborah Loewenberg Ball University of Michigan

Philip Bredesen Former Governor of Tennessee Howard Gardner Harvard Graduate School of Education

David L. Lee Clarity Partners, LP

Richard Light Harvard Graduate School of Education

Kathleen McCartney Smith College Paula D. McClain Duke University

Joseph Neubauer formerly, Aramark Corporation

Nancy Peretsman Allen and Company

Paul Sagan General Catalyst Partners

Morton Schapiro Northwestern University **Marcelo Suárez-Orozco** University of Massachusetts Boston

Beverly Daniel Tatum Spelman College

PROJECT STAFF

Tania Munz Chief Program Officer

Meetings

The Dilemma Facing America's Schools During COVID-19

August 20, 2020 Virtual Event

As the nation was in the depths of the COVID-19 pandemic, the debate over if, when, and how to reopen schools gripped communities across the country. Academy members joined an interactive virtual discussion featuring **Austin Beutner**, Superintendent of the Los Angeles Unified School District, and **Sara Bleich**, Professor of Public Health Policy at the Harvard T.H. Chan School of Public Health, on the daunting choices facing school leaders during the pandemic, as they navigate the conflict between community health and the learning needs of students.

The Post-Pandemic Future of Higher Education: A Convening of American Academy Affiliates April 23, 2021 Virtual Event

The American Academy of Arts and Sciences invited leaders from its network of Affiliate institutions to a candid, forward-looking discussion about how lessons learned from the disruption of the COVID-19 pandemic might inform the future of higher education. The program included a presentation from Richard Arum (University of California, Irvine) on insights from his Next Generation Success Measurement project, which collects data on undergraduate student behavior; a panel discussion featuring university leaders Ana Mari Cauce (University of Washington), Robert Jones (University of Illinois at Urbana-Champaign), and Christina Paxson (Brown University), who shared insights from their own experiences throughout the pandemic and their vision for the future; and small group conversations in which colleagues could connect about their own hopes and concerns for their campus communities.

Global Security & International Affairs

he Global Security and International Affairs program area draws on the expertise of policy-makers, practitioners, and scholars to foster knowledge and inform innovative and more substantial policies to address crucial issues affecting the global community. Projects underway in this area engage with pressing strategic development and moral questions that underpin relations among people, communities, and states worldwide. Each initiative embraces a broad conception of security as the interaction among human, national, and global security imperatives. Project recommendations move beyond the idea of security as the absence of war toward higher aspirations of collective peace, development, and justice.

COMMITTEE ON INTERNATIONAL SECURITY STUDIES

CHAIR

Scott D. Sagan Stanford University

MEMBERS

R. Nicholas Burns Harvard Kennedy School

Antonia Chayes Tufts University Christopher F. Chyba Princeton University

Neta C. Crawford Boston University

Karl W. Eikenberry Schwarzman College

Tanisha M. Fazal University of Minnesota

Martha Finnemore George Washington University Lawrence D. Freedman King's College London

Nicholas D. Kristof The New York Times

Susan Landau Tufts University

Robert Legvold Columbia University

Rose M. McDermott Brown University **Steven E. Miller** Harvard Kennedy School

................

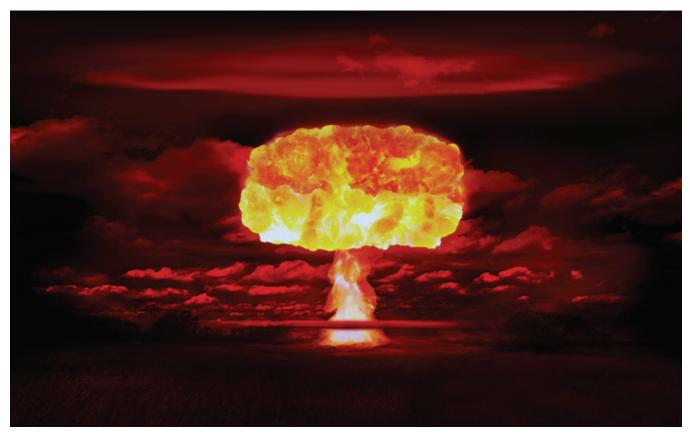
Barry Posen Massachusetts Institute of Technology

Adam Roberts The British Academy

Jennifer M. Welsh McGill University

Paul H. Wise Stanford University

PROJECT Meeting the Challenges of the New Nuclear Age, Phase I



The world has entered a new nuclear era. No longer dominated by two nuclear superpowers, the evolving multipolar nuclear order presents fundamental challenges to the conceptual and practical means of avoiding nuclear war. Moreover, the new era has slowly dismantled the bilateral arms control framework, with no clear prospect that it will be revived and extended. The possibility that a framework or frameworks encompassing other, let alone all, nuclear powers can be achieved seems even more remote. In addition, advances in weapons technology and the opening of new frontiers, such as cyber capabilities and artificial intelligence, make a shifting environment still more complex. The pathways to inadvertent nuclear war have multiplied across more regions and relationships.

Since 2017, the Meeting the Challenges of the New Nuclear Age project has worked to identify the major dangers generated by the dynamics of a multipolar nuclear world that pose the greatest threat of inadvertent nuclear war; offer alternative approaches to addressing each of these dangers; facilitate discussions with relevant communities in the United States and abroad; and encourage and assist policy-makers, Congress, the

analytical community, and the media to think systematically about our increasingly multipolar world. The publications produced by the project have been shared widely with domestic and international policy-makers, scholars and students of nuclear affairs, and leaders of international organizations.

Meeting the Challenges of the New Nuclear Age is rooted in the critically important work on arms control that the Academy conducted from 1958 to 1960 to prevent a nuclear confrontation between the United States and the Soviet Union. During that time, Academy Fellows gathered monthly to build a cooperative framework between the United States and the Soviet Union based on the limitations of the nuclear stockpile and the establishment of mutual vulnerability between the two rivals. The group included Donald Brennan, Edward Teller, Henry Kissinger, and Thomas Schelling, among others. Today, more than ever, an effort that brings together scholars and policy-makers to examine the wide range of challenges posed by the changing nuclear order is urgently needed. More information about the Academy's past and present nuclear-related projects is online at www.amacad.org/nuclear.

PROJECT Meeting the Challenges of the New Nuclear Age, Phase II: Deterrence & New Nuclear States



With the emergence of three new nuclear powers (India, Pakistan, and North Korea) and several more potentially becoming nuclear states (including Iran, Saudi Arabia, and Turkey), the world is on the verge of a new nuclear age. This will demand new thinking about the security implications of nuclear powers that may be in highly hostile environments, suffer from domestic instability, have fewer resources, or be led by personalist dictators. Phase II of Meeting the Challenges of the New Nuclear Age investigates the deterrence and

PROJECT CHAIRS, PHASE I

Robert Legvold Columbia University

Christopher Chyba Princeton University

PROJECT CHAIRS, PHASE II

Scott D. Sagan Stanford University

Vipin Narang Massachusetts Institute of Technology defense implications facing small nuclear force countries and potential proliferators.

The project is producing an edited volume of innovative, policy-relevant essays that will be published by a university press. Outreach activities will be aimed at nuclear policy-makers (primarily in the United States) and academic centers and think tank institutes with a specific focus on nuclear studies.

STEERING COMMITTEE MEMBERS, PHASE I

Thomas J. Christensen Princeton University

Lynn Eden Stanford University

Steven E. Miller Harvard Kennedy School Scott D. Sagan Stanford University

Jon Wolfsthal Global Zero

CONTINUED Meeting the Challenges of the New Nuclear Age

WORKING GROUP, PHASE I

James M. Acton Carnegie Endowment for International Peace

Mark S. Bell University of Minnesota

Linton Brooks Center for Strategic and International Studies

M. Taylor Fravel Massachusetts Institute of Technology

Sumit Ganguly Indiana University

Francis J. Gavin John Hopkins School of Advanced and International Studies

Michael Krepon Stimson Center

Hans Kristensen Federation of American Scientists

Jessica Tuchman Mathews Carnegie Endowment for International Peace **Nicholas L. Miller** Dartmouth University

Steven E. Miller Harvard Kennedy School

Vipin Narang Massachusetts Institute of Technology

Olga Oliker International Crisis Group

George Perkovich Carnegie Endowment for International Peace

Steven Pifer Brookings Institution

William Potter Middlebury Institute of International Studies at Monterey

Mira Rapp-Hooper Yale University

Scott D. Sagan Stanford University

Michael Swaine Quincy Institute for Responsible Statecraft

Nina Tannenwald Brown University Jane Vaynman Temple University

Keren Yarhi-Milo Princeton University

ADVISORY COMMITTEE, PHASE II

Victor Cha Georgetown University

Lawrence D. Freedman King's College London

Robert Jervis Columbia University

Jeffrey Lewis Middlebury Institute of International Studies at Monterey

Rose McDermott Brown University

Barry Posen Massachusetts Institute of Technology

Gary Samore Brandeis University

Caitlin Talmadge Georgetown University

PROJECT STAFF

Poul Erik Christiansen Raymond Frankel Nuclear Security Policy Fellow

Kathryn Moffat Program Officer

Tania Munz Chief Program Officer

Islam Qasem Program Director

Jen Smith Program Coordinator

Kathleen Torgesen Program Coordinator

FUNDERS

Louise Henry Bryson and John E. Bryson

John F. Cogan, Jr.†

Lester Crown

Alan M. Dachs

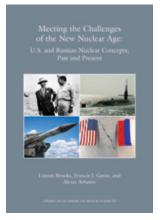
Bob and Kristine Higgins

Richard Rosenberg

Kenneth L. and Susan S. Wallach

[†]Deceased

Project Publications



Meeting the Challenges of the New Nuclear Age: U.S. and Russian Nuclear Concepts, Past and Present, Linton Brooks, Alexei Arbatov, and Francis J. Gavin (American Academy of Arts and Sciences, 2018) Meeting the Challenges of the New Nuclear Age: Emerging Roks and Declining Norms in the Age of Technological Intervation and Changing Nicklar Doctrines



Meeting the Challenges of the New Nuclear Age: Emerging Risks and Declining Norms in the Age of Technological Innovation and Changing Nuclear Doctrines, Nina Tannenwald and James M. Acton, with an Introduction by Jane Vaynman (American Academy of Arts and Sciences, 2018) <section-header><section-header><text>

Meeting the Challenges of the New Nuclear Age: Nuclear Weapons in a Changing Global Order, Steven E. Miller, Robert Legvold, and Lawrence Freedman (American Academy of Arts and Sciences, 2019)

Contemplating Strategic Stability in a New Multipolar Nuclear World, Robert Legvold (American Academy of Arts and Sciences, 2019)



"Meeting the Challenges of a New Nuclear Age," *Dædalus*, edited by Robert Legvold & Christopher Chyba (2020)

Project Meetings

2020 Dædalus Virtual Series

July 9, July 22, August 6, and August 19, 2020

To stimulate discussion among policy-makers about the changing multipolar nuclear order, and to generate conversation about key findings of the *Dædalus* volume produced as part of the Meeting the Challenges of the New Nuclear Age project, the Academy convened a series of virtual discussions in collaboration with the Hoover Institution that featured selected *Dædalus* authors as well as experts and former officials from the United States, Russia, and China. The principal goal of the virtual discussion series was to identify and explore particular areas that could lead to greater international cooperation.

Deterrence and New Nuclear States Authors' Virtual Workshop II

July 6, July 13, July 20, and July 27, 2020

This second workshop brought together the authors of the forthcoming edited volume on *The Fragile Balance of Terror: Deterrence in the New Nuclear Age* to review and discuss the draft essays and the cross-cutting conclusions in the volume.

2021 Dædalus Virtual Series

March 12, March 19, April 9, and April 3, 2021

Building on the work of the virtual series in 2020, the Academy and the Hoover Institution hosted a second virtual series with scholars and policy-makers from the United States, Russia, and China to explore issues such as What Next for Arms Control, Missile Defense and Strategic Stability, Cross-Domain Entanglement and Nuclear Risk, and The North Korean Nuclear Challenge.

PROJECT Rethinking the Humanitarian Health Response to Violent Conflict



Rethinking the Humanitarian Health Response to Violent Conflict seeks to understand and address current trends in humanitarian contexts that pose new or evolving challenges for humanitarian health responders. Among the most pressing challenges are the increasingly protracted nature of civil and non-international armed conflict; the fact that many of the world's most violent places are facing criminal or political violence rather than conflict as conventionally understood; shortfalls in funding; and changing geopolitical relations. This project brings together political scientists, legal and security experts, health professionals, and humanitarians to examine current challenges to effective humanitarian action and to develop, where necessary, new strategies for preventing civilian harm and delivering critical health services in areas plagued by violent conflict.

The project's initial work includes a focus on responding to some of the urgent challenges posed by the COVID-19 pandemic's effects on humanitarian health needs in conflict areas and other violent settings. Building on its efforts to address the political and security dimensions of pandemic response in areas of weak governance and violent conflict, the initiative is convening a series of rapid-cycle workshops on global cooperation and pandemic control. Drawing upon the Academy's strengths in political science, diplomacy, global health, and the arts, the project will explore how political legitimacy, trust in expert authority and information, divisive political environments, and cultural mechanisms of community protection and social cohesion shape the ability of states and international institutions to respond to infectious outbreaks.

Future work across the project's major components will include substantive engagement with a range of audiences through convenings, publications, and multimedia products. A cross-cutting $D\alpha edalus$ issue, to be published in 2023, will synthesize these findings from across all components of the project, and tailored resources will be produced for selected audiences, particularly relevant stakeholders and policy-makers.

PROJECT CHAIRS

Jaime Sepulveda University of California, San Francisco

Jennifer M. Welsh McGill University

Paul H. Wise Stanford University

ADVISORY GROUP

Sergio Aguayo El Colegio de México

Donald M. Berwick Institute of Healthcare Improvement Louise Henry Bryson The J. Paul Getty Trust

Rita Dayoub Chatham House

Elisabeth Decrey Warner Geneva Call

David P. Fidler Indiana University Bloomington

Fouad Fouad American University of Beirut

Marion Jacobs University of Cape Town

Arthur Kleinman Harvard University Joanne Liu McGill University

Deborah F. Rutter John F. Kennedy Center for the Performing Arts

Tamara Taraciuk Broner Human Rights Watch

PROJECT STAFF

Kathryn Moffat Program Officer

Tania Munz Chief Program Officer

Islam Qasem Program Director Jen Smith Program Coordinator

Rebecca Tiernan Program Associate

Kathleen Torgesen Program Coordinator

FUNDERS

Louise Henry Bryson and John E. Bryson

Malcolm Hewitt Wiener Foundation

Project Meetings

Cooperative Responses to Common Threats

February 8 and February 22, 2021

This meeting brought together a select group of experts, who work on a range of shared threats that require international and cooperative responses, to consider ways to strengthen international cooperation in response to pandemics. Building on the Academy's extensive network across a variety of fields, the participants discussed what can be learned from other efforts – such as those that involve nuclear, chemical, and biological weapons and climate change, among others – to generate international cooperation to respond to shared threats. Particular attention was given to the design of institutions and other arrangements to foster cooperation and encourage information sharing among states, even in situations of geopolitical rivalry.



PROJECT Promoting Dialogue on Arms Control and Disarmament

Unlike the Cold War, the current nuclear age is characterized by a simultaneous collapse of arms control agreements and the absence of any strategic dialogue among the three main nuclear players.

One strand of the project's work consists of a series of Track-2 dialogues between experts and former policy-makers from the United States, Russia, and China, which is designed to identify critical short-term goals in arms control that would serve to minimize and reduce the potential risks of nuclear arms-racing and escalation. The meetings identify areas for cooperation and promote conceptual thinking about measures that might strengthen strategic stability and help to reduce the significant dangers of nuclear weapons being used in the future.

A second strand of work builds on the Academy's prior experience organizing educational sessions for the

PROJECT CHAIR

PROJECT STAFF

Steven E. Miller Harvard University **Poul Erik Christiansen** Raymond Frankel Nuclear Security Policy Fellow

Kathryn Moffat Program Officer United States Congress on a range of topics. Through a series of engagements with members of Congress and their staffs, the project will help to foster and strengthen knowledge on key issues and challenges facing the United States in arms control and international security, with particular attention to careful management of the strategic competition posed by China and Russia.

A third strand of work weaves the project's expert discussions and policy recommendations together to produce high-impact publications on critical debates within nuclear arms control. With authorship shared between U.S., Russian, and Chinese experts, the publication series will be used to disseminate research findings to the executive and legislative branches and the policy community at large in the United States. These publications will also be translated into Russian and Chinese for reciprocal dissemination to policy-makers and the arms control communities in Moscow and Beijing.

Tania Munz Chief Program Officer

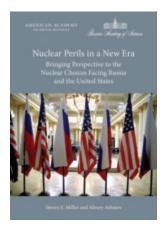
Islam Qasem Program Director

Jen Smith Program Coordinator Kathleen Torgesen Program Coordinator

FUNDER

The Raymond Frankel Foundation

Project Publication



Nuclear Perils in a New Era: Bringing Perspective to the Nuclear Choices Facing Russia and the United States, Steven E. Miller and Alexey Arbatov (American Academy of Arts and Sciences and Russian Academy of Sciences, 2021)

Project Meeting

China's Foreign Policy: Sovereignty, Confrontation, and Prospects for Arms Control July 23, 2020

This briefing for staffers from both sides of the aisle in the U.S. House of Representatives and Senate featured expert speakers who highlighted a range of issues in Chinese policy that have significant implications for the United States, including the ways in which China's recent actions in various disputed border territories bring into focus how it views sovereignty issues in its neighborhood, and how China's refusal to engage in trilateral nuclear arms control with the United States and Russia relates to issues of Chinese nuclear attitudes and their military strategy.



PROJECT Civil Wars, Violence, and International Responses

The Civil Wars, Violence, and International Responses project stems from the observation that current multilateral approaches for preventing, mitigating, and resolving civil wars and intrastate violence are often far too ambitious. They frequently overpromise stability, security, peace, democracy, and development to countries experiencing high levels of violence and instability. The project identified six threats that emerge from civil wars and intrastate violence: pandemic diseases, transnational terrorism, migration, regional instability, great power conflict, and criminality. The project has engaged in extensive domestic and international outreach to share findings and recommendations that

PROJECT CHAIRS

Karl Eikenberry Schwarzman College

Stephen Krasner Stanford University

PROJECT MEMBERS

Michele Barry Stanford University **Abdeta Dribssa Beyene** The Centre for Dialogue, Research and Cooperation,

Stephen D. Biddle Council on Foreign Relations

Tanja M. Börzel Freie Universität Berlin

Ethiopia

Charles Call American University deliver a more comprehensive, effective, and integrated approach to conflict prevention and crisis management, which encompasses security, diplomacy, and development strategies in countries such as Colombia, Nigeria, Ethiopia, Syria, Lebanon, and Sri Lanka, among others. Building on these policy discussions, in January 2021 the project published a research paper that focuses on the policy implications of the project's findings, which is being distributed to relevant policy-makers in the United States and internationally. Outreach activities for the paper will focus on connecting with members and staff of the U.S. Congress, with policy-makers in Europe, and with other relevant audiences.

Susana Campbell American University

Martha Crenshaw Stanford University

Lyse Doucet BBC News

Tanisha M. Fazal University of Minnesota

James D. Fearon Stanford University Vanda Felbab-Brown Brookings Institution

Francis Fukuyama Stanford University

Sumit Ganguly Indiana University

Miguel García-Sánchez Universidad de los Andes, Colombia

Richard Gowan New York University **Sonja Grimm** University of Konstanz, Germany

Jean-Marie Guéhenno Centre for Humanitarian Dialogue, Switzerland

Joseph Hewitt United States Institute of Peace

Steven Heydemann Smith College

Bruce Jones Brookings Institution

Stathis N. Kalyvas Yale University

Nancy E. Lindborg The David and Lucile Packard Foundation Sarah Kenyon Lischer Wake Forest University

Clare Lockhart Institute for State Effectiveness

Aila M. Matanock University of California, Berkeley

Seyoum Mesfin Institute of Advanced Research, Ethiopia[†]

Stewart Patrick Council on Foreign Relations

Barry R. Posen Massachusetts Institute of Technology

William Reno Northwestern University **Thomas Risse** Freie Universität Berlin

Hendrik Spruyt Northwestern University

Stephen Stedman Stanford University

Eric Stollenwerk Freie Universität Berlin

Paul H. Wise Stanford University

PROJECT STAFF

Kathryn Moffat Program Officer

Tania Munz Chief Program Officer **Islam Qasem** Program Director

Jen Smith Program Coordinator

Kathleen Torgesen Program Coordinator

FUNDERS

Humanity United

Smith Richardson Foundation

Oak Foundation

[†]Deceased

Project Publications



Field H. Wise & Michaele Barry Sarah Karayon Liacher - Speile Felhale Breese adelt Sproyt - Sophan Balally - William Brees

Karry B. Pose

"Civil Wars & Global Disorder: Threats & Opportunities," *Dædalus*, edited by Karl Eikenberry & Stephen D. Krasner (2017)



Constraints & Possibilities Blochery & Jughes D. Kramer, guest editors with Francis University Invited States of States N. Kalyner der T. Call & Naman P. Camplell. Les Dours mens Eines A. Ern Statisservel. Cher Lachard 1. S. Savall Statisservel.

Richard G. Lindering B.; Joseph Rowert Richard General & Displers Marke Codesan Samit Gaugaly - Joan Marke Codesan

"Ending Civil Wars: Constraints & Possibilities," *Dædalus*, edited by Karl Eikenberry & Stephen D. Krasner (2018) "Good Enough" Governance Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence



"Good Enough" Governance: Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence, Karl Eikenberry and Stephen D. Krasner (American Academy of Arts and Sciences, 2021) **CONTINUED** Civil Wars, Violence, and International Responses

Project Meetings

Briefing with the Hoover National Security Affairs Fellows March 12, 2021

During this virtual briefing, Karl Eikenberry and Stephen Krasner shared the key findings and policy implications of the project with representatives from the U.S. military and U.S. Department of State who are currently participating in the Robert and Marion Oster National Security Affairs Fellows program. The briefing also included a wider discussion of the implications of changing conflict for U.S. military policy.

Small Group Discussion with the Centre for Humanitarian Dialogue April 21, 2021

The discussion focused on under what conditions and with what tools can intervention in civil wars succeed. Karl Eikenberry and Stephen Krasner briefly presented their paper, "Good Enough" Governance: Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence, and then engaged in a wider group discussion on what donor countries can realistically achieve.

The Humanities, Arts & Culture

hile the Academy focused most of its early efforts on the natural and physical sciences, in recent years the organization has taken a more active role in studying and promoting humanities, arts, and culture in American society. Through its commissions, publications, and projects, the Academy conducts research and develops policy recommendations to advance the arts and humanities in American life, and seeks opportunities to enrich the nation's cultural life. The unique convening power of the Academy brings together scholars, artists, and leaders from the public and private sectors to demonstrate their vital role in the life of the nation, and to articulate how the country might better support activities in this area.



PROGRAM ADVISORY COMMITTEE

CHAIR

Johanna Drucker University of California, Los Angeles

MEMBERS

Richard Brodhead Duke University

Colin Dayan Vanderbilt University

Thomas Gunning University of Chicago Maria Hummer-Tuttle The J. Paul Getty Trust

Jacqueline Jones University of Texas at Austin

Mary C. Kelley University of Michigan

Jane Dammen McAuliffe Library of Congress **Jahan Ramazani** University of Virginia

Oscar Tang New York, New York

Pauline Yu American Council of Learned Societies



PROJECT Commission on the Arts

The Commission on the Arts seeks to reframe the national conversation about the role the arts can play in a diverse twenty-first-century democracy. The national focus of the project is reflected in the composition of its membership, which spans the cultural field and the geography of the United States; its members represent over a dozen states and more than forty organizations and disciplines.

This group of artists, scholars, institutional leaders, and community advocates is guided by the common belief that the arts are essential to well-being. With this variety of perspectives, the Commission has been examining the funding mechanisms, policies, and narratives that currently govern the vast creative field.

Arts and culture are essential for their ability to bridge divides and foster community. The Commission seeks both to strengthen the impact and reach of creative work and encourage better support mechanisms for the artists and creatives whose labor and vision make that work possible.

COMMISSION CHAIRS

John Lithgow Actor and Author **Deborah F. Rutter** The John F. Kennedy Center for the Performing Arts Through reports, recommendations, and public engagement initiatives the Commission is offering a framework for how the arts can be better integrated and appreciated in public life. The first report, Art for Life's Sake: The Case for Arts Education, examines existing inequities and presents recommendations to make arts a core part of every student's education. A second report on the creative workforce will identify the needs of artists as workers and outline a series of recommendations for federal and state policies that can provide long-term workforce development and job opportunities for cultural workers. In addition to these policy-oriented reports, the Commission is developing public engagement activities that include a crowd-sourced poem curated by Commission cochair Natasha Trethewey called "Remix: For My People," which was co-produced as part of PBS's American Portrait initiative. Each element of the Commission seeks, within its given topic area, to uplift the necessity of art in daily life, both personally and collectively.

Natasha Trethewey Northwestern University

COMMISSION MEMBERS

Diane Ackerman Author, Poet, and Naturalist

Elizabeth Alexander The Andrew W. Mellon Foundation

Maribel Alvarez The University of Arizona

Rod Bigelow Crystal Bridges Museum of American Art

Terence Blanchard Jazz Trumpeter and Composer

Mary Bordeaux First Peoples Fund

Pam Breaux National Assembly of State Arts Agencies

Jeffrey Brown PBS NewsHour

Louise H. Bryson The J. Paul Getty Trust

Francis Collins National Institutes of Health

James Cuno The J. Paul Getty Trust

Paul DiMaggio New York University

Oskar Eustis The Public Theater

Katherine Farley Lincoln Center for the Performing Arts

Theaster Gates Jr. Rebuild Foundation

Paula Giddings Smith College

Olivia Gude School of the Art Institute of Chicago

Vijay Gupta Street Symphony

Nora Halpern Americans for the Arts **Vicky Holt Takamine** Pua Ali'i 'llim

Maria Hummer-Tuttle Hummer-Tuttle Foundation

Gish Jen Novelist

Brian Kisida University of Missouri

Angela La Porte University of Arkansas

Tania León Composer and Conductor

Sonia Manzano Actress and Author

Michael O'Bryan The Village of Arts and Humanities

Felix Padrón Arts Management Professional and Artist

Annise Parker LGBTQ Victory Fund

Mwalim (Morgan James Peters) University of Massachusetts Dartmouth

Victoria Rogers John S. and James L. Knight Foundation

Jacqueline Stewart The University of Chicago

Yancey Strickler Kickstarter

Steven Tepper Arizona State University

Roberta Uno Arts in a Changing America

Zannie Voss Southern Methodist University National Center for Arts Research

Carrie Mae Weems Photographer

Damian Woetzel The Juilliard School **Jay Xu** Asian Art Museum of San Francisco

Kevin Young The National Museum of African American History and Culture, Smithsonian Institution

Laura Zabel Springboard for the Arts

PROJECT STAFF

Susy Bielak Consultant

Mary Lyons Program Coordinator

Allentza Michel Program Officer Tania Munz Chief Program Officer

Jessica Taylor Louis W. Cabot Fellow

Robert B. Townsend Program Director

FUNDERS

The Barr Foundation

Ford Foundation

The Getty Foundation

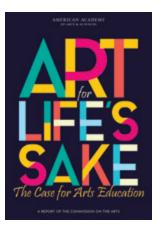
The John S. and James L. Knight Foundation

The Kresge Foundation

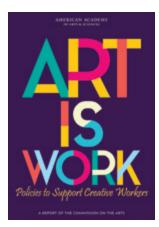
Roger W. and Victoria P.[†] Sant

[†]Deceased

Commission Publications



Art for Life's Sake: The Case for Arts Education (American Academy of Arts and Sciences, 2021)



Art Is Work: Policies to Support Creative Workers (American Academy of Arts and Sciences, 2021)

CONTINUED Commission on the Arts

Commission Meetings

Arts Education Listening Sessions

June 25 and September 23, 2020 Virtual Meetings

Two listening sessions that convened educators, artists, administrators, parents, and students were central elements of the information gathering stage of the Commission's report on arts education. In each of these sessions, participants spoke in small groups about the impact of arts education and the various challenges that prevent schools and communities from delivering equitable, quality arts opportunities to students across the U.S. public school system.

Angela La Porte

University of Arkansas

MEETING CHAIRS

Olivia Gude School of the Art Institute of Chicago

Brian Kisida University of Missouri

Arts in Community and Economic Development Listening Session August 12, 2020 Virtual Meeting

To gather insights into pressing challenges related to the arts' role in community and economic development, the Commission convened experts and practitioners involved in relevant efforts. Participants spoke about the long-standing challenges affecting artists and the ways in which the pandemic has exacerbated those issues and unveiled systemic inequities in the cultural sector. In each of the small groups that comprised this meeting, a need to focus on sustainable models for the creative workforce emerged as a clear priority for the Commission.

MEETING CHAIRS

Michael O'Bryan The Village of Arts and Humanities Allentza Michel American Academy of Arts and Sciences Meeting of the Commission December 3, 2020 Virtual Meeting

The fourth meeting of the Commission on the Arts convened its members to discuss the development of the Commission's reports and public engagement activities. During the meeting, Commission members shared updates and strategies for moving the project into its final stage in 2021. Much of the discussion focused on the impacts of the COVID-19 pandemic on artists and the arts and culture sector more broadly, as well as how the Commission can address the needs unveiled by the crisis through its reports, policy recommendations, and other activities.

MEETING CHAIRS

John Lithgow Actor and Author Natasha Trethewey Northwestern University

Deborah F. Rutter The John F. Kennedy Center for the Performing Arts

Arts Education Report Roundtables

February 2–3, 2021 Virtual Meeting

To ensure the relevance of the Arts Commission's report on arts education, experts in the field came together to discuss a draft of the report and strategies for advancing its priorities. The participants included scholars, advocacy and policy experts, philanthropic leaders, educators, and other organizational and community leaders.

Creative Workforce Development Report Roundtables

April 19–20, 2021 Virtual Meeting

The COVID-19 pandemic exposed and exacerbated deep vulnerabilities for artists and creative workers. Individuals and groups around the country are discussing potential policies and strategies to build a better support system for the creative workforce. This meeting built on the Arts Commission's long-standing efforts to uplift the value of artists' and creatives' work by bringing together these experts and practitioners to discuss the Commission's forthcoming report and policy recommendations on creative workforce development.

PROJECT The Humanities Indicators



The Humanities Indicators provide nonpartisan statistical information about all aspects of the humanities: ranging from early childhood reading, through undergraduate and graduate education in the humanities, and on to employment and humanities experiences in daily life, such as book reading and visits to museums. Now in its twelfth year as a publicly available website, the project tracks the condition of the humanities enterprise via its own rigorous survey research and analyses of data gathered by the federal government. Recent work has included a survey of five thousand Americans about their engagement with and attitudes toward the humanities, as well as updates to the project's widely cited analyses on the employment status, earnings, and occupations of humanities majors. The Humanities Indicators are accessible at www.amacad .org/humanities-indicators.

PROJECT DIRECTORS

Norman M. Bradburn

Robert B. Townsend

American Academy

of Arts and Sciences

of Chicago

NORC at the University

PROJECT STAFF

Carolyn Fuqua Senior Research Associate

John Garnett Research Assistant

Tania Munz Chief Program Officer

ADVISORY COMMITTEE

Edward Ayers University of Richmond

Jack Buckley Research at the College Board Jonathan R. Cole Columbia University

Joy Connolly American Council of Learned Societies

CONTINUED The Humanities Indicators

ADVISORY COMMITTEE, continued

John Dichtl American Association of State and Local History

Michael Hout New York University Felice J. Levine American Educational Research Association

Phoebe Stein Federation of State Humanities Councils

Judith Tanur Stony Brook University

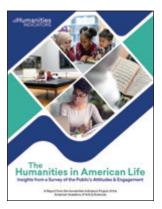
FUNDERS

The Andrew W. Mellon Foundation

The project was developed with generous support from the National Endowment for the Humanities; Elihu Rose and the Madison Charitable Fund; John P. Birkelund; Peck Stackpoole Foundation; Rockefeller Foundation; Sara Lee Foundation; Teagle Foundation; Walter B. Hewlett and the William R. Hewlett Trust; and William and Flora Hewlett Foundation.

Project Publications

The Indicators staff publishes regular online updates to the content. Over the past year, these updates included new findings on the occupations and earnings of college graduates, charitable giving to the humanities, and public libraries. The project also produced the following research reports:



The Humanities in American Life: Insights from a 2019 Survey of the Public's Attitudes & Engagement (2020)

Home with the Humanities: American Engagement During the Pandemic (2020) The Induction of the Advancement of the Advancement

The Humanities in American Life: At a Glance: Insights from a Survey of the Public's Attitudes & Engagement (2020)

The State of the Humanities in Four-Year Colleges and Universities: A Summary of Findings (2020)

Project Meetings and Presentations

Reflections on the State of the Humanities in Colleges and Universities July 16, 2020

Academy members joined Jonathan Holloway, incoming President of Rutgers University, and Melissa Nobles, MIT's Dean of the School of Humanities, Arts, and Social Sciences, for a discussion of current trends in the humanities and how they might change as a result of our current crisis. The discussion began with a brief overview of findings from a recent national survey of humanities departments in the United States by Robert Townsend, Co-Director of the Humanities Indicators, followed by remarks by Holloway and Nobles and Q&A moderated by Academy President David Oxtoby.

Humanities Research Institute at University of Illinois October 6, 2020

Project Co-Director **Robert Townsend** shared recent findings on the health of the humanities.

National Humanities Conference

November 11, 2020

Project Co-Director **Robert Townsend** presented on the Indicators recent survey of the general public and hosted a "virtual exhibit booth" at the conference.

Exploring the Humanities in American Life November 18, 2020

Marking the publication of the Indicators study on the public's engagement with the humanities, documentary filmmaker **Ken Burns** joined in conversation with **Brenda Thomson** (Arizona Humanities) and **Kevin Young** (Schomburg Center for Research in Black Culture) to discuss the publication's findings. The event included opening remarks from Academy President **David Oxtoby** and **Jon Parrish Peede**, Chairman of the National Endowment for the Humanities.

Q&A about the Humanities in American Life November 23, 2020

Humanities Indicators Principal Investigator Norman Bradburn, along with staff members Carolyn Fuqua and Robert Townsend, answered questions and heard feedback and suggestions for future rounds of a national survey of the public.

Advisory Committee Meeting

January 21, 2021

At the annual meeting of the Humanities Indicators Advisory Committee, the participants reviewed the results of the two national surveys conducted by the project in the prior year and assessed plans for future publications and research.

PARTICIPANTS

Norman M. Bradburn NORC at the University of Chicago

Edward Ayers University of Richmond

Jack Buckley Research at the College Board

Jonathan R. Cole Columbia University

Joy Connolly American Council of Learned Societies

John Dichtl American Association of State and Local History Michael Hout New York University

Felice J. Levine American Educational Research Association

Phoebe Stein Federation of State Humanities Councils

Judith Tanur Stony Brook University

Carolyn Fuqua American Academy of Arts and Sciences

Robert B. Townsend American Academy of Arts and Sciences

Science, Engineering & Technology



he Academy's record of distinction in Science, Engineering, and Technology dates to its founding mission "to cultivate every art and science which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people." Rather than generate new scientific research, the role of the Academy has been uniquely interdisciplinary, bridging the social sciences and arts with the physical sciences to support a national understanding, belief, and trust in science and discovery. Perhaps no better example of this can be found than in the mid-1800s when the Academy hosted hotly contested debates about a new scientific theory: the theory of evolution.

Academy projects in Science, Engineering, and Technology seek to strengthen the capacity of science and engineering to improve the human condition. This goal has never been more important for the nation or for the world than it is today. Global challenges increasingly require collaboration across disciplinary, professional, and national boundaries, while rapid advances in information processing and transmission raise new issues for both the management of scientific and technical information and for the ability of individuals and institutions to assimilate and act on new discoveries.

PROGRAM ADVISORY COMMITTEE

CHAIRS

Alan Leshner formerly, American Association for the Advancement of Science

Geraldine L. Richmond University of Oregon

MEMBERS

Nancy C. Andrews Duke University School of Medicine Mary Beckerle University of Utah

Arthur Bienenstock Stanford University

Emery Brown Massachusetts Institute of Technology; Harvard Medical School; Massachusetts General Hospital

Claude Canizares Massachusetts Institute of Technology David Clark Massachusetts Institute of Technology

Wayne Clough Georgia Institute of Technology; formerly, Smithsonian Institution

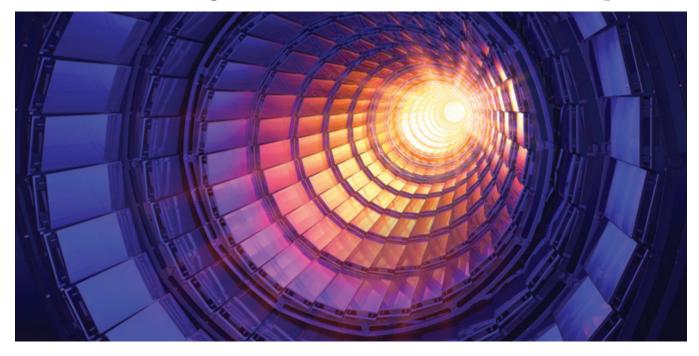
Robert Horvitz Massachusetts Institute of Technology

Leah Jamieson Purdue University **Cora Marrett** National Science Foundation NTTR

James Simons Simons Foundation

Jeannette Wing Columbia University

PROJECT Challenges for International Scientific Partnerships



Challenges for International Scientific Partnerships (CISP) articulates the benefits of international collaboration and recommends solutions to the most pressing challenges associated with the design and operation of international partnerships. This initiative identifies policy recommendations and best practices to mitigate challenges for international science collaborations, including physical facilities, distributed networks, and peer-to-peer partnerships. The project released its first report, *America and the International Future of Science*, in December 2020.

The Large-Scale Science (LSS) working group approaches international collaborations through the lens of issues particular to large-scale science, not peer-topeer or small-scale international work. This group has been tasked with exploring how the United States can enhance its role in these partnerships, both in physical

PROJECT CHAIRS

Peter Michelson Stanford University

Arthur Bienenstock Stanford University

Peter Michelson Stanford University

LARGE-SCALE SCIENCE WORKING GROUP CHAIRS

Arthur Bienenstock Stanford University

EMERGING SCIENCE PARTNERS WORKING GROUP CHAIRS

Shirley Malcom American Association for the Advancement of Science

Olufunmilayo Olopade University of Chicago facilities (such as CERN) and distributed networks (such as the Human Cell Atlas). This group is focusing on recommendations that will bolster U.S. ability to partake in large-scale collaboration efforts as meaningful and engaged partners. The report from this working group, *Bold Ambition: International Large-Scale Science*, was published in spring 2021.

The Emerging Science Partners (ESP) working group explores issues particular to U.S. scientific collaborations at all scales with countries seeking to boost their scientific capacity, particularly those with limited resources to do so. This working group frames discussions around how the United States can be a better collaborator in its partnerships with emerging science partner countries and work to increase equity in these collaborations. The report from this working group, *Global Connections: Emerging Science Partners*, was released in fall 2021.

STEERING COMMITTEE

Claude R. Canizares Massachusetts Institute of Technology

Matthias Hentze European Molecular Biology Laboratory

John Hildebrand University of Arizona **Kerri-Ann Jones** formerly, Pew Charitable Trusts

William Lee Wilmer Cutler Pickering Hale and Dorr

Shirley Malcom American Association for the Advancement of Science

Cherry Murray University of Arizona

CONTINUED Challenges for International Scientific Partnerships

STEERING COMMITTEE, continued

Venkatesh ("Venky") Narayanamurti Harvard University

Olufunmilayo Olopade University of Chicago

Geraldine Richmond University of Oregon

Vaughan Turekian National Academies of Sciences, Engineering, and Medicine

Caroline Wagner The Ohio State University

LARGE-SCALE SCIENCE WORKING GROUP

Arthur Bienenstock, Cochair Stanford University

Peter Michelson, *Cochair* Stanford University

Claude R. Canizares Massachusetts Institute of Technology

E. William Colglazier American Association for the Advancement of Science

Inez Fung University of California, Berkeley

Michael Holland University of Pittsburgh **Kaye Husbands Fealing** Georgia Institute of Technology

Cherry Murray University of Arizona

Philip Rubin Yale University

Gary Sanders California Institute of Technology

Diane Souvaine Tufts University

EMERGING SCIENCE PARTNERS WORKING GROUP

Shirley Malcom, Cochair American Association for the Advancement of Science

Olufunmilayo Olopade, *Cochair* University of Chicago

Bruce Alberts University of California, San Francisco

Bernard Amadei University of Colorado Boulder

Arthur Bienenstock, ex officio Stanford University

Jared Cohon Carnegie Mellon University

Rita R. Colwell University of Maryland James W. Curran Emory University

Ali Douraghy Lawrence Berkeley National Laboratory (concluded participation on January 19, 2021)

Nina Dudnik Seeding Labs

Mohamed Hassan The World Academy of Sciences

John G. Hildebrand University of Arizona

Nkem Khumbah University of Michigan

Peter Michelson, *ex officio* Stanford University

Peggy Oti-Boateng United Nations Educational, Scientific, and Cultural Organization

Jamil Salmi Diego Portales University

Flavia Schlegel United Nations Educational, Scientific, and Cultural Organization

Vaughan Turekian National Academies of Sciences, Engineering, and Medicine

Caroline Wagner The Ohio State University

PROJECT STAFF

Tania Munz Chief Program Officer

Islam Qasem John E. Bryson Program Director

Amanda Vernon Program Officer & Hellman Fellow in Science and Technology Policy

Rebecca Tiernan Program Associate

Jen Smith Program Coordinator

FUNDERS

Gordon and Betty Moore Foundation

William and Flora Hewlett Foundation

Alfred P. Sloan Foundation

Project Publications



America and the International Future of Science (American Academy of Arts & Sciences, 2020)



Bold Ambition: International Large-Scale Science (American Academy of Arts & Sciences, 2021)



Global Connections: Emerging Science Partners (American Academy of Arts & Sciences, 2021)

Project Meetings & Events

Making the Case for International Scientific Partnerships

December 14, 2020

This event launched the first report of the CISP initiative, *America and the International Future of Science*. The webinar featured presentations of the report's findings by the cochairs of the CISP initiative and Large-Scale Science working group, **Arthur Bienenstock** and **Peter Michelson**. Their presentations highlighted the report's recommendations for continued U.S. engagement with the global scientific ecosystem, including

SPEAKERS

Arthur Bienenstock Stanford University

Peter Michelson Stanford University **Shirley Malcom** American Association for the Advancement of Science U.S.-China collaborations. The event also featured a discussion with the cochairs of the Emerging Science Partners working group, Shirley Malcom and Olufunmilayo Olopade, who discussed the importance of building a more resilient and inclusive scientific enterprise for the post-COVID-19 world, especially through collaborations with emerging science partner countries.

Olufunmilayo Olopade University of Chicago David W. Oxtoby American Academy of Arts and Sciences **CONTINUED** Challenges for International Scientific Partnerships

American Association for the Advancement of Science Annual Meeting 2021

Challenges for International Scientific Partnerships: Policy Priorities February 10, 2021

The CISP initiative hosted a panel session at the virtual AAAS 2021 Annual Meeting. The session included a discussion of international scientific partnerships, across disciplines and at all scales, and identified policy recommendations and best practices to mitigate challenges based on the CISP project's reports. The session emphasized some of the issues explored by the project's two working groups: Large-Scale Science and Emerging Science Partners.

SPEAKERS

Arthur Bienenstock Stanford University **Shirley Malcom** American Association for the Advancement of Science

Peter Michelson Stanford University

Olufunmilayo Olopade University of Chicago

CISP Large-Scale Science Impact Workshop March 29, 2021

Members of the CISP Steering Committee and Large-Scale Science working group met to discuss desired goals and impact for the report, *Bold Ambition: International Large-Scale Science*. The group identified domestic and international target audiences and proposed strategies for engaging with these audiences as well as outlined a defined strategy for outreach following the publication of the *Bold Ambition* report.

MEETING CHAIRS

Arthur Bienenstock Stanford University Peter Michelson Stanford University

United Nations Commission on Science and Technology for Development – Side Event Challenges for International Scientific Partnerships May 17, 2021

A side session event at the 24th United Nations Commission on Science and Technology for Development featured presentations on the CISP initiative by project cochairs **Arthur Bienenstock** and **Peter Michelson** and a presentation of the goals and findings of the Emerging Science Partners working group by working group cochairs **Shirley Malcom** and **Olufunmilayo Olopade**. The event also included a panel discussion that focused on strategies and priorities for building sustainable and equitable international scientific collaborations in Africa. In breakout groups, the meeting participants discussed selected topics in international collaboration in developing regions of the world, including: 1) the Nature of Scientific Collaborations; 2) Capacity-Building; and 3) National Science and Technology Goals.

SPEAKERS

Arthur Bienenstock Stanford University

Peter Michelson Stanford University

Shirley Malcom American Association for the Advancement of Science

Olufunmilayo Olopade University of Chicago

PANELISTS

Jonathan Jansen Stellenbosch University

Jacqueline Kado Network of African Science Academies

Exploring the Future of International Large-Scale Science

June 1, 2021

The Academy held an online webinar and panel discussion to launch the CISP initiative's second report, *Bold Ambition: International Large-Scale Science*. The event featured talks by the project cochairs **Arthur Bienenstock** and **Peter Michelson** on the imperatives for U.S. participation in and support for international large-scale science collaborations and initiatives. The program also included a panel discussion, moderated by E. William

SPEAKERS

PANELISTS

Arthur Bienenstock Stanford University

Peter Michelson Stanford University

David W. Oxtoby American Academy of Arts and Sciences E. William Colglazier moderator; *Science & Diplomacy*, American Association for the Advancement of Science

France Córdova Science Philanthropy Alliance Colglazier, on the future of large-scale science and how the United States could best participate in such collaborations. The panelists discussed the key role of U.S. federal agencies in funding such initiatives and collaborations; the importance of investing in cutting-edge research in advancing fields such as high-energy physics; and participating in shaping the norms and standards in collaborations in global health and climate change.

James Curran Emory University

Jonathan Dorfan formerly, Okinawa Institute of Science and Technology; formerly, Stanford Linear Accelerator Center **Kaye Husbands Fealing** Georgia Institute of Technology

PROJECT Accelerating Climate Action



The Academy has launched a new initiative to focus on the global challenge of climate change. The scientific consensus is clear: climate change and its associated devastating impacts are upon us. With such strong scientific backing, what has prevented meaningful action? The project will

COMMISSION CHAIRS

Christopher Field Stanford University

Catherine Coleman Flowers The Center for Rural Enterprise and Environmental Justice

David G. Victor University of California, San Diego

Patricia Vincent-Collawn PNM Resources

COMMISSION MEMBERS

Mustafa Santiago Ali National Wildlife Federation; Revitalization Strategies

Xiye Bastida Fridays for Future New York City

Philip Bredesen Former Governor of Tennessee

Patricia Cochran Alaska Native Science Commission Mariano-Florentino Cuéllar Supreme Court of California

Tim Guinee Climate Actors

Rebecca Henderson Harvard University

Charles (Chad) O. Holliday, Jr. Royal Dutch Shell plc

Russel L. Honoré Commander of Joint Task Force Katrina, Leadership, Safety & Global Preparedness Authority

Bob Inglis republicEn.org

Leanne Kealoha Fox University of Hawaiʻi at Mānoa

Elizabeth Kolbert The New Yorker

Gary Roughead Hoover Institution

Roger Sant The Summit Foundation; The AES Corporation address two questions: 1) How can the United States accelerate climate mitigation and adaptation strategies for all Americans regardless of race and socioeconomic background? and 2) What policies would most effectively and equitably remove barriers to climate action?

J. Marshall Shepherd University of Georgia

Hilary Tompkins Hogan Lovells

Elke Weber Princeton University

PROJECT STAFF

Tania Munz Chief Program Officer

Islam Qasem John E. Bryson Program Director **Amanda Vernon** Program Officer & Hellman Fellow in Science and Technology Policy

Rebecca Tiernan Program Associate

Jen Smith Program Coordinator

FUNDERS

This project is funded through an endowment provided by John E. Bryson and Louise Henry Bryson, a gift from Hansjörg Wyss, and a gift from Roger Sant and Doris Matsui.

Commission Meeting

June 24, 2021

The Commission met for the first time to identify project goals and workstreams. Commission members described the major barriers to action they have seen in their own work and areas of expertise, and they discussed crosscutting suggestions for areas of focus for the Commission.

PROJECT Resiliency in Supply Chains



The Academy has launched a new exploratory initiative on building resiliency in supply chains, with a focus on healthcare and food supply chains for a post-COVID world. Supply chains are often invisible, not just to end-users but even to end-suppliers of goods and services. We have seen disruptions in the supply of some of our essential goods, such as medicines, personal protective equipment, and ventilators during the COVID-19 pandemic. In addition to mending the fractures that have been exposed in our current medical supply chain systems, the pandemic has also revealed weaknesses in our country's food supply networks, in which the human costs of production, distribution, and delivery in unsafe conditions have been disproportionately borne

PROJECT CHAIRS

Margaret Levi

Center for Advanced Study in the Behavioral Sciences, Stanford University

Richard Locke Brown University

PROJECT STAFF

Tania Munz Chief Program Officer

Islam Qasem John E. Bryson Program Director by the most vulnerable participants, now reclassified as "essential workers."

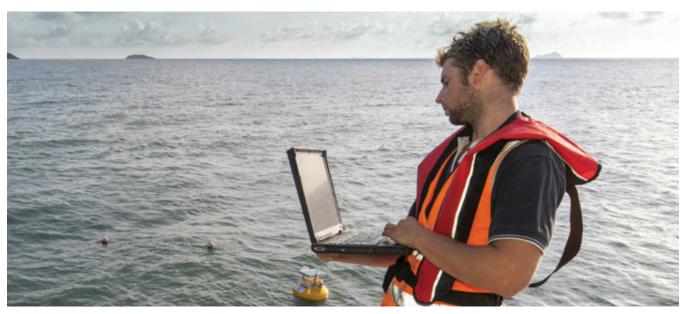
To address these questions, the Academy will convene an exploratory meeting with a group of interdisciplinary experts who will address the social and ethical dimensions of supply chains and produce useful recommendations for government, industry, and non-profit action. The meeting will explore three themes and identify both the vulnerabilities and challenges as well as possible solutions for each: 1) healthcare and food security supply chains; 2) ethical considerations of supply chains; and 3) national security as it relates to supply chains.

FUNDER

Rebecca Tiernan Program Associate

Jen Smith Program Coordinator American Academy Exploratory Fund

PROJECT The Public Face of Science



The Academy's multiyear initiative on the Public Face of Science addresses various aspects of the complex and evolving relationship between scientists and the public and examines how trust in science is shaped by individual experiences, beliefs, and engagement with science. Additional project activities have included published work on the role of science in the legal system and the coordination and deployment of scientific teams as part of crisis response. The initiative has brought together a broad range of experts in communication, law, humanities, the arts, journalism, public affairs, and the physical, social, and life sciences. While this project does not directly address scientific literacy in K-12 and adult education,

PROJECT CHAIR

Richard Meserve Covington & Burling LLP; formerly, Carnegie Institution for Science

STEERING GROUP MEMBERS

Emilio Bizzi Massachusetts Institute of Technology

Geoffrey Cowan University of Southern California

Ellen Futter American Museum of Natural History **Sylvester James Gates, Jr.** Brown University

Robert Hauser American Philosophical Society

Rush D. Holt, Jr. formerly, American Association for the Advancement of Science

Kathleen Hall Jamieson University of Pennsylvania

Venkatesh Narayanamurti Harvard University

Nora Newcombe Temple University it will inform such efforts by fostering a greater understanding of the public's attitudes toward science.

The third and final project report of the initiative, *The Public Face of Science in America : Priorities for the Future*, was published in August 2020 and presents a series of proposed policy recommendations for target audiences to improve the practice of science communication and engagement. This report was informed by the findings of the earlier publications of the initiative, *Perceptions of Science in America* and *Encountering Science in America*, which aggregated data both on how Americans view the role of science in society and how they interact with science in their everyday lives.

Kenneth Prewitt Columbia University

Rebecca Rimel Pew Charitable Trusts

Cristián Samper Wildlife Conservation Society

Samuel Thier Harvard Medical School; Massachusetts General Hospital

PROJECT STAFF

Islam Qasem John E. Bryson Program Director **Erica Kimmerling** former Hellman Fellow for Science and Technology Policy

Amanda Vernon Program Officer & Hellman Fellow in Science and Technology Policy

Rebecca Tiernan Program Associate

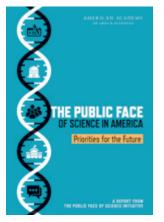
FUNDERS

Gordon and Betty Moore Foundation

Rita Allen Foundation

Alfred P. Sloan Foundation

Project Publications



The Public Face of Science in America: Priorities for the Future (American Academy of Arts and Sciences, 2020)



Science During Crisis: Best Practices, Research Needs, and Policy Priorities, Rita R. Colwell and Gary E. Machlis (American Academy of Arts and Sciences, 2019)

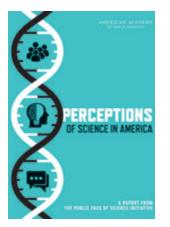
The Public Face of Science Across the World Optimism and Innovation in an Era of Reservations and Inequality



The Public Face of Science Around the World, Matthew C. Nisbet and Erik C. Nisbet (American Academy of Arts and Sciences, 2019)



Encountering Science in America (American Academy of Arts and Sciences, 2019)



Perceptions of Science in America (American Academy of Arts and Sciences, 2018)



"Science & the Legal System," *Dædalus*, edited by Shari Seidman Diamond & Richard O. Lempert (2018)

Project Event

Earning Trust in the Age of the Pandemic September 16, 2020

The American Academy partnered with the National Academies of Sciences, Engineering, and Medicine to host a conversation on the complex relationship between public trust and vaccines. The discussion explored the public's multifaceted perception of vaccine safety and the importance of creating and sustaining public trust regarding its use. The discussion accompanied the launch of the project's final report, *The Public Face of Science*: *Priorities for the Future*, which includes recommendations for improved U.S. scientific engagement with the public.

SPEAKERS

David W. Oxtoby American Academy of Arts and Sciences

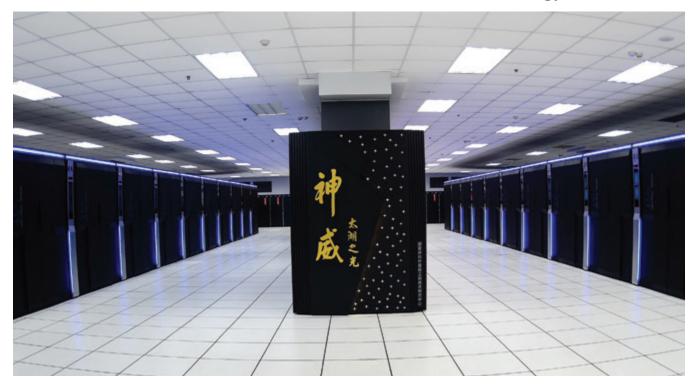
Victor Dzau National Academy of Medicine

Francis S. Collins National Institute of Health

Evelynn Hammonds Harvard University Seth Mnookin Massachusetts Institute of Technology

Monica Schoch-Spana Johns Hopkins School of Public Health

Erica Palma Kimmerling Association of Science and Technology Centers



PROJECT New Models for U.S. Science and Technology

This project assembled recognized leaders from all sectors of science, engineering, and technology to recommend policy actions to help ensure the long-term sustainability of the U.S. science and engineering research enterprise. 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 partnerships between 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.

PROJECT CHAIRS

Norman R. Augustine Lockheed Martin Corporation

Neal Lane Rice University

PROJECT MEMBERS

Nancy C. Andrews Duke University School of Medicine

John E. Bryson

formerly, U.S. Department of Commerce; formerly, Edison International

Thomas R. Cech University of Colorado Boulder

Steven Chu Stanford University; formerly, U.S. Department of Energy

Jared Cohon Carnegie Mellon University **James J. Duderstadt** University of Michigan

Mark C. Fishman Harvard University

Sylvester James Gates, Jr. Brown University

Bart Gordon K&L Gates; formerly, U.S. House of Representatives

M.R.C. Greenwood University of Hawaii **John L. Hennessy** Alphabet, Inc.; Stanford University

The Restoring the Foundation report, published in 2014, of-

fers actionable recommendations for the long-term sus-

tainability of the U.S. science and engineering research

system to ensure a healthy research enterprise that continues to benefit the American people. An update to the

report, *The Perils of Complacency: America at a Tipping Point in Science & Engineering*, published in fall 2020, reaf-

firms the importance of science and engineering for the

United States, especially in the context of China's rise as

a science and technology powerhouse.

Charles O. Holliday, Jr. Royal Dutch Shell plc

Peter S. Kim Stanford University; formerly, Merck Research Laboratories

Richard A. Meserve Covington & Burling LLP; formerly, Carnegie Institution for Science

PROJECT MEMBERS, continued

C.D. Mote, Jr. University of Maryland; formerly, National Academy of Engineering

Venkatesh "Venky" Narayanamurti Harvard University

Maxine L. Savitz Honeywell, Inc.

Robert F. Sproull University of Massachusetts, Amherst; formerly, Oracle Corporation **Subra Suresh** Nanyang Technological University

Shirley M. Tilghman Princeton University

Jeannette M. Wing Columbia University

Elias Zerhouni formerly, Sanofi; formerly, National Institutes of Health; formerly, Johns Hopkins University School of Medicine

PROJECT STAFF

Tania Munz Chief Program Officer

Peter Robinson Morton L. Mandel Director of Strategic Implementation

Rebecca Tiernan Program Associate

Amanda Vernon Program Officer & Hellman Fellow in Science and Technology Policy

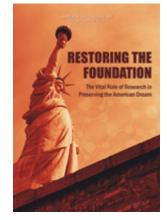
FUNDERS

Bryson Science Fund Hellman Fellows Fund

Project Publications



The Perils of Complacency: America at a Tipping Point in Science & Engineering (American Academy of Arts and Sciences and Rice University's Baker Institute for Public Policy, 2020)



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

Project Event

Inadequate Investment: America, China, and the Future of Innovation September 30, 2020

This virtual event launched *The Perils of Complacency: America at a Tipping Point in Science & Engineering*, published by the American Academy and The Baker Institute for Public Policy. The report assesses progress and setbacks in the five years since the release of *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*. The speakers discussed concerns about America falling behind and policies that could help ensure that the United States secures its strong position of global leadership in discovery and innovation.

SPEAKERS

Nancy C. Andrews, moderator Duke University School of Medicine

Norman R. Augustine Lockheed Martin Corporation **Neal Lane** Rice University

Jeannette Wing Columbia University

Local Program Committees & Representatives

Local Program Committees and Representatives bring together communities of members to connect, explore topics of interest, and advise informally on Academy projects.

Berkeley Program Committee

Pamela Samuelson, *Chair* University of California, Berkeley School of Law

David A. Hollinger University of California, Berkeley

Randy W. Schekman University of California, Berkeley

Boston-Cambridge Planning Committee

David E. Bloom Harvard T. H. Chan School of Public Health

Richard E. Cavanagh Harvard Kennedy School; Fremont Group

Felton James Earls Harvard Medical School

Lawrence K. Fish formerly, Citizens Bank

Sally Haslanger Massachusetts Institute of Technology

Arthur Michael Jaffe Harvard University

Susan Woods Paine formerly, Museum of Fine Arts, Boston

Katharine Park Harvard University **Steven Pinker** Harvard University

William James Poorvu Harvard Business School

Gigliola Staffilani Massachusetts Institute of Technology

Mriganka Sur Massachusetts Institute of Technology

Sherry Turkle Massachusetts Institute of Technology

Chicago Program Committee

UNIVERSITY OF CHICAGO SUBCOMMITTEE

Young-Kee Kim, Cochair University of Chicago

Katherine Baicker University of Chicago

John Mark Hansen University of Chicago

Jonathan Lear University of Chicago

Anne Walters Robertson University of Chicago

Robert Rosner University of Chicago

Lucia B. Rothman-Denes University of Chicago

Geoffrey Richard Stone University of Chicago Law School Amanda L. Woodward University of Chicago

Luigi G. Zingales University of Chicago Booth School of Business

NORTHWESTERN UNIVERSITY SUBCOMMITTEE

Richard I. Morimoto, *Cochair* Northwestern University

Gary Alan Fine Northwestern University

Carol D. Lee Northwestern University

Natasha D. Trethewey Northwestern University

DOWNTOWN CHICAGO SUBCOMMITTEE

Patrick G. Ryan, Cochair Ryan Specialty Group; World Sport Chicago

Shari Seidman Diamond Northwestern University Pritzker School of Law

John Wilbur McCarter, Jr. formerly, Field Museum of Natural History

Eric G. Neilson Northwestern University

James W. Pellegrino University of Illinois at Chicago

Diane P. Wood United States Court of Appeals, Seventh Circuit

Gainesville Representatives

Douglas E. Soltis University of Florida

Pamela S. Soltis University of Florida

Houston Program Committee

Lee H. Rosenthal, *Chair* United States District Court, Southern District of Texas

Ernest H. Cockrell Cockrell Interests, Inc.; Cockrell Foundation

Edward P. Djerejian Rice University

Neal Francis Lane Rice University

David. W. Leebron Rice University

Ruth Simmons Prairie View A&M University

Edwin Lorimer Thomas Texas A&M University

Huda Y. Zoghbi Baylor College of Medicine

Los Angeles Program Committee

Louis Geoffrey Cowan, *Chair* University of Southern California

Frances Hamilton Arnold California Institute of Technology

Austin M. Beutner Los Angeles Unified School District

Gene D. Block University of California, Los Angeles

Louise Henry Bryson J. Paul Getty Trust

Albert Carnesale University of California, Los Angeles

James Cuno J. Paul Getty Trust

Louis M. Gomez University of California, Los Angeles

Maria D. Hummer-Tuttle J. Paul Getty Trust

Steven S. Koblik The Huntington Library, Art Collections, and Botanical Gardens

Sherry Lee Lansing Sherry Lansing Foundation

John A. Lithgow Los Angeles, California

Thomas F. Rosenbaum California Institute of Technology

Anneila Isabel Sargent California Institute of Technology

Ernest James Wilson III University of Southern California

New Haven Program Committee

Thomas W. Appelquist Yale University

Michael John Donoghue Yale University

Alan S. Gerber Yale University

Linda Greenhouse Yale Law School

Roger Evans Howe Yale University

John H. Langbein Yale Law School

Isabela Mares Yale University

Thomas Dean Pollard Yale University

Judith Resnik Yale Law School

John E. Roemer Yale University

Frances McCall Rosenbluth Yale University

Alan Schwartz Yale Law School

Ian Shapiro Yale University

Steven I. Wilkinson Yale University

New York Program Committee

Carol Gluck, Cochair Columbia University

Kenneth L. Wallach, Cochair Central National-Gottesman Inc.

Diane Ackerman Ithaca, New York

Jesse Huntley Ausubel Rockefeller University Thomas Bender New York University

Sylvian E. Cappell New York University

Joseph J. Fins Weill Cornell Medicine

Mark N. Kaplan Skadden, Arps, Slate, Meagher & Flom, LLP

Dahlia Lithwick Slate Magazine

Matthew S. Santirocco New York University

Philadelphia Program Committee

Kathleen Hall Jamieson, *Cochair* University of Pennsylvania

Nora S. Newcombe, Cochair Temple University

Philip P. Betancourt Temple University

Nancy Bonini University of Pennsylvania

Jonathan A. Epstein University of Pennsylvania Perelman School of Medicine

Martha Julia Farah University of Pennsylvania

Frank F. Furstenberg, Jr. University of Pennsylvania

James Larry Jameson University of Pennsylvania Perelman School of Medicine

Jean-Michel Rabate University of Pennsylvania

Nathan Sivin University of Pennsylvania

Princeton Program Committee

Stanley Nider Katz, *Chair* Princeton University

Michael A. Cook Princeton University

Janet M. Currie Princeton University

Jill Dolan Princeton University

Carol J. Greenhouse Princeton University

Arthur Elliott Levine Institute for Citizens & Scholars

Nolan McCarty Princeton University

Harold Vincent Poor Princeton University

Marta Tienda Princeton University

Michael Wood Princeton University

Froma I. Zeitlin Princeton University

Providence Program Committee

Rose M. McDermott, *Cochair* Brown University

Jill Pipher, Cochair Brown University

Research Triangle Program Committee

Terry Magnuson, Cochair University of North Carolina at Chapel Hill

Paula D. McClain, Cochair Duke University

John Aldrich Duke University

Kerry Steven Bloom University of North Carolina at Chapel Hill

Jacquelyn Dowd Hall University of North Carolina at Chapel Hill

Guillermo R. Sapiro Duke University

San Diego Program Committee

Thomas Evan Levy, Cochair University of California, San Diego

Geoffrey Myles Wahl, *Cochair* Salk Institute for Biological Studies

Susan L. Ackerman University of California, San Diego

Shu Chien University of California, San Diego

Patricia Smith Churchland University of California, San Diego

Fred H. Gage Salk Institute for Biological Studies

Gordon Nelson Gill University of California, San Diego School of Medicine

Vicki H. Grassian University of California, San Diego Benedict Hyman Gross Harvard University

Theodore Groves University of California, San Diego

Tony Hunter Salk Institute for Biological Studies

Yishi Jin University of California, San Diego

Harvey Jules Karten University of California, San Diego School of Medicine

Marta Kutas University of California, San Diego

David A. Lake University of California, San Diego

J. Andrew McCammon University of California, San Diego

M. Margaret McKeown United States Court of Appeals, Ninth Circuit

Donald A. Norman University of California, San Diego

Jerrold M. Olefsky University of California, San Diego School of Medicine

Ivan K. Schuller University of California, San Diego

Susan S. Taylor University of California, San Diego School of Medicine

John Burnard West University of California, San Diego School of Medicine

Seattle Program Committee

Charles Hirschman, *Chair* University of Washington

Eric G. Adelberger University of Washington

Lawrence Corey Fred Hutchinson Cancer Research Center

Patricia Buckley Ebrey University of Washington

Michael F. Goodchild University of California, Santa Barbara

Donald K. Grayson University of Washington

Everett Peter Greenberg University of Washington

Mark Groudine Fred Hutchinson Cancer Research Center

Ray W. Hilborn University of Washington

Mary-Claire King University of Washington

Lawrence A. Loeb University of Washington

Marc Mangel University of California, Santa Cruz

Elizabeth Alison Thompson University of Washington

South Florida Representative

George Henry Conrades Akamai Technologies Inc.

St. Louis Program Committee

Gerald Early, Chair Washington University in St. Louis

Lee Epstein Washington University in St. Louis

Kenneth Marc Ludmerer Washington University in St. Louis School of Medicine

Emily Rauh Pulitzer The Pulitzer Foundation for the Arts

Peter Hamilton Raven Missouri Botanical Garden

Susanne S. Renner Washington University in St. Louis

Robert Eric Ricklefs University of Missouri– St. Louis

James V. Wertsch Washington University in St. Louis

Mark Stephen Wrighton Washington University in St. Louis

Urbana Representative

John Albert Katzenellenbogen University of Illinois at Urbana-Champaign

Washington, D.C. Program Committee

Norman R. Augustine Lockheed Martin Corporation

David G. Bradley Atlantic Media

David B. Brooks New York Times Company

A'Lelia Bundles Washington, D.C.

Mary Sue Coleman Association of American Universities

John J. DeGioia Georgetown University

Donald Graham Graham Holdings Co.

Sanford D. Greenberg TEI Industries, Inc.

Steven Knapp Carnegie Museums of Pittsburgh

Alan I. Leshner American Association for the Advancement of Science

Richard Andrew Meserve Covington & Burling, LLP; formerly, Carnegie Institution for Science

Erin K. O'Shea Howard Hughes Medical Institute

Earl A. Powell III National Gallery of Art

Rebecca W. Rimel Pew Charitable Trusts

Roger W. Sant The Summit Foundation Margaret C. Simms Center on Labor, Human Services, and Population at the Urban Institute

David J. Skorton Association of American Medical Colleges

Patty Stonesifer Martha's Table

Member Events, 2020–2021

he Academy typically holds events around the country and the world that bring members and others in their communities together. Although the COVID-19 pandemic suspended in-person events, the Academy continued to explore topics of national and global concern through a series of virtual activities. Academy President David W. Oxtoby provided opening remarks and moderated most of the virtual meetings and events.

July 7, 2020

Technology and Empathy After COVID-19

FEATURED SPEAKER: Sherry Turkle (Massachusetts Institute of Technology)

July 16, 2020

Reflections on the State of the Humanities in Colleges and Universities

FEATURED SPEAKERS: Jonathan Holloway (Rutgers University); Melissa Nobles (Massachusetts Institute of Technology)

July 20, 2020

Democratic Citizenship: A Discussion with the Commission's Leaders and Academy Members

FEATURED SPEAKERS: Danielle Allen (Harvard University); **Stephen Heintz** (Rockefeller Brothers Fund); **Eric Liu** (Citizen University)

August 20, 2020

The Dilemma Facing America's Schools During COVID-19*

FEATURED SPEAKERS: Austin Beutner (Los Angeles Unified School District); Sara Bleich (Harvard T.H. Chan School of Public Health)

August 24, 2020

Does Meritocracy Destroy the Common Good? *Morton L. Mandel Public Lecture*

FEATURED SPEAKERS: T. J. Jackson Lears (Rutgers University); Michael Sandel (Harvard University); Anna Deavere Smith (New York University)

September 16, 2020

Earning Trust in the Age of the Pandemic *Co-sponsored with the National Academies of Sciences, Engineering, and Medicine*

FEATURED SPEAKERS: Francis Collins (National Institutes of Health); Evelynn Hammonds (Harvard University); Seth Mnookin (Massachusetts Institute of Technology); Monica Schoch-Spana (Johns Hopkins University); INTRODUCTION: Victor J. Dzau (National Academy of Medicine); MODERATOR: Erica Kimmerling (Association of Science and Technology Centers)

September 24, 2020

Launching a New Report, "Civil Justice for All"

FEATURED SPEAKERS: Kenneth Frazier (Merk & Company); John Levi (Legal Services Corporation; Sidley Austin LLP); Martha Minow (Harvard Law School); MODERATOR: David M. Rubenstein (The Carlyle Group)

September 25, 2020

Can We Rebuild Social Cohesion in the United States?

Cosponsored with the Center for Advanced Study in the Behavioral Sciences, Stanford University

FEATURED SPEAKERS: Danielle Allen (Harvard University); Eric Klinenberg (New York University); Shaylyn Romney Garrett (Washington, Utah); Robert Putnam (Harvard University); MODERATOR: David Brooks (*The New York Times*)

* Activity of a Local Program Committee or Representative

September 30, 2020

Inadequate Investment: America, China, and the Future of Innovation

FEATURED SPEAKERS: Norman Augustine (Lockheed Martin Corporation); Neal Francis Lane (Rice University); Jeanette Wing (Columbia University); MODERATOR: Nancy C. Andrews (Duke University)

October 7, 2020

Celebration of New Members

FEATURED SPEAKERS: Danielle Allen (Harvard University); Nancy C. Andrews (Duke University); Karl Eikenberry (Stanford University); John Lithgow (Los Angeles, California); Marcelo Suárez-Orozco (University of Massachusetts Boston); Geraldine Richmond (University of Oregon); David M. Rubenstein (The Carlyle Group); Natasha Trethewey (Northwestern University)

October 17, 2020

Reinventing Democracy for the 21st Century: A University of Chicago Humanities Day Discussion*

FEATURED SPEAKERS: William Howell (University of Chicago); Tracey Meares (Yale University); Susan Stokes (University of Chicago); Diane Wood (United States Court of Appeals, Seventh Circuit); MODERATOR: Eric Slauter (University of Chicago); INTRODUCTION: Anne Walters Robinson (University of Chicago)

October 22, 2020

Telling Our Regional Story: The Narratives that Unite and Divide in North Carolina: A UNC Research Week Discussion*

FEATURED SPEAKERS: John Aldrich (Duke University); David Price (U.S. House of Representatives); Phoebe Stein (Federation of State Humanities Councils); William Sturkey (University of North Carolina, Chapel Hill); INTRODUCTION: Paula D. McClain (Duke University); Terry Magnuson (University of North Carolina, Chapel Hill)

October 27, 2020

Civil Justice for All: Law Schools and the Civil Justice Gap

FEATURED SPEAKERS: Tonya Brito (University of Wisconsin); Margaret H. Marshall (Choate, Hall, and Stewart LLP; formerly, Massachusetts Supreme Judicial Court); Martha Minow (Harvard Law School); Dayna Bowen Matthew (George Washington University Law School); Andrew Perlman (Suffolk University School of Law); Quinten Steenhuis (Suffolk University School of Law)

November 16, 2020

A Toast to New Members in Chicago*

FEATURED SPEAKER: John W. Rogers, Jr. (Ariel Investments, LLC); INTRODUCTION: Young-Kee Kim (University of Chicago)

November 18, 2020

Exploring the Humanities in American Life

FEATURED SPEAKERS: Kenneth Burns (Florentine Films); Brenda Thomson (Arizona Humanities); Kevin Young (New York Public Library); INTRODUCTION: John Parrish Peede (National Endowment for the Humanities)

December 2, 2020

A Conversation with Astronaut Jessica Meir*

FEATURED SPEAKER: Jessica Meir (NASA); MODER-ATOR: Brian Keating (University of California, San Diego); INTRODUCTION: Thomas Evan Levy (University of California, San Diego); Geoffrey Myles Wahl (Salk Institute for Biological Studies)

December 8, 2020

Health and Civil Justice: Innovative Partnerships Between Medicine and the Law

Cosponsored with the National Center for Medical-Legal Partnership at the George Washington University

FEATURED SPEAKERS: Jay Chaudhary (Indiana Family and Social Services Administration); Bethany Hamilton (George Washington University); Sharad Kohli (People's Community Clinic); Keegan Warren-Clem (University of Texas); MODERATOR: Allison Rice (Duke University)

December 9, 2020

Steps Toward International Climate Governance* Cosponsored with Yale University's MacMillan Center

FEATURED SPEAKERS: Scott Barrett (Columbia University); Pinelopi Goldberg (Yale University); William Nordhaus (Yale University); INTRODUCTION: Steven Wilkinson (Yale University)

December 14, 2020

Making the Case for International Scientific Partnerships

FEATURED SPEAKERS: Arthur Bienenstock (Stanford University); Shirley Malcom (American Association for the Advancement of Science); Peter Michelson (Stanford University); Olufunmilayo Olopade (University of Chicago)

January 6, 2021

Honoring William Labov

Cosponsored with the Linguistic Society of America

FEATURED SPEAKERS: William Labov (University of Pennsylvania); INTRODUCTION: Penelope Eckert (Stanford University); Wendell Pritchett (University of Pennsylvania)

January 31, 2021

Making Sweet Tea: A Discussion with E. Patrick Johnson*

FEATURED SPEAKER: E. Patrick Johnson (Northwestern University); **INTRODUCTION**: Young-Kee Kim (University of Chicago), Richard I. Morimoto (Northwestern University)

February 3, 2021

Honoring Ruth Lehmann and Gertrude Schüpbach

FEATURED SPEAKERS: Ruth Lehmann (Massachusetts Institute of Technology); Gertrude Schüpbach (Princeton University); INTRODUCTION: Nancy C. Andrews (Duke University); Shirley Tilghman (Princeton University)

February 8, 2021

A Timely Confluence: The Backstory of Moderna's COVID-19 Vaccine

FEATURED SPEAKER: Melissa Moore (Moderna Therapeutics)

February 9, 2021

Introducing "Measuring Civil Justice for All"

FEATURED SPEAKERS: John Mark Hansen (University of Chicago); Rebecca Sandefur (Arizona State University); James Sandman (University of Pennsylvania Carey Law School)

February 11, 2021

A Circle of Notable Native American Scholars

Cosponsored with Harvard University Native American Program (HUNAP) and the Stanford American Indian Organization (SAIO) and Native American Cultural Center (NACC)

FEATURED SPEAKERS: Philip Deloria (Harvard University); K. Tsianina Lomawaima (Arizona State University); Henrietta Mann (Montana State University); Greg Sarris (Sonoma State University); Robert Warrior (University of Kansas)

February 21, 2021

Southern California Members Reception*

FEATURED SPEAKERS: Louis Geoffrey Cowan (University of Southern California); Antonia Hernández (California Community Foundation); John Lithgow (Los Angeles, California); Ernest Wilson (University of Southern California)

February 23, 2021

American Democracy and Civic Participation in 2021: A Conversation with Danielle Allen and Eric Liu

Cosponsored with the Chicago Community Trust

FEATURED SPEAKERS: Danielle Allen (Harvard University); Eric Liu (Citizen University); MODERATOR: Helene Gayle (Chicago Community Trust)

March 3, 2021

Why America Needs Service Now, More Than Ever

FEATURED SPEAKERS: Josh Fryday (State of California); Kei Kawashima-Ginsberg (Tufts University); Darryl Lester (Institute for Building Communities by Design); Fareed Zakaria (CNN; *The Washington Post*)

March 10, 2021

Empathy and Our Future

Morton L. Mandel Public Lecture

FEATURED SPEAKERS: Eric Liu (Citizen University); Sherry Turkle (Massachusetts Institute of Technology)

March 11, 2021

Using Civic Media to Build a Better Society *Cosponsored with the Library of Congress*

FEATURED SPEAKERS: Danielle Allen (Harvard University); Talia Stroud (University of Texas); Brendesha Tynes (University of Southern California); Richard Young (CivicLex)

March 16, 2021

The COVID-19 Pandemic and Vaccine Development*

FEATURED SPEAKERS: Rommie Amaro (University of California, San Diego); Natasha Martin (University of California, San Diego); Robert Schooley (University of California, San Diego); INTRODUCTION: Thomas Evan Levy (University of California, San Diego); Geoffrey Myles Wahl (Salk Institute for Biological Studies)

March 18, 2021

America's Black-White Divide: Looking Back, Looking Around, Looking Forward

Cosponsored with the Center for Advanced Study in Behavioral Sciences, Stanford University

FEATURED SPEAKERS: Lawrence Bobo (Harvard University); Henry Louis Gates Jr. (Harvard University); Claude Steele (Stanford University); MODERATOR: Margaret Levi (Stanford University)

March 24, 2021

Honoring Margaret Atwood

FEATURED SPEAKER: Margaret Atwood (Toronto, Ontario, Canada); MODERATOR: Gish Jen (Cambridge, Massachusetts); INTRODUCTION: Nancy C. Andrews (Duke University)

March 24, 2021

Ash Center Presents: "Our Common Purpose: Reinventing American Democracy for the 21st Century"

Cosponsored with the Ash Center for Democratic Governance and Innovation, Harvard University

FEATURED SPEAKERS: Danielle Allen (Harvard University); Stephen Heintz (Rockefeller Brothers Fund); Eric Liu (Citizen University); MODERATOR: Archon Fung (Harvard Kennedy School)

April 6, 2021

The American Mythology of Racial Progress*

FEATURED SPEAKER: Jennifer Richeson (Yale University)

April 8, 2021

HBO Documentary Films' "Our Towns" Virtual Screening and Q&A

FEATURED SPEAKERS: Steven Ascher (West City Films); Dee Davis (Center for Rural Strategies); Deborah Fallows (New America); James Fallows (*The Atlantic*); Jeanne Jordan (West City Films)

April 15, 2021

How Political Institutions Shape Outcomes and How We Might Reform Them Cosponsored with the Library of Congress

FEATURED SPEAKERS: Danielle Allen (Harvard University); Lee Drutman (New America); Katie Fahey (Of the People); Cara McCormick (National Association of Nonpartisan Reformers)

April 21, 2021

Investing in Civic Education and Our Democracy

FEATURED SPEAKERS: Danielle Allen (Harvard University); Allonah Ashworth (Houston, Texas); Sam Buker (Wellesley, Massachusetts); Mae Ciezki (Chula Vista, California); Shawn Healy (iCivics); Kei Kawashima-Ginsberg (Tufts University); David McCullough III (American Exchange Program); Tammy Waller (Arizona Department of Education)

April 23, 2021

The Post-Pandemic Future of Higher Education

FEATURED SPEAKERS: Richard Arum (University of California, Irvine); Ana Mari Cauce (University of Washington); Robert Jones (University of Illinois at Urbana-Champaign); Christina Paxson (Brown University)

May 6, 2021

A Conversation with Architect Jeanne Gang

FEATURED SPEAKER: Jeanne Gang (Studio Gang)

May 13, 2021

Finding a Shared Historical Narrative *Cosponsored with the Library of Congress*

FEATURED SPEAKERS: Danielle Allen (Harvard University); Samuel Goldman (George Washington University); Natalia Molina (University of Southern California); Cathy Park Hong (Rutgers University–Newark)

May 20, 2021

Artists at Work Cosponsored with Springboard for the Arts

FEATURED SPEAKERS: Oskar Eustis (The Public Theater); Thelma Golden (The Studio Museum in Harlem); Laura Zabel (Springboard for the Arts)

May 27, 2021

Reflections on a Full, Consequential, and Lucky Life: Science, Leadership, and Education*

Cosponsored with the University of Chicago Physics Department

FEATURED SPEAKERS: Walter Massey (School of the Art Institute of Chicago); Don Michael Randel (formerly, University of Chicago); INTRODUCTION: Young-Kee Kim (University of Chicago)

June 1, 2021

Exploring the Future of International Large-Scale Science

FEATURED SPEAKERS: Arthur Bienenstock (Stanford University); E. William Colglazier (*Science & Diplomacy,* American Association for the Advancement of Science); France Córdova (Science Philanthropy Alliance); James Curran (Emory University); Jonathan Manne Dorfman (Stanford University); Kaye Husbands Fealing (Georgia Institute of Technology); Peter Michelson (Stanford University)

June 10, 2021

The Hybrid Workforce of the Future

FEATURED SPEAKERS: James Manyika (McKinsey and Company; McKinsey Global Institute); Indra Nooyi (formerly, PepsiCo); Robert Pozen (Massachusetts Institute of Technology)

June 14, 2021

Reckoning with Organizational History *Morton L. Mandel Public Lecture*

FEATURED SPEAKERS: Claudia Rankine (Yale University); John DeGioia (Georgetown University); Susan Goldberg (National Geographic); Brent Leggs (African American Cultural Heritage Action Fund); MODERATOR: Ben Vinson (Case Western Reserve)

June 30, 2021

American Democracy Under Construction

FEATURED SPEAKERS: Hahrie Han (Johns Hopkins University); Wallace B. Jefferson (Alexander Dubose & Jefferson LLP); Yuval Levin (American Enterprise Institute); Norman J. Ornstein (American Enterprise Institute; *The Atlantic*); MODERATOR: Judy Woodruff (PBS *NewsHour*)

Affiliates of the American Academy

he Affiliates program is a partnership between the Academy and leading colleges, universities, and cultural and scientific organizations. The Academy and its Affiliates are united by a shared commitment to the vitality of higher education, the value of research, and to advancing the common good. This network provides essential support for the work of the Academy and is a vehicle for important conversations about the higher education landscape.

In October 2020, representatives from Affiliate institutions' law schools gathered for a special briefing on the Academy's *Civil Justice for All* report and to discuss the role of law schools in closing the civil justice gap. In April 2021, the Academy held a convening of Affiliate leaders to address the post-pandemic future of higher education. The attendees included presidents, provosts, faculty, and administrators, who participated in a candid, forward-looking conversation on the impact of the COVID-19 pandemic on teaching methodology, enrollment policy, and student mental health, among other topics.



Amherst College Carolyn A. "Biddy" Martin, President



Arizona State University Michael M. Crow, President



Brown University Christina Hull Paxson, President



Columbia University Lee C. Bollinger, President



California Institute of Technology Thomas F. Rosenbaum, *President*



Cornell University Martha E. Pollack, President



Boston University Robert A. Brown, President



Brandeis University Ronald D. Liebowitz, President



Carnegie Institution for Science Eric D. Isaacs, President



Carnegie Mellon University Farnam Jahanian, President



Dana-Farber Cancer Institute Laurie H. Glimcher, President and CEO



Dartmouth College Philip J. Hanlon, President

Duke

Duke University Vincent E. Price, President



Emory University Gregory L. Fenves, President



Harvard University Lawrence S. Bacow, President



Indiana University Michael A. McRobbie, President



Georgetown University John J. DeGioia, President

THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC

The George Washington University Thomas J. LeBlanc, President



Georgia Institute of Technology Ángel Cabrera, President



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



Johns Hopkins University Ronald J. Daniels, President



Lowell Observatory William Lowell Putnam, IV, *Trustee*



Massachusetts Institute of Technology L. Rafael Reif, President



Michigan State University Samuel L. Stanley, Jr., President



New York University Andrew D. Hamilton, President

Northeastern University

Northeastern University Joseph E. Aoun, President



Northwestern University Morton O. Schapiro, President



The Ohio State University Kristina M. Johnson, *President*



Pomona College G. Gabrielle Starr, *President*



Princeton University Christopher L. Eisgruber, *President*

AFFILIATES OF THE AMERICAN ACADEMY



Rice University David W. Leebron, *President*



Syracuse University Kent D. Syverud, *Chancellor and President*



University of California, Irvine Howard Gillman, Chancellor



Rutgers, The State University of New Jersey Jonathan Holloway, *President*



Texas A&M University Katherine M. Banks, *President*



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



Rutgers University – Newark Nancy E. Cantor, *Chancellor*



Tufts University Anthony P. Monaco, *President*



University of California, Riverside Kim A. Wilcox, Chancellor



Smithsonian Institution Lonnie G. Bunch III, Secretary



University of Arizona Robert C. Robbins, President



University of California, San Diego Pradeep K. Khosla, *Chancellor*

UC SANTA BARBARA

University of California, Santa Barbara

Henry T. Yang, Chancellor



Spelman College Mary Schmidt Campbell, President



Stanford University Marc Tessier-Lavigne, President



University of California, Berkeley Carol T. Christ, Chancellor



University of California, Davis Gary S. May, *Chancellor*



University of California, Santa Cruz Cynthia K. Larive, *Chancellor*



University of Chicago Paul Alivisatos, President



UNIVERSITY OF MIAMI



University of Miami Julio Frenk, *President*



University of Michigan Mark S. Schlissel, President



University of Oregon Michael H. Schill, President



University of Pennsylvania Amy Gutmann, *President*

University of Pittsburgh

University of Rochester

Sarah C. Mangelsdorf, President

Patrick D. Gallagher, Chancellor

UNIVERSITY of OCHESTER



University of Illinois at Urbana-Champaign Robert J. Jones, *Chancellor*



University of Minnesota Joan T.A. Gabel, *President*



University of Iowa Barbara J. Wilson, *President*



University of Maryland Darryll J. Pines, *President*



University of Massachusetts Amherst Kumble R. Subbaswamy, *Chancellor*



University of Nebraska-Lincoln Ronnie D. Green, *Chancellor*



THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

University of North Carolina at Chapel Hill Kevin M. Guskiewicz, Chancellor



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



University of Southern California Carol L. Folt, *President*



University of Texas at Austin Jay Hartzell, *President*

AFFILIATES OF THE AMERICAN ACADEMY







University of Utah Michael L. Good, Interim President



University of Virginia James E. Ryan, *President*



University of Washington Ana Mari Cauce, President



University of Wisconsin-Madison Rebecca M. Blank, *Chancellor*



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



Wake Forest University Susan R. Wente, President



Washington University in St. Louis Andrew D. Martin, *Chancellor*



Yale University Peter Salovey, President

FOR MORE INFORMATION, PLEASE CONTACT:

Patrick Meade Membership Engagement Associate pmeade@amacad.org



Vanderbilt University Daniel Diermeier, Chancellor

Academy Patrons

What Makes A Good Citizen: Stephen D. Bechtel, Jr.

n the spring of 2018, Stephen D. Bechtel, Jr., asked the Academy, "What makes a good citizen?" His question challenged the Academy to explore what it means to be a good citizen in the twenty-first century and became the impetus for the Commission on the Practice of Democratic Citizenship, one of the most impactful initiatives in the Academy's modern history.

Even earlier, in 2013, Stephen Bechtel played an active role in the development and funding of the Academy's Stewarding America project, which investigated the civic institutions that inspire and model good citizenship. Through in-depth analyses of the government, the courts, the media, the military, corporations, unions, and the education system, the Academy developed a better understanding of the role each of these institutions played in the American democratic system. The project also considered ways to increase civic participation and public confidence in American leaders and institutions. In many ways, Stewarding America served as a precursor to the Commission on the Practice of Democratic Citizenship. Since 1990, Stephen Bechtel and his foundation contributed over \$6.8 million to the Academy. In 2005, the S.D. Bechtel, Jr. Foundation provided funding for the Science, Engineering, and Technology program area. In recognition of his generous support, in 2006 the Academy named its auditorium for Stephen. Since then, the Stephen D. Bechtel, Jr. Auditorium has provided a gracious and elegant accommodation for Stated Meetings, concerts, conferences, and convenings. Most recently, the S.D. Bechtel, Jr. Foundation provided financial support for the Commission on the Practice of Democratic Citizenship as well as the implementation of its final report, *Our Common Purpose: Reinventing American Democracy for the 21st Century*.

Stephen D. Bechtel, Jr., passed away on March 15, 2021. His legacy will be remembered through his many contributions to the Academy. With generosity, leadership, guidance, and passion, he demonstrated exactly what makes a good citizen.



New Academy Fellowships supported generously by the **Raymond Frankel Foundation**, the **Hellman Foundation**, the **Carl & Lily Pforzheimer Foundation**, the **Virginia Wellington Cabot Foundation**, and the **Cabot Family Charitable Trust**.

ver the past decade, the Academy has provided a growing number of career-building fellowships for postdoctoral scholars. With thanks to the generous contributions of members and foundations, the Academy now offers four fellowships dedicated to advancing the Academy's broad portfolio of academic and policy work.

RAYMOND FRANKEL NUCLEAR SECURITY POLICY FELLOWSHIP



In May 2021, the Raymond Frankel Foundation made a grant of \$2 million to endow a new fellowship in nuclear security policy. **Poul Christiansen** is the inaugural Raymond Frankel Nuclear Security Policy Fellow.

Prior to joining the Academy, Poul earned his PhD in political science from the University of Ottawa and worked for the Pugwash Conference

on Science and World Affairs. As the inaugural Raymond Frankel Nuclear Security Policy Fellow, Poul leads the Academy's project on Promoting Dialogue on Arms Control and Disarmament and supports work in Meeting the Challenges of the New Nuclear Age. When asked what this fellowship means to him, Poul responded, "The Frankel Fellowship is a great platform for me to engage with the policy world and apply my academic training to a different set of challenges. The project work has been a great learning curve on how to navigate the congressional attention span and think through questions that will be important for my career development. The deep expertise of Academy members and the strong network of affiliated scholars and policy-makers provide a superb resource and opportunities for my career progression. Above all, it is the opportunity of doing so in the professional and welcoming environment that Academy staff have created."

LOUIS W. CABOT FELLOWSHIP

Jessica Taylor is the inaugural Louis W. Cabot Fellow, a humanities policy fellowship established with the philanthropic support of the Virginia Wellington Cabot Foundation and the Cabot Family Charitable Trust in memory of the late Louis W. Cabot. Prior to joining the Academy, Jessica received a PhD in linguistic anthropology from the University



of Toronto and was a Research Associate at Harvard University in Studies of Women, Gender, and Sexuality. At the Academy, Jessica contributes to the Commission on the Arts, in which she facilitates the writing and editing of the Commission's reports as well as supports related public events and engagements. When asked about her experience, Jessica said, "Receiving this fellowship was life-changing for me, especially coming as it did in the midst of a global pandemic that has been extremely challenging for both higher education and the arts and culture sector. As I transition into work outside of the university, I'm very pleased to have an opportunity to put my training and experience to good use in the service of the Academy's projects - and to learn as much as I can from the fabulous people who work here and the fantastic and knowledgeable members across all sectors."

CARL & LILY PFORZHEIMER FOUNDATION FELLOWSHIP



A second endowed fellowship in the humanities is supported by a past contribution from the Carl & Lily Pforzheimer Foundation. Elizabeth Youngling is the inaugural Carl & Lily Pforzheimer Foundation Fellow. She received her PhD in cultural anthropology from the University of Illinois at Urbana-Champaign, where her research focused on

the role of housing stakeholders in the reconstruction of U.S. homeownership after the 2008 recession. At the Academy, Liza works on the Commission on the Practice of Democratic Citizenship and a new project on economic inequality. When asked what this fellowship means to her, Liza replied, "I pursued a PhD in cultural anthropology because I wanted tools to understand and respond to complex human challenges. But after finishing my degree, I was unsure how to apply those tools in a meaningful way. The Carl & Lily Pforzheimer Foundation Fellowship has given me a path forward. I have the opportunity to work with an incredible group of colleagues, Academy members, and practitioners to address some of the most pressing policy issues of our time, such as how to strengthen American democracy and create an economic system that prioritizes the public good. This fellowship is giving me experiences, relationships, and skills that will allow me to have an impactful career in public policy."

HELLMAN FELLOWSHIP IN SCIENCE AND TECHNOLOGY POLICY

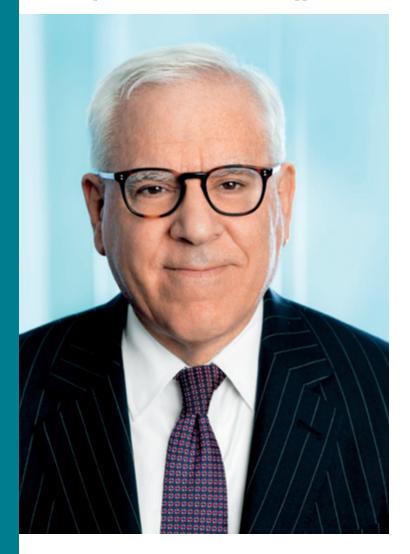
These three new fellowships build on the success of the Hellman Fellowship in Science and Technology Policy, a two-year fellowship supported by the Hellman Foundation. Since 2007, the Hellman Fellowship has provided eleven scientists with the opportunity to explore and launch careers in public policy, while playing key roles in advancing the Academy's science and technology programming.

The Hellman Fellowship program continues to thrive. In 2019, immediately following her fellowship, **Erica Palma Kimmerling** joined the Association of Science and Technology Centers (ASTC) as a Senior Advisor for Science Engagement Policy and Partnerships. In this role, she launched the emerging network for Leaders in Science and Technology Engagement Networks (LISTEN) as ASTC's Civic Science Fellow, supported by the Kavli Foundation. On June 1, 2021, Erica became a Senior Policy Advisor for Public Engagement in Science at the White House Office of Science and Technology Policy.

Current Hellman Fellow Amanda Vernon was promoted recently to Program Officer for Science, Engineering, and Technology at the Academy. In this role, she leads the projects on Challenges for International Scientific Partnerships and New Models for U.S. Science and Technology. The Academy's newest Hellman Fellow is Sophia Charan, who begins her fellowship in September 2021 after earning her PhD in chemical engineering from the California Institute of Technology.

Leading By Example: David M. Rubenstein

n his 2020 book, *How to Lead: Wisdom from the World's Greatest CEOs, Founders, and Game Changers*, David Rubenstein wrote, "Why should anyone really want to be a leader? First, a leader can create the type of change or results that will improve the lives of others. Second, a leader can motivate others to become leaders, and in turn improve others' lives. And third, a leader can feel a sense of accomplishment and achievement that provides human fulfillment and happiness."



A true leader by example, in February 2021, David Rubenstein made the largest donation in the Academy's 241-year history, pledging \$10 million to support two initiatives. The gift provides funding for a new addition to the Academy building to house the institution's archival collections, thereby making these historic records more accessible to all. The gift also establishes a new Rubenstein Fund for American Institutions, supporting Academy projects and commissions devoted to advancing democracy and justice.

In 2016, David Rubenstein made a gift of \$5 million to establish the Rubenstein Enhancement Fund at the Academy. That fund continues to support a number of Academy activities, including the Making Justice Accessible project, the Commission on the Practice of Democratic Citizenship, the Exploratory Fund, and the Annual David M. Rubenstein Lecture.

David Rubenstein's involvement in the Academy goes far beyond his philanthropy. A member of both the Academy's Board of Directors and Trust, he also serves as the cochair of the current capital campaign, partnering with Louise Bryson to help raise \$100 million. In addition, at the annual David M. Rubenstein Lecture, held during the Induction weekend, Mr. Rubenstein interviews an Academy member who exemplifies the excellence and accomplishments of the newly inducted class. Past interviewees include astronaut Kathryn D. Sullivan; Supreme Court Justice Sonia Sotomayor; and actress, playwright, and author Anna Deavere Smith.

When asked about the impact David Rubenstein has made at the Academy, Chair of the Board Nancy C. Andrews said, "We are deeply grateful for all that David has contributed to the American Academy, through his generous gifts and his dedicated service. He brings tremendous experience to our Board and inspires our work with the same amalgam of patriotism and vision that motivated our founders 241 years ago."

The Campaign for the Academy & Its Future



n fiscal year 2021, the Academy received over \$21 million in new gifts and grants, bringing us within reach of our ambitious goal as we approach the final year of the Campaign for the Academy & Its Future. This total was made possible by the contributions of over 1,200 members who continue to support the programs, events, and initiatives that animate the Academy's 241-year-old mission. In this watershed year, we acknowledge the following individuals and foundations whose especially generous support will have a lasting impact on our organization :

DAVID M. RUBENSTEIN

David Rubenstein's gift of \$10 million provides implementation and project support for the Academy's projects in democracy and inequality in America. It will also fund the construction of The Rubenstein Wing, a dedicated space to house and make the Academy's archival collections more accessible.

THE RAYMOND FRANKEL FOUNDATION

A \$2 million grant from the Raymond Frankel Foundation will endow a nuclear security policy fellowship, intended to build the careers of promising young scholars and cement the Academy's historic legacy in global security.

AN ANONYMOUS FOUNDATION

Recognizing the challenge and opportunity of the massive operational shift brought on by the COVID-19 pandemic, a new grant of \$2 million in endowment will support the Academy's technology infrastructure, allowing us to engage a greater number and diversity of people through our events and communications.

THE WILLIAM J. AND LIA G. POORVU FOUNDATION

A grant of \$1 million will establish the Poorvu Fund, providing current-use support for the early development and inclusive planning of new projects and initiatives at the Academy.

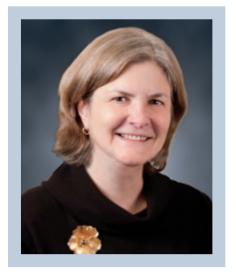
ROCKEFELLER BROTHERS FUND

As a leader in democracy-focused philanthropy, the Rockefeller Brothers Fund made a grant of \$1 million to accelerate the implementation of *Our Common Purpose*, the final report of the Commission on the Practice of Democratic Citizenship.

"We are exceedingly grateful for the partnership of so many dedicated members and missionoriented foundations who join us in supporting the goals of the Academy and its Campaign."

- Louise H. Bryson and David M. Rubenstein, Campaign Cochairs

From the Chair of the Board of Directors



s envisioned by our founders in 1780, the mission of the American Academy of Arts and Sciences is to "cultivate every art and science which may tend to advance the interest, honor, dignity, and happiness of a free, independent, and virtuous people." Looking back over a year marked with extraordinary upheaval in nearly every facet of American life, I find myself reflecting on the resonance of this mission in the Academy of today, with a particular focus on the word "people."

We are an institution whose membership, convenings, leadership, and initiatives are becoming increasingly representative and inclusive. A new

standing committee of the Board is reckoning with our organizational history and advising on anti-racism initiatives. Many of our projects and convenings this year explored the theme of access: access to the democratic process, access to civil justice, access to the arts and education, and access to economic opportunity. Our projects in Science, Engineering, and Technology as well as those in Global Security and International Affairs are strengthening international relationships that are built on a common desire for peace, cooperation, and the productive exchange of ideas. Our new project on climate action seeks to accelerate climate mitigation and adaptation strategies for all Americans, regardless of race and socioeconomic background.

For over 240 years, the Academy has sought to contribute its vast breadth of intellectual and professional strengths toward applications that serve the common good – with all people in mind. I commend my fellow members for the work we have undertaken this year that serves this noble vision in a way that intentionally marries excellence and inclusion.

None of this work is possible without the participation, partnership, and philanthropy of our members. I am deeply grateful for all of your contributions this year and for your continued involvement and generous support of the Academy.

Nancy C. Andrews

Academy Leadership

Board of Directors

Nancy C. Andrews, *Chair* Duke University School of Medicine

David W. Oxtoby, *President* American Academy of Arts and Sciences

Stephen B. Heintz, Vice Chair Rockefeller Brothers Fund

Diane P. Wood, *Vice Chair* U.S. Court of Appeals, Seventh Circuit

Carl H. Pforzheimer III, *Treasurer* Carl H. Pforzheimer and Co.

Geraldine L. Richmond, Secretary University of Oregon

K. Anthony Appiah New York University

Louise H. Bryson The J. Paul Getty Trust

John Mark Hansen University of Chicago

Nannerl O. Keohane Princeton University

Cherry A. Murray University of Arizona

David M. Rubenstein The Carlyle Group

Deborah F. Rutter John F. Kennedy Center for the Performing Arts

Larry J. Shapiro University Health Partners of Hawaii

Shirley M. Tilghman Princeton University

Natasha D. Trethewey Northwestern University

Jeannette M. Wing Columbia University

Pauline Yu American Council of Learned Societies

Council

Diane P. Wood, *Chair* U.S. Court of Appeals, Seventh Circuit

Helen M. Blau Stanford University School of Medicine

Emery Brown Harvard Medical School; Massachusetts General Hospital; Massachusetts Institute of Technology

David D. Clark Massachusetts Institute of Technology

Joseph S. Francisco University of Pennsylvania

Paula J. Giddings Smith College

Annette Gordon-Reed Harvard University

Linda Greenhouse Yale Law School

Paula T. Hammond Massachusetts Institute of Technology

Mary-Claire King University of Washington

Sara Lawrence-Lightfoot Harvard Graduate School of Education

Paula D. McClain Duke University

Steven E. Miller Harvard Kennedy School

Patricia Phelps de Cisneros Fundación Cisneros

Scott D. Sagan Stanford University

Kathryn A. Sikkink Harvard Kennedy School

Alfred Z. Spector Two Sigma Investments

Jeannette M. Wing Columbia University **Susan Wolf** University of North Carolina at Chapel Hill

Nancy C. Andrews, ex officio Duke University School of Medicine

David W. Oxtoby, *ex officio* American Academy of Arts and Sciences

Stephen B. Heintz, *ex officio* Rockefeller Brothers Fund

Carl H. Pforzheimer III, *ex officio* Carl H. Pforzheimer and Co.

Geraldine L. Richmond, *ex officio* University of Oregon

Trust

Stephen B. Heintz, *Chair* Rockefeller Brothers Fund

Joanne Berger-Sweeney Trinity College

Philip Bredesen Nashville, Tennessee

Louise H. Bryson The J. Paul Getty Trust

Ernest H. Cockrell Cockrell Interests, Inc.

Juan Enriquez Excel Venture Management

Frances Daly Fergusson Vassar College

Ann M. Fudge Young & Rubicam Brands

Antonia Hernández California Community Foundation

Robert F. Higgins Causeway Media Partners

Alberto Ibargüen John S. and James L. Knight Foundation

Andrew R. Jassy Amazon.com **Steven S. Koblik** The Huntington Library, Art Collections, and Botanical Gardens

Carl H. Pforzheimer III Carl H. Pforzheimer and Co.

John W. Rogers, Jr. Ariel Investments

David M. Rubenstein The Carlyle Group

Patti B. Saris U.S. District Court, District of Massachusetts

Sara Lee Schupf New York, New York

James M. Stone Plymouth Rock Companies

Marcelo M. Suárez-Orozco University of Massachusetts Boston

Samuel O. Thier Harvard Medical School; Massachusetts General Hospital

Kenneth L. Wallach Central National-Gottesman, Inc.

Nancy C. Andrews, ex officio Duke University School of Medicine

David W. Oxtoby, *ex officio* American Academy of Arts and Sciences

Geraldine L. Richmond, *ex officio* University of Oregon

Diane P. Wood, *ex officio* U.S. Court of Appeals, Seventh Circuit

With Appreciation ...

Academy projects, publications, and meetings are supported by gifts and grants from members, friends, foundations, corporations, Affiliates, and other funding agencies. The Academy expresses its deep appreciation for this support and to the many members who contribute to its work.

Published by the American Academy of Arts and Sciences, September 2021

PHOTO CREDITS

Martha Stewart Photography: pages 3, 5; iStock.com/carterdayne: page 4; iStock.com/studiocasper: page 8; iStock .com/tzam: page 11; iStock.com/Jacob Ammentorp Lund: page 13; iStock.com/dzika_mrowka: page 16; ewg3D/Getty Images: page 17; Russell Watkins/Department for International Development: page 20; iStock.com/baona: page 22; Albert Gonzalez Farran/Getty Images: page 24; iStock.com/YinYang: page 27; iStock.com/sisoje: page 28; iStock.com/ FatCamera, iStock.com/fizkes, iStock.com/FrankyDeMeyer, and iStock.com/evrim ertik: page 31, clockwise from top left; iStock.com/SolStock: page 34; iStock.com/-Dant-: page 35; iStock.com/josemoraes: page 40; iStock.com/pluem05: page 41; Xinhua News Agency/Getty Images: page 44; Courtesy of David M. Rubenstein: page 64; Courtesy of Nancy C. Andrews: page 75 AMERICAN ACADEMY OF ARTS & SCIENCES Norton's Woods 136 Irving Street Cambridge, MA 02138-1996 USA

telephone 617-576-5000 facsimile 617-576-5050 email aaas@amacad.org website www.amacad.org @americanacad

