


Bulletin of the American Academy of Arts & Sciences

“ The Academy was born of crisis, established by the nation’s founders in 1780 amidst the American Revolution. Let us likewise make the current crisis a time of rebirth for the Academy.

2020

ANNUAL REPORT

FALL 2020



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its capacity to convene scholars,
practitioners, and public figures
from every discipline, field, and
profession to define the most
important problems facing our
world and develop new ideas
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ANNUAL REPORT



Board & Committee Reports

- 4** Report of the Chair of the Board of Directors
Nancy C. Andrews
- 5** Report of the President
David W. Oxtoby
- 6** Academy Statement on Anti-Racism
- 8** Academy Governance & Committees
- 11** Report of the Treasurer
Carl H. Pforzheimer III

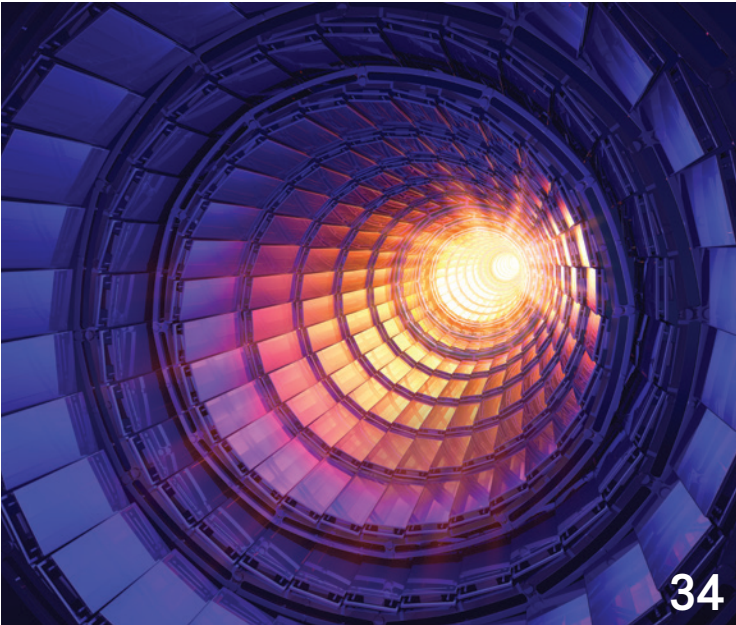
- 14** Report of the Committee on Development & Communications
Louise H. Bryson, Chair
- 15** Report of the Committee on Studies & Publications
John Mark Hansen, Chair



31



31



34



52

Projects, Publications & Meetings

- 17 American Institutions, Society & the Public Good
- 20 Education & the Development of Knowledge
- 22 Global Security & International Affairs
- 29 The Humanities, Arts & Culture
- 32 Science, Engineering & Technology
- 37 Academy Publications
- 39 Local Program Committees & Representatives
- 42 Member Events

Prizes

52 Prizes Awarded by the Academy

Academy Members

- 55 Members Elected in 2020
- 60 Deceased Members

Academy Staff

- 61 List of Staff at the Academy

Report of the Chair of the Board of Directors

NANCY C. ANDREWS

This has been an extraordinary year, marked by a historic pandemic, bitter political strife, and unsettling civil unrest, and capped by a presidential election unlike any before. The new administration faces daunting challenges – uniting a deeply divided country, marshaling science and public health expertise to quell the coronavirus pandemic, improving relationships with international allies, striving for racial equity, addressing climate change, and making our economy work for all citizens. Members of the American Academy will play important roles in these efforts, both through public service and through the work of our organization. I believe we are as relevant and important now as at any other moment over the past two hundred and forty years.

The Academy is distinguished by its capacity to convene scholars, practitioners, and public figures from every discipline, field, and profession to define the most important problems facing our world and develop new ideas to solve them. Over the past year I've been struck by how often the Academy has *anticipated* issues before they became urgent. I'll offer some examples. A Stated Meeting in 2006 presaged the pandemic we are living through now in uncanny detail, warning that it was only a matter of time. Our recent project on The Public Face of Science explored nuances of the public's trust in science and scientists, providing insight that helps us understand how that trust can be influenced by politics. And *Our Common Purpose*, the final report from our Commission on the Practice of Democratic Citizenship, offered much needed recommendations to help mend fissures and strengthen our democracy.

It is a great honor to be elected to the Academy and we should take pride in its contributions. But this year, as killings of innocent citizens by police once again cast a spotlight on unjust experiences of Black Americans, we took a hard look at ourselves. The Academy's Board had frank and open discussions about the anti-Black racism that is endemic in our country. We acknowledged that it is also intrinsic to our history as an



organization. We contemplated how it conflicts with our values and how it should be countered in our work. In September, the Board released a formal Statement on Anti-Racism, found on pages 6–7 in this Annual Report. We stand behind that Statement, and owe Board colleagues K. Anthony Appiah, Deborah Rutter, and Natasha Trethewey a debt of gratitude for crafting powerful language to express our commitment.

In the Statement we say, “*We accept that the Academy like the nation has much to atone for. A statement, of course, barely atones for anything. Acting upon it is what will.*” We will be accountable for taking action and making changes to erase the influence of racism in selecting our members and operating our organization. We will be deliberate in considering how racism shades each problem and project we take on, and we will instill an anti-racism perspective in our work. I am pleased that K. Anthony Appiah has agreed to serve as Chair of a new Standing Committee on Anti-Racism, working with myself, President David Oxtoby, and distinguished thought leaders to recommend actions and keep us on task. You will hear more about this Committee and its work in the months to come.

The year 2020 has been difficult, but our organization gives me hope for the future. The Academy has navigated through troubling times in the past. As we have since our earliest days, we will draw on the ingenuity and dedication of our members to chart a course for a better future. With your leadership, involvement, and support, I am confident that the Academy will continue to make important contributions for the benefit of generations to come.

Report of the President

DAVID W. OXTOBY

As we reach the end of a year like no other, I hope this message finds you well and safe. As you know, the COVID-19 pandemic has affected every aspect of the Academy's work. Our staff has been working remotely since the middle of March 2020 and will continue to do so until at least July 2021. We have had to adapt quickly to a year in which we have become a truly "virtual" community. And yet, this was a year that also demonstrated the enduring strength of that community.

A series of online events has allowed us to include more members – in more places – than ever before, a lesson we will take with us when we reach the "new normal." Through weekly Zoom all-staff meetings and virtual social events, our staff has maintained the close bonds that so impressed me when I first arrived at the Academy. And our virtual 2020 New Member Celebration on October 7, while certainly no substitute for Induction, succeeded in conveying the sense of fellowship, intellectual curiosity, and public purpose that makes the Academy such a special institution.

While the COVID-19 crisis has fundamentally changed *how* the Academy pursues its work, another crisis has inspired us to reconsider *why*.

As our Board Chair Nancy Andrews notes in her message in this Annual Report, the recent incidents of police violence and ensuing protests for racial justice have led us to reflect on the role the Academy plays in our society. As a workplace, we have come together through candid all-staff discussions, special virtual staff events, and a new Diversity and Inclusion Council to engage in a meaningful dialogue about what we can do – as individuals and as an organization – to build a more hopeful future. Three Board members – Anthony Appiah, Deborah Rutter, and Natasha Trethewey – demonstrated superb leadership in developing an Academy Statement on Anti-Racism, which was approved by the Board and is available on the Academy's website and on the following pages. To ensure that this statement is translated into action, we have established a Board Standing Committee on Anti-Racism, focused on strengthening the diversity of our membership and



leadership, making sure that the Academy holds up the values of anti-racism as an employer, and ensuring that a commitment to anti-racism is reflected in our work.

This renewed commitment to building a more just society is already evident in the projects and publications detailed in this Annual Report. In June, the Academy released *Our Common Purpose: Reinventing American Democracy for the 21st Century*, the final report of the Commission on the Practice of Democratic Citizenship. Over the course of two years, the Commission conducted listening sessions with hundreds of Americans in communities across the country, developing a set of 31 recommendations to help make American democracy more representative, responsive, and just. In September, the Academy's Making Justice Accessible project released *Civil Justice for All*, providing concrete recommendations to improve access to civil legal assistance for the millions of low-income Americans who need it. And projects such as The Public Face of Science, Challenges for International Scientific Partnerships, and New Models for U.S. Science and Technology Policy released reports emphasizing the importance of inclusion to the strength, vitality, and competitiveness of the scientific enterprise.

The Academy was born of crisis, established by the nation's founders in 1780 amidst the American Revolution. Let us likewise make the current crisis a time of rebirth for the Academy. I hope you will join us as we confront the challenges of our time and bring new meaning to our founders' promise of service to a "free, independent, and virtuous people."

Academy Statement on Anti-Racism

For the third time in our long history as an independent republic – the Civil War, the Civil Rights movement, and now this movement of civil unrest – we see the possibility of real progress in escaping the long shadow of White Supremacy in our country that dates back to its beginnings. The Academy was founded, as was our nation, during the Enlightenment, a moment in which prominent thinkers and philosophers – including Thomas Jefferson – codified notions of racial difference and hierarchy, the bedrock of White Supremacy and racism. These ideas, intrinsic in our national story, are embedded in our institutional history as well, and we certainly cannot advance if we refuse to have frank conversations about the past and the present of racism in our country.

We are proud of the Academy’s long history of gathering together leaders in every domain of American life and thought in service to the common good. We are proud, too, of all that is best in the traditions of our country, beginning with its bold enunciation that we are all created equal, all endowed with the same inalienable rights. But the price of taking pride in the genuine achievements of a historical institution like ours, as in our nation, is that we must accept the burden of its less honorable traditions. We repeat: We have no difficulty in being proud of the Academy’s achievements. That pride can and should guide us. But our shame should guide us, too, driving us to work to eradicate the practices and reform the institutions whose behavior is the ground of that shame. To ignore the shame would be to get our pride on the cheap.

If we are to make the best of the current opportunities for progress, we must begin, therefore, with a frank acknowledgment of the sources of our shame. The universities and colleges that educated our earliest members excluded African Americans. With honorable exceptions, many of our universities made their first real attempts to recruit significant numbers of Black people only in the 1960s, when our most ancient universities were more than three centuries old. Like the country’s first President, the Academy’s founding President, James Bowdoin, was a slaveholder in 1776, when he sided with that revolution in the name of freedom. We cannot excuse him by saying he merely thought with his times. Even Thomas Jefferson recognized, in his draft of the Declaration, that the slave trade violated “the most sacred rights of life and liberty” of Africans. Nor was Bowdoin, of

course, the last racist among our members, as Jefferson was not the last of our racist Presidents. The Academy's historical treatment of women is also replete with sources of shame.

We can be proud that Dr. Ralph Bunche, an African-American international civil servant of the first rank, was elected to the Academy in 1951, the year after he received the Nobel Peace Prize. But equally we must be ashamed that no African American – in the country of W.E.B. Du Bois and Zora Neale Hurston – was elected before him.

The fact is that every major feature of our social lives is shaped by massive continuing racial inequalities, as we have seen, yet again, in the current pandemic. Embedded as we are in this history, we have choices to make about how to play a role in combatting the continuing institutionalization of Black racial disadvantage.

Shame is not guilt. We do not have responsibility for the Academy's past wrongs. But we do accept that we ourselves have not done as much as we should have. Our primary responsibility, though, as leaders of the institution, moving forward, as custodians of the commitment to our common good, is to seek to undo the wrongs and to move us forward in the search for racial justice, advancing the ongoing project of perfecting our Union.

We believe this means at least three things. First, we must make sure that our membership and our leadership are fully reflective of the racial diversity of American excellence. Second, in all of our projects in service to the common good, we must keep our eyes firmly on ensuring that we lose no opportunities to contribute to undoing the unjust legacies of racism. In that task, the formidable intellectual resources of the Academy can be placed in the service of deeper social understanding. And third, we must be rigorously committed to ensuring that nothing we do as an employer continues the legacies of White Supremacy. We recognize, of course, that anti-racism is not the only thing that matters. But we believe it must now be one mainspring of our work. As a result, the Chair of the Board has created a new Standing Committee of the Academy on Anti-Racism that will be responsible for advising the governing boards in our pursuit of these goals.

We accept that the Academy like the nation has much to atone for. A statement, of course, barely atones for anything. Acting on it is what will. We expect the members of the Academy and the wider world to hold us to these commitments. You can expect to hear more of the Academy's work on these three fronts in the months and years ahead.

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Fremont Group

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Art Collections, and
Botanical Gardens

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Emilio Bizzi
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John Browne
L1 Energy

Richard Goldstone
Constitutional Court
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University of Arizona

American Council of Learned Societies

Elaine Sisman
Columbia University

National Humanities Center

Harriet Ritvo
Massachusetts Institute of Technology

Report of the Treasurer

CARL H. PFORZHEIMER III

The firm of Mayer Hoffman McCann P.C., Certified Public Accountants, conducted the audit of the American Academy's statements of financial position for the fiscal year 2020 (July 1, 2019–June 30, 2020). I am pleased to report the auditors found the consolidated financial statements present fairly, in all material respects, the financial position of the Academy, and the auditors have issued an unqualified report. The consolidated statement of activities and financial position may be found on pages 12–13. A copy of the audited financial statements is available on the Academy's website and upon request from the Academy's Business Office.

In spite of the challenges associated with the COVID-19 pandemic, the financial stability of the Academy continues to be strong due to the generous financial support from members, foundations, and affiliates. For the fiscal year 2020, total assets decreased by less than 0.8 percent, from \$86.5 million to \$85.8 million. Total liabilities decreased from \$3.2 million to \$3.1 million. The operating budget was maintained at an approximate break-even level as in years past.

As of June 30, 2020, the investment portfolio had a fair market value of \$67.4 million, a decrease of \$3.4



million for the year as a result of a declining market and the release of purpose restricted funds, such as grants and prior gifts. The Investment Committee continues to review and make recommendations related to the Academy's investment goals, asset allocation, and performance objectives by which the organization's assets are managed.

I would like to thank the members of the Audit Committee, Investment Committee, and Finance Committee for stewarding the Academy's resources.

Members of the **Audit Committee** include Larry J. Shapiro (*Chair*), Richard E. Cavanagh, William F. Pounds, and Patti B. Saris.

Members of the **Investment Committee** include Arthur Gelb (*Chair*), Nancy C. Andrews, Ernest Cockrell, Alan M. Dachs, D. Ronald Daniel, Martin Leibowitz, David W. Oxtoby, Carl H. Pforzheimer III, and David C. Weinstein.

Members of the **Finance Committee** include Carl H. Pforzheimer III (*Chair*), Nancy C. Andrews, Alan M. Dachs, Arthur L. Goldstein, Cherry A. Murray, Venkatesh Narayanamurti, David W. Oxtoby, James M. Stone, and Pauline Yu.

American Academy of Arts and Sciences and Affiliate Consolidated Statement of Financial Position as of June 30, 2020

Assets

Cash	\$ 2,412,072
Grants and pledges receivable, net	7,601,569
Other assets	217,765
Investments	64,709,229
Beneficial interest in perpetual trust for science	2,727,859
Prepaid land lease, net	461,953
Property and equipment, net	10,883,154
Total assets	\$ 89,013,601

Liabilities and Net Assets

Liabilities

Accounts payable and accrued expenses	\$ 847,681
Note payable	2,299,052
Total liabilities	3,146,733

Net assets

Without donor restrictions	24,621,454
With donor restrictions	61,245,414
Total net assets	85,866,868
Total liabilities and net assets	\$ 89,013,601

American Academy of Arts and Sciences and Affiliate

Consolidated Statement of Activities and Changes in Net Assets

For the Year Ended June 30, 2020

	Without Donor Restrictions	With Donor Restrictions	Total
Revenues			
Support:			
Gifts and grants	\$ 928,464	\$ 5,427,480	\$ 6,355,944
Annual appeal	2,041,715		2,041,715
University affiliates	1,062,500		1,062,500
Membership dues	1,601,491		1,601,491
Distribution from beneficial interest in perpetual trust for science		120,000	120,000
Investment return	73,080	18,043	91,123
Other operating income	(64,998)		(64,998)
Net assets released from purpose restrictions	4,803,185	(4,803,185)	
Total support	10,445,437	762,338	11,207,775
Investment spending policy for operations and programs	1,536,466	947,757	2,484,223
Total revenues	11,981,903	1,710,095	13,691,998
Expenses			
Programs	7,486,006		7,486,006
General and administrative	3,179,527		3,179,527
Development	1,226,993		1,226,993
Conference services	732,833		732,833
Total operating expenses	12,625,359		12,625,359
Changes in net assets from operations	(643,456)	1,710,095	1,066,639
Other Changes			
Contributions to endowment		2,164,793	2,164,793
Investment return	(1,057,028)	(264,518)	(1,321,546)
Less - spending policy distribution	(251,944)	(2,232,279)	(2,484,223)
Net assets released from capital restrictions	1,200,468	(1,200,468)	
Decrease in beneficial interest in perpetual trust for science		(113,825)	(113,825)
Total other changes	(108,504)	(1,646,297)	(1,754,801)
Changes in net assets	(751,960)	63,798	(688,162)
Net assets, beginning of year	25,373,414	61,181,616	86,555,030
Net assets, end of year	\$ 24,621,454	\$ 61,245,414	\$ 85,866,868

Report of the Committee on Development & Communications

LOUISE H. BRYSON, *CHAIR*

On behalf of the Development and Communications Committee, I would like to extend my deep gratitude to all the Fellows, friends, and foundations who supported the Academy this year.

It was a year marked with uncertainty in the philanthropic world, as the pandemic and other factors caused some donors and funders to reconsider when and how to give. The Academy, like many other non-profits, was adversely impacted. However, despite these challenges, the commitment and generosity of our community persisted. The Academy received over \$9.2 million in new gifts and grants during the 2020 fiscal year. This total included over \$2 million in contributions to the annual fund – the first time in our history that we have surpassed this milestone.

I would like to acknowledge the major donors and foundations whose contributions helped to advance critical and timely Academy projects, such as the Commission on the Practice of Democratic Citizenship and Meeting the Challenges of the New Nuclear Age, and explorations of a study on climate action in the United States. These include the S. D. Bechtel, Jr. Foundation, Alan and Lauren Dachs, the Raymond Frankel Foundation, the Hellman Foundation, Robert Higgins, the Andrew W. Mellon Foundation, the Rockefeller Brothers Fund, Kenneth and Susan Wallach, and Hansjörg Wyss, a new member who made a remarkable gift of \$1 million to support the most pressing needs of the Academy.

These gifts also are counted as part of the Campaign for the Academy and Its Future, which has now raised



over \$66 million toward its \$100 million goal. The Campaign seeks to change the way that philanthropy supports the Academy, bringing greater continuity and sustainability to our programs by increasing endowed and multiyear support. If successful, this change will undergird the Academy through challenging years such as this one, allowing our work to progress unhindered and to have its intended impact. As cochairs, David Rubenstein and I are grateful to all those who have added their support, and we are committed to achieving a successful outcome to the campaign by 2022.

Finally, I would like to thank the members of the Development and Communications Committee for their insight, ideas, and guidance that have aided our fundraising efforts for many years. Going forward, the work of development will be folded into the Trust, an adjustment that is sure to bring greater efficiency to discussions about philanthropic support, visibility, influence, and impact. It has been a great pleasure to work with this distinguished group of volunteers. We are fortunate to have their continued involvement in many aspects of the Academy's governance, membership, and projects.

Report of the Committee on Studies & Publications

JOHN MARK HANSEN, CHAIR

The Committee on Studies and Publications supports the Academy's Council by regularly reviewing the progress of projects, considering topics for future studies, and evaluating publications, including *Dædalus*.

Academy members from a broad range of disciplines and professions share their expertise on projects and publications, which look at critical issues, advance discussion on central questions, and offer solutions to both national and international challenges.

During 2020, two senior program staff members joined the Academy team. In September, Islam Qasem started as the John E. Bryson Director of Science, Engineering, and Technology Programs and Program Director for Global Security and International Affairs to oversee the project work within those portfolios. Tania Munz started in February as the new Chief Program Officer. In this capacity, she leads the coordination and integration of the Academy's programmatic work within the five areas of emphasis:

- 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.

An overview of the active projects and a list of recent Academy publications may be found on pages 17–38.

During 2020, the Committee recommended four project proposals to the Council and the Board of Directors and approved four *Dædalus* proposals. The projects are:

- *Accelerating Climate Action* – Cochair: Christopher Field (Stanford Woods Institute for the Environment, Stanford University). Additional cochairs to be named.



The scientific consensus is clear: climate change is upon us, and its impacts will be devastating and increasingly difficult to prevent and address if we do not act now. This project will attempt to answer the following questions: Why has meaningful action in the United States on this critical issue stalled, despite strong scientific backing across the international scientific community? What factors and policies have permitted an unjust distribution of the impacts of climate change, in which lingering repercussions of structural racism are, and will continue to be, exacerbated by the climate crisis? And how can the United States accelerate positive trends on climate action and work to reach zero emissions by the middle of the twenty-first century?

- *The American Dream: Planning Phase* – Cochairs to be determined.

An intensive twelve-month planning period is being undertaken to develop this major new initiative. This project will address how surging inequality and declining rates of social mobility have, for many Americans, bred deep distrust of economic and political institutions. The American Dream project will build on and complement the Academy's Commission on the Practice of Democratic Citizenship.

- *Rethinking the Humanitarian Health Response to Violent Conflict* (approval of updated focus) – Cochairs: Paul Wise (Stanford University School of Medicine); Jennifer Welsh (McGill University; Somerville College, University of Oxford); and Jaime Sepulveda (University of California, San Francisco).

The fundamental goal of this initiative to confront the current crisis in humanitarian protection and the provision of health services in areas plagued by armed conflict remains central to this study. However, recent events surrounding the COVID-19 pandemic have elevated the utility and urgency of some of the initiative's core components. The revised study will focus on two broad areas of emphasis: global cooperation and pandemic control; and regional humanitarian responses to pandemics, criminal and political violence, and forced migration. In response, the initiative will prioritize activities that focus more directly on these components and initiate scholarly work with the greatest promise of making critical, strategic contributions.

- *Supply Chains: Building Resiliency for a Post-COVID World* – Cochair: Margaret Levi (Center for Advanced Study in the Behavioral Sciences, Stanford University). Additional cochairs to be named.

Coming out of a series of COVID-19 – focused soundings meetings, this project will examine how our current systems of essential industries, services, and workers can be better assessed and reconfigured to ensure long-term resilience and sustainability in the face of the current and possible future health crises.

The four *Dædalus* proposals that were approved are:

- “Reimagining Justice: The Challenges of Violence and Punitive Excess,” guest edited by Bruce Western (Columbia University). This issue of *Dædalus* will bring together essays that look at violence and justice reform as well as criminalization and punitive excess. The volume will address the major challenges to the task of foundational criminal justice reform in the United States.

- “Institutions, Experts, and the Loss of Trust,” guest edited by Henry E. Brady (University of California, Berkeley) and Kay Lehman Schlozman (Boston College). The collection will explore the extent and consequences of the erosion of trust. One central theme will be the interplay between the decline in trust and the way that distrust adheres to multiple lines of political and social cleavage.

- “The Humanities in American Life: Thriving or in Crisis?” guest edited by Norman Bradburn (University of Chicago, emeritus), Carin Berkowitz (New Jersey Humanities Council), and Robert B. Townsend (American Academy of Arts and Sciences). This volume of *Dædalus* will examine the value and state of the humanities in American society, with a focus on newer areas of academic humanistic inquiry, such as the medical, environmental, and digital humanities.

- “AI and Society,” guest edited by James Manyika (McKinsey & Company). The volume will explore where we are in the development of artificial intelligence, the applications and uses of AI, and key questions around the impact that AI could have on society and on our future. The essays will present both positive and critical views of AI, in its technical and scientific development and in its impacts on society.

The Committee on Studies and Publications invites members to suggest ideas for projects and for issues of *Dædalus* that draw on the knowledge and interests of the Academy's membership and on the Academy's ability to bring together individuals from diverse fields, disciplines, professions, and institutions.

American Institutions, Society & the Public Good

Since its founding, projects that work to bolster Americans' engagement with government institutions have been a hallmark of the American Academy of Arts and Sciences. 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 develop innovative solutions to problems facing American society in the twenty-first century. Projects in this area interpret the term "institutions" broadly, focusing on all of the constituent elements of government, civic culture, and civil society. These projects address how individual citizens interact with social structures, how these experiences prepare people to make a positive contribution to a diverse America, and how these institutions are evolving. The Academy shares this research through publications, convenings, and active outreach.

PROGRAM ADVISORY COMMITTEE

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Frances McCall Rosenbluth
Yale University

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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 is a multiyear project of the American Academy of Arts and Sciences. The Commission 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 our media environment have altered what civic engagement looks like in many communities; and makes recommendations that will encourage 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 to revitalize American democracy by increasing representation, empowering voters, making institutions more responsive, and revitalizing our civic culture. *Our Common Purpose: Reinventing American Democracy for the 21st Century*, the Commission's final report, was released in June 2020 and the Commission will remain active in an effort to make significant progress on all of the recommendations by 2026, the nation's 250th anniversary.

COMMISSION CHAIRS

Danielle Allen
Harvard University

Stephen Heintz
Rockefeller Brothers Fund

Eric Liu
Citizen University

COMMISSION PUBLICATIONS

The Internet and Engaged Citizenship, David Karpf (2019)

The Data Driving Democracy, Christina Couch (2020)

The Political and Civic Engagement of Immigrants, Caroline Brettell (2020)

Our Common Purpose: Reinventing American Democracy for the 21st Century (2020)

FUNDERS

S. D. Bechtel, Jr. Foundation

Rockefeller Brothers Fund

Alan and Lauren Dachs

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 fields and 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, identifies the 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 policymakers. 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.

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

Mark Hansen
University of Chicago

Rebecca Sandefur
Arizona State University

DESIGNING LEGAL SERVICES FOR THE 21ST CENTURY PROJECT CHAIRS

John Levi
Legal Services Corporation;
Sidley Austin LLP

Martha Minow
Harvard Law School

Kenneth Frazier
Merck & Co.

PROJECT PUBLICATIONS

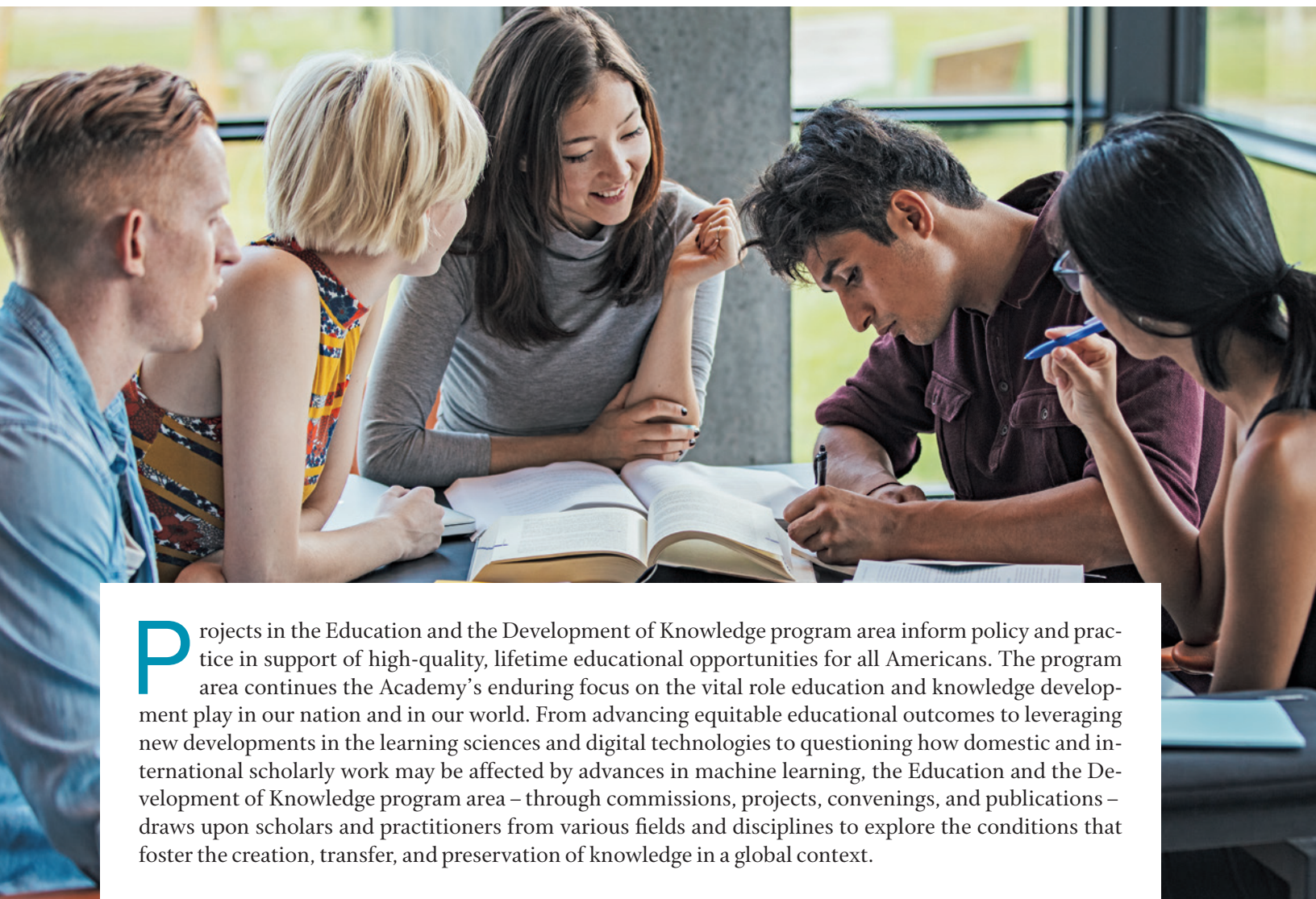
“Access to Justice,”
Dædalus,
edited by Lincoln Caplan,
Lance Liebman & Rebecca
Sandefur (2019)

Civil Justice for All (2020)

FUNDER

**David M. Rubenstein
Enhancement Fund**

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 – through commissions, projects, convenings, and publications – 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

Howard Gardner
Harvard Graduate School
of Education

David L. Lee
Clarity Partners, LP

Paula D. McClain
Duke University

Joseph Neubauer
formerly, Aramark
Corporation

Morton Schapiro
Northwestern University

Marcelo Suárez-Orozco
University of Massachusetts
Boston

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Philip Bredezen
Nashville, Tennessee

Richard Light
Harvard Graduate School
of Education

Kathleen McCartney
Smith College

Nancy Peretsman
Allen and Company

Paul Sagan
General Catalyst Partners

Beverly Daniel Tatum
Spelman College

PROJECT Commission on the Future of Undergraduate Education



The Commission on the Future of Undergraduate Education is a multiyear initiative charged with examining the current state of American undergraduate education, projecting the nation's short-term and long-term educational needs, and offering recommendations to strengthen all aspects of undergraduate education. The Commission – whose members include leaders from higher education, philanthropy, business, and government – reviewed the research and data; met with students and faculty members, experts, and state and federal policy-makers; and produced a data-based primer on the student journey through college, four in-depth research papers, a comprehensive final report, and an issue of *Daedalus* on improving teaching.

The key idea emerging from this body of work is that what was once a challenge of quantity in American undergraduate education, of enrolling as many students as possible, is increasingly a challenge of educational quality – of making sure that all students receive the education they need to succeed, that they are able to complete the studies they begin, and that they can do all this affordably. The Commission engaged in a range of outreach activities to make its work as widely read as possible and to advance its recommendations around quality, completion, and affordability.

COMMISSION CHAIRS

Roger Ferguson, Jr.
TIAA

Michael McPherson
formerly, Spencer
Foundation

COMMISSION PUBLICATIONS

***A Primer on the College
Student Journey*** (2016)

***Undergraduate Financial
Aid in the United States*,**
Judith Scott-Clayton (2017)

***The Complex Universe of
Alternative Postsecondary
Credentials and Pathways*,**
Jessie Brown & Martin
Kurzweil, Ithaka S+R (2017)

***The Economic Impact of
Increasing College Com-
pletion*,** Sophia Koropecy,
Chris Lafakis & Adam
Ozimek, Moody's Analytics;
Foreword by Michael S.
McPherson (2017)

***Policies and Practices to
Support Undergraduate
Teaching Improvement*,**
Aaron Pallas, Anna Neumann
& Corbin Campbell
(2017)

***The Future of Undergradu-
ate Education, The Future of
America*** (2017)

**"Improving Teaching:
Strengthening the College
Learning Experience,"**
Daedalus, edited by
Sandy Baum & Michael S.
McPherson (2019)

FUNDERS

**Carnegie Corporation
of New York**

TIAA Institute

Global Security & International Affairs

The 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

Nicholas Burns
Harvard University

Antonia Chayes
Tufts University

Christopher Chyba
Princeton University

Karl Eikenberry
formerly, Stanford University;
U.S. Army, ret.

Tanisha Fazal
University of Minnesota

Martha Finnemore
George Washington
University

Nicholas Kristof
The New York Times

Susan Landau
Tufts University

Robert Legvold
Columbia University

Rose McDermott
Brown University

Steven E. Miller
Harvard University

Barry Posen
Massachusetts Institute
of Technology

Adam Roberts
University of Oxford

Jennifer M. Welsh
McGill University

Paul H. Wise
Stanford University

PROJECT Civil Wars, Violence & International Responses



The Civil Wars, Violence, and International Responses project stems from the observation that current multi-lateral 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 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, the project published a research paper that focuses on the policy implications of the project's findings, which will be distributed to relevant policy-makers in the United States and internationally.

PROJECT CHAIRS

Karl Eikenberry
formerly, Stanford University;
U.S. Army, ret.

Stephen D. Krasner
Stanford University

PROJECT PUBLICATIONS

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

"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, Karl Eikenberry & Stephen D. Krasner (2020)

FUNDERS

Humanity United
Smith Richardson Foundation
Oak Foundation

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

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.

PROJECT CHAIRS

Robert Legvold
Columbia University

Christopher Chyba
Princeton University

PROJECT PUBLICATIONS

Meeting the Challenges of the New Nuclear Age: U.S. and Russian Nuclear Concepts, Past and Present, Linton Brooks, Alexei Arbatov & Francis J. Gavin (2018)

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 & James M. Acton, with an Introduction by Jane Vaynman (2018)

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

Contemplating Strategic Stability in a New Multipolar Nuclear World, Robert Legvold (2019)

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

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

A World Without Nuclear Constraints: A Virtual Discussion Series

The last remaining bilateral nuclear arms treaty between the United States and the Russian Federation is set to expire on February 5, 2021. The New Strategic Arms Reduction Treaty (“New START”), negotiated in 2010, set forth strict, verifiable limits on the number of strategic missile launchers both nations can maintain. If the treaty expires, the world’s largest nuclear arsenals would not be subject to regulation or inspection for the first time since the middle of the Cold War.

With the number of nuclear weapons states increased to nine and the rapid advances in weapons technology further complicating the environment, it is a challenging time for nuclear arms control and, by implication, for global peace and security. The end of New START is part of a changing landscape: many other treaties gov-

erning nuclear weapons and related technologies have been abandoned or abrogated in the last twenty years.

first arms control agreements beginning in 1970 – produced massive accumulations of nuclear arms, as well as countless crises, near-misses, and widespread global dangers. Polling research introduced by one participant showed that U.S. public support of nuclear deterrence combined with arms control and legal restraints remains strong along bipartisan lines, which prompted the question of how to elicit concern from U.S. policymakers to address the declining support in Congress for nuclear arms control.

Since the United States and Russia today control the majority of nuclear arms – over 6,000 weapons each, constituting over 90 percent of the global holdings – the participants focused not only on the current status of talks between the two countries, and the impediments

“ The Academy’s virtual meetings were a vivid reminder of the historic U.S.-Soviet negotiations with Mikhail Gorbachev during the time I was in office. That memory prompted me to say that I had seen the Promised Land – a world without nuclear weapons – at Reykjavik, so I know that it exists, but I also know how hard it will be to get there.

— George P. Shultz

erning nuclear weapons and related technologies have been abandoned or abrogated in the last twenty years.

As Robert Legvold and Christopher Chyba write in their introduction to the Spring 2020 issue of *Daedalus* on Meeting the Challenges of a New Nuclear Age, the “new era has slowly dismantled this bilateral arms control framework, with no clear prospect that it will be revived and extended.” To stimulate discussion about the changing multipolar nuclear order, in the summer of 2020, in collaboration with the Hoover Institution, the Academy convened a series of virtual discussions with experts and former officials from the United States, Russia, and China to identify and explore areas that could lead to greater international cooperation.

An essential question connected all the discussions: will we have a future with nuclear arms control or a future without it?

The participants acknowledged the challenges of protecting American security interests in an unregulated nuclear world, recalling that the dawn of the “first” nuclear age – which lasted from the development and use of nuclear weapons in 1945 until the negotiation of the

to renewing New START, but also on understanding and forecasting what future negotiations might look like.

The final session in the series featured presentations by Russian and Chinese experts on the official priorities of their countries and the debates taking place in Moscow and Beijing. From one point of view, the discussions were encouraging because the United States, Russia, and China have the power to reduce significantly the role that nuclear weapons play in international affairs. Skillful diplomacy between the United States and Russia could extend the life of the New START agreement by five years, which would provide time to discuss and negotiate a successor agreement and allow for further reductions in the world’s two biggest nuclear arsenals and other measures to reduce nuclear dangers. Over time, talks on how to manage the new technologies could be extended to other nations with nuclear weapons, beginning with China.

An important outcome of the discussion series was the identification of a number of issues that might form the basis for official talks and provide avenues of future research and collaboration for the Academy’s nuclear program.

PROJECT Meeting the Challenges of the New Nuclear Age, Phase Two: 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 Two of Meeting the Challenges of the

New Nuclear Age investigates the deterrence and 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.

PROJECT CHAIRS

Scott D. Sagan
Stanford University

Vipin Narang
Massachusetts Institute
of Technology

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 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 will focus on two key priority areas. First, building on its efforts to address the political and security dimensions of pandemic response in areas of weak governance and violent conflict, the

initiative will convene 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.

Second, to respond to the acute challenges that humanitarian organizations face in addressing health needs in areas with extreme levels of political or criminal violence – settings that now account for more violent deaths than war zones – and in places where people are fleeing from such violence, the project will convene interdisciplinary groups of experts from across multiple regions to explore the questions state sovereignty poses for humanitarians operating in such settings and to analyze and examine how the dynamics of political and criminal violence influence humanitarian responses.

PROJECT CHAIRS

Jaime Sepulveda
University of California,
San Francisco

Jennifer M. Welsh
McGill University

Paul H. Wise
Stanford University

FUNDERS

**Louise Henry Bryson and
John E. Bryson**

PROJECT Promoting Dialogue on Arms Control & 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, which would serve to minimize and reduce the potential risks of a nuclear escalation.

One strand of the project's work consists of a series of bilateral U.S.-Russia and U.S.-China dialogues designed to identify critical short-term goals in arms control. The meetings will identify areas for cooperation and conceptual thinking about measures that might strengthen strategic stability and help to reduce the significant dangers of nuclear weapons being used in the future. Through reports and outreach activities, the

project aims to contribute to rebuilding trust and predictability among the rival Great Powers.

A second strand of work will build on the Academy's experience organizing educational sessions for the United States Congress on a range of topics, including cybersecurity, disaster response, and federal research policy in addition to nuclear issues. Through a series of engagements with members of Congress and their staff, the project will help to foster and strengthen knowledge on key issues and challenges facing the United States in arms control and international security, including renewal of the New START treaty and the dangers of a world without nuclear constraints.

PROJECT CHAIR

Steven E. Miller
Harvard University

PROJECT PUBLICATION

Nuclear Perils in a New Era: Bringing Perspective to the Nuclear Choices Facing Russia and the United States,
Steven E. Miller & Alexey Arbatov (2020)

FUNDER

**The Raymond Frankel
Foundation**

The Humanities, Arts & Culture

Since 1780, the Academy has advocated for the importance of the humanities, arts, and culture in American society, and has called on both private citizens and the nation's government to help foster advances in these areas. Today, the Academy conducts research and develops policy recommendations to advance the humanities in academic scholarship and in the public sector, to display the importance of the arts in society, and to enrich the nation's cultural life. By bringing together scholars, artists, and leaders from both the public and private sectors, Academy programs in The Humanities, Arts, and Culture put practitioners and scholars in conversation with individuals from other disciplines, ensuring that the arts and humanities are valued in all areas of civic life. Projects in this area demonstrate the value of the arts, humanities, and culture to the nation's security and prosperity, and call attention to the role played by work in these fields to enriching the health of communities and the daily lives of its citizens.



PROGRAM ADVISORY COMMITTEE

CHAIR

Johanna Drucker
University of California,
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Richard Brodhead
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Colin Dayan
Vanderbilt University

Thomas Gunning
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Maria Hummer-Tuttle
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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 what 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, disciplines, and institutions. This group of poets, scholars, institutional leaders, actors, 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. Through reports, recommendations, and public engagement initiatives – all set to launch in the summer of 2021 – the Commission will offer a framework for how the arts can be better integrated and appreciated in public life. One report will identify the needs of artists as workers and outline a series of recommendations of federal and state policies that can provide long-term workforce development and job opportunities for cultural workers. A second report will highlight existing inequities in access and illustrate the effects that the absence or presence of the arts in a student's formative years can have on the whole child's development. In addition to these policy-oriented reports, the Commission is also producing an engagement initiative centered on broad participation from the American public. Each element seeks, within its given topic area, to uplift the necessity of art giving meaning to daily life, both personally and collectively.

COMMISSION CHAIRS

John Lithgow
Actor and Author

Natasha Trethewey
Northwestern University

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

FUNDERS

Ford Foundation

The Getty Foundation

**The John S. and James L.
Knight Foundation**

The Kresge Foundation

The Barr Foundation

Roger and Victoria† Sant

† Deceased

PROJECT The Humanities Indicators



The Humanities Indicators provide 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 experiences later in life with museums and other humanistic activities. Now in its eleventh 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 national surveys of humanities departments at four-year colleges and universities, as well as a survey of over five thousand Americans about their engagement with and attitudes about a variety of humanities activities. The Humanities Indicators are accessible at www.amacad.org/humanities-indicators.

PROJECT DIRECTORS

Norman M. Bradburn
NORC at the University
of Chicago

Robert B. Townsend
American Academy of Arts
and Sciences

SELECT PROJECT PUBLICATIONS

The Humanities in Our Lives
(2019)

*The State of the Humanities
in Four-Year Colleges and
Universities* (2020)

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

FUNDER

**The Andrew W. Mellon
Foundation**

Science, Engineering & Technology



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. Global challenges increasingly require collaboration across disciplinary, professional, and national boundaries, while advances in information processing and transmission raise 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.

Drawing on the expertise of its membership and outside experts, Academy studies in Science, Engineering, and Technology analyze the impact of advances in these areas and develop policy recommendations that are made available to government, academia, nongovernmental organizations, and the private sector. Activities focus on increasing public understanding of current research and technological change, and on helping society adapt effectively and make meaningful use of new scientific and technical knowledge. Areas of interest include U.S. productivity in science and engineering; public understanding of, and trust in, science; strengthening U.S. participation in international scientific collaboration; and climate change policy.

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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, 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, entitled *The Public Face of Science in America: Priorities for the Future*, 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.

PROJECT CHAIR

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

PROJECT PUBLICATIONS

Perceptions of Science in America (2018)

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

Encountering Science in America (2019)

Science During Crisis: Best Practices, Research Needs, and Policy Priorities, Rita R. Colwell & Gary E. Machlis (2019)

The Public Face of Science Across the World, Matthew C. Nisbet & Erik C. Nisbet (2019)

The Public Face of Science in America: Priorities for the Future (2020)

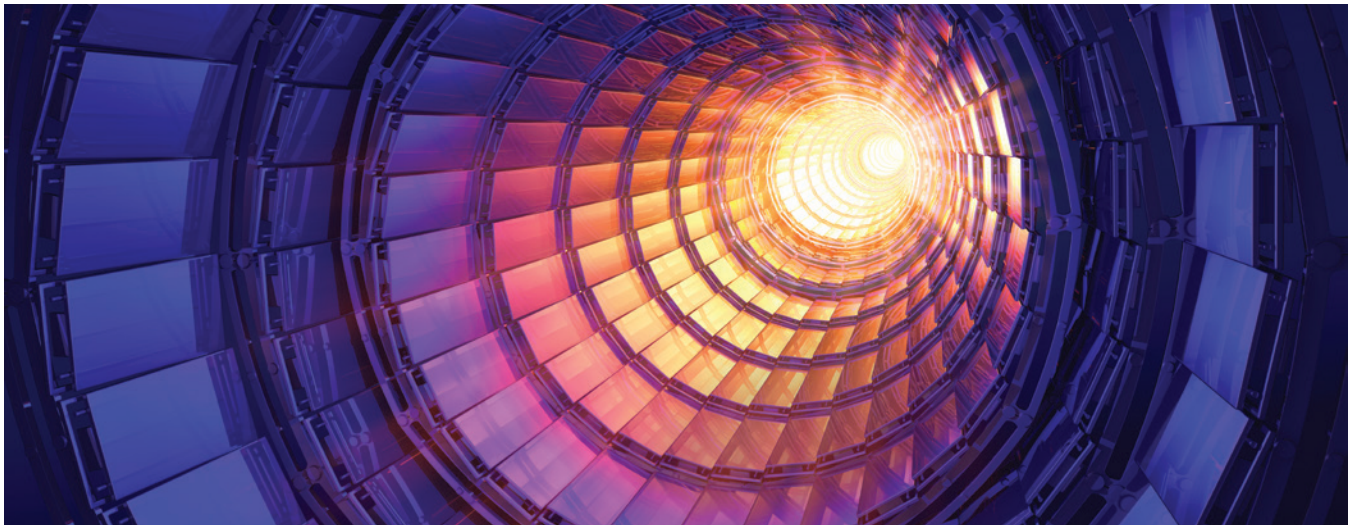
FUNDERS

Gordon and Betty Moore Foundation

Rita Allen Foundation

Alfred P. Sloan Foundation

PROJECT Challenges for International Scientific Partnerships



The Academy study on Challenges for International Scientific Partnerships (CISP) examines impediments to collaborations between scientific researchers of all scales and identifies potential policy changes and best practices that could make the United States a better partner in international science partnerships. With guidance from its Steering Committee, the project pursues two major streams of work.

First, a working group on Large-Scale Science approaches international collaborations through the lens of issues particular to large-scale collaborations and not peer-to-peer 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 facilities (e.g., the European Organization for Nuclear Research, or CERN) and distributed networks (e.g., the Human Cell Atlas). This group is developing a

series of best practices and fundamental principles for these types of collaborations and will aim to articulate these to U.S. government agencies and congressional branches through a forthcoming report to better position the United States as a meaningful and engaged partner.

Through advice from the Steering Committee, the project has sought a second stream of work on U.S. collaborations with Emerging Science Partners. This working group is exploring 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. The group prioritizes identifying and examining difficult issues facing resource-limited researchers, such as the challenges facing women researchers in the developing world, and will articulate a series of recommendations to aid in strengthening collaborations and making them more mutually beneficial.

PROJECT CHAIRS

Arthur Bienenstock
Stanford University

Peter Michelson
Stanford University

LARGE-SCALE
SCIENCE WORKING
GROUP CHAIRS

Arthur Bienenstock
Stanford University

Peter Michelson
Stanford University

EMERGING SCIENCE
PARTNERS WORKING
GROUP CHAIRS

Shirley Malcom
American Association for the
Advancement of Science

Olufunmilayo Olopade
University of Chicago
Medicine

PROJECT
PUBLICATION

*America and the International
Future of Science*
(2020)

FUNDERS

**Gordon and Betty Moore
Foundation**

**William and Flora Hewlett
Foundation**

Alfred P. Sloan Foundation

PROJECT New Models for U.S. Science & 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.

The *Restoring the Foundation* report, published in 2014, offers actionable recommendations for the long-term sustainability 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*, reaffirms the importance of science and engineering for the United States, especially in the context of China's rise as a science and technology powerhouse.

PROJECT CHAIRS

Norman R. Augustine
Lockheed Martin
Corporation, ret.

Neal Lane
Rice University

PROJECT PUBLICATIONS

*Restoring the Foundation:
The Vital Role of Research
in Preserving the American
Dream* (2014)

*The Perils of Complacency:
America at a Tipping Point
in Science & Engineering*
(2020)

FUNDERS

Bryson Science Fund
Hellman Fellows Fund
Kavli Foundation

PROJECT Accelerating Climate Action



The Academy seeks to launch a new Science, Engineering, and Technology initiative to focus on the current climate change situation facing our global society. The scientific consensus is clear: climate change is upon us, and its impacts will be devastating and increasingly difficult to prevent and address if we do not take action now. With such strong scientific backing across the international scientific community, what has prevented meaningful action?

The project will be developed around two key ideas, informed through a series of discussions held in the past year: 1) targeting U.S. audiences at various levels and

2) involving nontraditional disciplines in the project work, including social scientists, artists, and humanists.

The initiative will seek to further understanding of the barriers that prevent effective and collective action and propose strategies for how to overcome these barriers in order to make progress on moving productive conversations forward. It will also identify potential policies to propose to relevant U.S.-focused audiences to encourage the implementation of essential adaptation and mitigation strategies to build resiliency and prepare communities, especially those currently on the frontlines, for the inevitable climate future.

ACADEMY PUBLICATIONS

Issued Quarterly



Dædalus, the Journal of the American Academy of Arts and Sciences



Bulletin of the American Academy of Arts and Sciences

Published Recently Listed in Reverse Chronological Order



“Good Enough” Governance: Humility and the Limits of Foreign Intervention in Response to Civil Wars and Intrastate Violence, Karl Eikenberry & Stephen D. Krasner (2020)

Nuclear Perils in a New Era: Bringing Perspective to the Nuclear Choices Facing Russia and the United States, Steven E. Miller & Alexey Arbatov (2020)

America and the International Future of Science (2020)



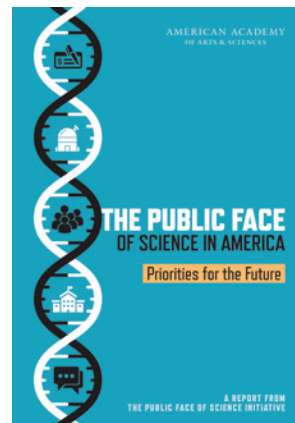
The State of the Humanities in Four-Year Colleges and Universities (2020)

The Humanities in American Life: Insights from a Survey of the Public’s Attitudes and Engagement (2020)

The Perils of Complacency: America at a Tipping Point in Science & Engineering (2020)

Civil Justice for All (2020)

The Public Face of Science in America: Priorities for the Future (2020)



Our Common Purpose: Reinventing American Democracy for the 21st Century (2020)

“Witnessing Climate Change,” Dædalus, edited by Nancy L. Rosenblum (2020)

“Religion & Democracy,” Dædalus, edited by Robert Audi (2020)

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



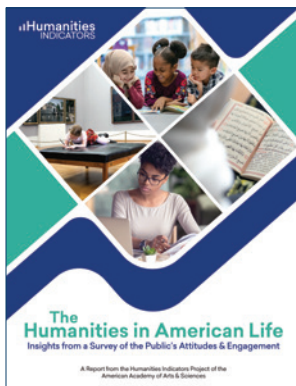
“Women & Equality,” Dædalus, edited by Nannerl O. Keohane & Frances McCall Rosenbluth (2020)

The Political and Civic Engagement of Immigrants, Caroline Brettell (2020)

The Data Driving Democracy, Christina Couch (2020)

The Internet and Engaged Citizenship, David Karpf (2019)

Contemplating Strategic Stability in a New Multipolar Nuclear World, Robert Legvold (2019)



The Public Face of Science Across the World: Optimism and Innovation in an Era of Reservations and Inequality, Matthew C. Nisbet & Erik C. Nisbet (2019)

Science During Crisis: Best Practices, Research Needs, and Policy Priorities, Rita R. Colwell & Gary E. Machlis (2019)

Lessons from the Clean Air Act: Building Durability and Adaptability into U.S. Climate and Energy Policy, edited by Ann Carlson & Dallas Burtraw (2019)

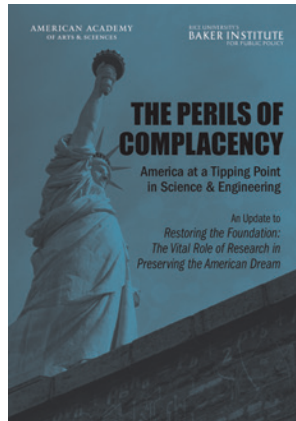
"Improving Teaching: Strengthening the College Learning Experience," *Dædalus*, edited by Sandy Baum & Michael McPherson (2019)

"Inequality as a Multi-dimensional Process," *Dædalus*, edited by Michèle Lamont & Paul Pierson (2019)

"Why Jazz Still Matters," *Dædalus*, edited by Gerald Early & Ingrid Monson (2019)

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

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



The Humanities in Our Lives (2019)

Encountering Science in America (2019)

Perceptions of Science in America (2018)

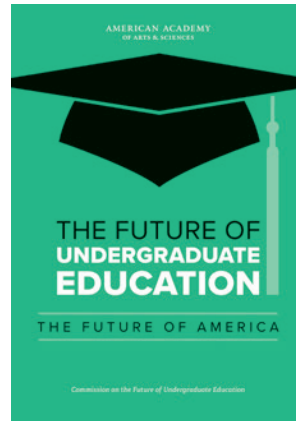
Meeting the Challenges of the New Nuclear Age: Emerging Risks and Declining Norms in the Age of Technological Innovation and Changing Nuclear Doctrines, Nina Tannenwald & James M. Acton; with an Introduction by Jane Vaynman (2018)

Meeting the Challenges of the New Nuclear Age: U.S. and Russian Nuclear Concepts, Past and Present, Linton Brooks, Francis J. Gavin & Alexei Arbatov (2018)

The State of the Humanities 2018: Graduates in the Workforce & Beyond (2018)

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

"Anticorruption: How to Beat Back Political & Corporate Graft," *Dædalus*, edited by Robert I. Rotberg (2018)



"Unfolding Futures: Indigenous Ways of Knowing for the Twenty-First Century," *Dædalus*, edited by Philip J. Deloria, K. Tsianina Lomawaima, Bryan McKinley Jones Brayboy, Mark N. Trahan, Loren Ghiglione, Douglas Medin & Ned Blackhawk (2018)

"Ending Civil Wars: Constraints & Possibilities," *Dædalus*, edited by Karl Eikenberry & Stephen D. Krasner (2018)

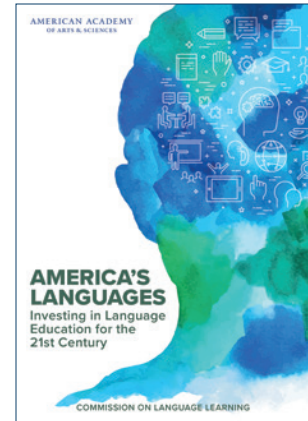
The Future of Undergraduate Education, The Future of America (2017)

Policies and Practices to Support Improving Undergraduate Teaching, Aaron Pallas, Anna Neumann & Corbin Campbell (2017)

The Economic Impact of Increasing College Completion, Sophia Koropecj, Chris Lafakis & Adam Ozimek, Moody's Analytics (2017)

Undergraduate Financial Aid in the United States, Judith Scott-Clayton (2017)

The Complex Universe of Alternative Postsecondary Credentials and Pathways, Jessie Brown & Martin Kurzweil, Ithaka S+R (2017)



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

"The Prospects & Limits of Deliberative Democracy," *Dædalus*, edited by James S. Fishkin & Jane Mansbridge (2017)

"Russia Beyond Putin," *Dædalus*, edited by George W. Breslauer & Timothy J. Colton (2017)

"The Changing Rules of War," *Dædalus*, edited by Scott D. Sagan (2017)

Multinational Storage of Spent Nuclear Fuel and Other High-Level Nuclear Waste: A Roadmap for Moving Forward, Robert D. Sloan (2017)

Insider Threats, edited by Matthew Bunn & Scott D. Sagan (2017)

America's Languages: Investing in Language Education for the 21st Century (2017)

The State of Languages in the U.S.: A Statistical Portrait (2016)

A Primer on the College Student Journey (2016)

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Mriganka Sur
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Vision to Learn

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Salk Institute for Biological
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Missouri Botanical Garden

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The Summit Foundation

Margaret C. Simms
Center on Labor, Human
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at the Urban Institute

David J. Skorton
Association of American
Medical Colleges

Patty Stonesifer
Martha's Table

The Academy holds events around the country and the world. These gatherings bring members and others in their communities together to explore topics of national and global concern through an interdisciplinary lens that draws on the breadth and expertise of the Academy's membership.

CALIFORNIA

BERKELEY

November 20, 2019
University of California, Berkeley

Morton L. Mandel Public Lecture
Arms Trafficking: Its Past, Present, and Future*

Featured Speakers: Brian Delay (University of California, Berkeley); Ron Hassner (University of California, Berkeley); Daniel Sargent (University of California, Berkeley); Priya Satia (Stanford University).
Moderator: David Hollinger (University of California, Berkeley)

LOS ANGELES

November 17, 2019
J. Paul Getty Museum

Members Reception*

Featured Speaker: John Lithgow (Los Angeles, CA).
Introduction: James Cuno (J. Paul Getty Trust)

SAN DIEGO

August 20, 2019
University of California, San Diego

San Diego Program Committee Meeting*

November 5, 2019
University of California, San Diego

The Joy of Search*

Featured Speaker: Dan Russell (Google). *Moderator:* Donald Norman (University of California, San Diego).
Introduction: Geoff Wahl (Salk Institute for Biological Studies)

December 3, 2019
Salk Institute for Biological Studies

Solving Our Climate Crisis*

Featured Speaker: Al Gore (former Vice President of the United States). *Moderators:* Veerabhadran Ramanathan (University of California, San Diego); Elizabeth Simmons (University of California, San Diego)

February 6, 2020
University of California, San Diego

San Diego Program Committee Meeting*

SAN FRANCISCO

November 21, 2019
San Francisco, CA

Member Luncheon with Academy President David W. Oxtoby

*Activity of a Local Program Committee or Representative



David Oxtoby and Bruce Western



Zid Mancenido and Richard Jay Light



Back: Dianne Pinderhughes, Sherrilyn Ifill, Elizabeth Alexander, Michel Martin, and Tracey Meares; Front: Judith Weisenfeld and Kellie Jones



Haifa Jamal Al-Lail



Annie Proulx and Shawn Wong

STANFORD

December 2, 2019
Stanford University

**Member Reception with Academy President
David W. Oxtoby**

Featured Speaker: Nathaniel Persily (Stanford Law School)

CONNECTICUT

NEW HAVEN

September 27, 2019
Yale University

**One Interface of Fundamental Chemistry
Research with Pharma/Biotech Collaborations***

Featured Speaker: Scott Miller (Yale University). *Introduction:* Frances McCall Rosenbluth (Yale University)

November 7, 2019
Yale University

Fixing a Broken Global Order: Is it Too Late?*

Featured Speakers: Paul Kennedy (Yale University); Samuel Kortum (Yale University); Ian Shapiro (Yale University); Jing Tsu (Yale University); Arne Westad (Yale University). *Moderator:* Frances McCall Rosenbluth (Yale University)

DISTRICT OF COLUMBIA

WASHINGTON, D.C.

October 30, 2019
Association of American Universities

**Satellite Discussion – Improving Teaching:
Promoting Excellence in Undergraduate STEM
Education**

Featured Speakers: Sandy Baum (Urban Institute); Mary Sue Coleman (Association of American Universities); Michael S. McPherson (formerly, Spencer Foundation); Emily R. Miller (Association of American

Universities); Tobin Smith (Association of American Universities)

ILLINOIS

CHICAGO

January 28, 2020
University of Chicago

**University of Chicago Program Committee
Meeting***

MASSACHUSETTS

CAMBRIDGE

September 20, 2019
House of the Academy

Social Reception for Members*

Featured Speaker: Naomi Oreskes (Harvard University)

October 11, 2019
House of the Academy

Meeting of Local Program Committee Chairs*

Meeting Chair: Steven Knapp (Carnegie Museums of Pittsburgh; formerly, George Washington University)

October 11, 2019
Cambridge, MA

A Celebration of the Arts and Humanities

Featured Speakers: Elizabeth Alexander (The Andrew W. Mellon Foundation); Patricia Barber (Chicago, IL); Mark Bradford (Art + Practice); Harry J. Elam, Jr. (Stanford University); Donald Margulies (Yale University)



Henry Louis Gates Jr., Harry Elam, Jr., Andrea Goldsmith, Robert Jones, and Michele Elam



Katy Nixon, James Wersch, Annie Schlafly, and Joe Schlafly



Mary-Claire King, David Oxtoby, Ya-Quin Zhang, and Jenny Wang



Anna Deavere Smith and David Rubenstein

October 12, 2019

Cambridge, MA

Induction Ceremony

Featured Speakers: Jo Handelsman (University of Wisconsin-Madison); Zeid Ra'ad Al Hussein (University of Pennsylvania); Sherrilyn Ifill (NAACP Legal Defense and Education Fund); Margaret D. Jacobs (University of Nebraska-Lincoln); Ellen Mosley-Thompson (Ohio State University); Lonnie G. Thompson (Ohio State University); Ronald Olson (Munger, Tolles & Olson); Jane Olson (Pacific Council on International Policy; Human Rights Watch)

October 13, 2019

House of the Academy

Annual David M. Rubenstein Lecture

A Conversation with Anna Deavere Smith

Featured Speakers: Anna Deavere Smith (New York University Tish School for the Arts); David M. Rubenstein (The Carlyle Group)

October 30, 2019

House of the Academy

2019 Distinguished Morton L. Mandel Annual

Public Lecture

Improving Teaching: Strengthening the College Learning Experience

Featured Speakers: Sandy Baum (Urban Institute); Michael S. McPherson (formerly, Spencer Foundation)

November 8, 2019

House of the Academy

The Age of Living Machines: How Biology Will Build the Next Technology

Featured Speaker: Susan Hockfield (Massachusetts Institute of Technology)

December 12, 2019

House of the Academy

Winter Concert: Music and the Nobel Peace Prize

Featured Performers: Lynn Chang (Violinist); Ariel Chapman (Violinist); Tai Kim (Pianist); Ha-eun Ryu (Violinist); Alan Toda-Ambraras (Cellist)

December 16, 2019

House of the Academy

Meeting of the Boston Biotech Working Group

Featured Speakers: Sangeeta Bhatia (Massachusetts Institute of Technology); Susan Hockfield (Massachusetts Institute of Technology); Nancy Hopkins (Massachusetts Institute of Technology)

February 19, 2020

House of the Academy

Criminal Justice as Social Justice

Featured Speaker: Bruce Western (Columbia University)

March 6, 2020

House of the Academy

The Resisters Book Talk

Featured Speaker: Gish Jen (Cambridge, MA)

MISSOURI

ST. LOUIS

August 27, 2019

Missouri History Museum

An Evening at the Missouri History Museum: Connecting Exhibits to Community*

Featured Speaker: Frances Levine (Missouri Historical Society). *Introduction:* Kenneth Ludmerer (Washington University in St. Louis)



Tai Kim, Ha-eun Ryu, Alan Toda-Ambraras, Ariel Chapman, and Lynn Chang



Ilan Levine, Colleen Belak, Melissa Betancur, and David Oxtoby



Patricia Gill, Gordon Gill, and Faye Girsh



Members and guests view a portrait of Manet by Henri Fantin-Latour at the J. Paul Getty Museum.

NEW YORK

NEW YORK

October 30, 2019
Teachers College, Columbia University

**Satellite Discussion—Improving Teaching:
Academic Learning or Occupational Skill?
A False Dichotomy**

Featured Speakers: Thomas Bailey (Teachers College, Columbia University); Sandy Baum (Urban Institute); Clive Belfield (Queens College, City University of New York); Michael S. McPherson (formerly, Spencer Foundation)

February 4, 2020
New York, NY

New York Program Committee Meeting*

February 4, 2020
New York, NY

Jonathan F. Fanton Lecture

**The Global Refugee Crisis: What's Next and
What Can Be Done?**

Featured Speaker: David Miliband (International Rescue Committee)

NORTH CAROLINA

CHAPEL HILL

October 29, 2019
University of North Carolina at Chapel Hill

**Reception to Welcome New Members in the
Research Triangle***

Featured Speakers: David W. Oxtoby (American Academy of Arts and Sciences); Walt Wolfram (North Carolina State University). *Introduction:* Terry Magnusson (University of North Carolina at Chapel Hill); Paula McClain (Duke University)

DURHAM

December 20, 2019
Duke University

**Research Triangle Program Committee
Meeting***

TEXAS

HOUSTON

September 10, 2019
Rice University

**Dr. John Mendelsohn's Legacy and the Future of
Cancer Research***

Featured Speakers: Andrew Futreal (The University of Texas MD Anderson Cancer Center); Margaret Kripke (The University of Texas MD Anderson Cancer Center); John Zerwas (Texas House of Representatives). *Introduction:* David W. Leebron (Rice University); Peter WT Pisters (The University of Texas MD Anderson Cancer Center)

WASHINGTON

SEATTLE

September 17, 2019
University of Washington

Seattle Local Program Committee Meeting*

September 17, 2019
University of Washington

**Member Reception with Academy President
David W. Oxtoby***

November 19, 2019
University of Washington

Morton L. Mandel Public Lecture
Writing into the Sunset*

Featured Speakers: Annie Proulx (Seattle, WA); Shawn Wong (University of Washington)

January 9, 2020
University of Washington

Seattle Local Program Committee Meeting*

WISCONSIN

MADISON

October 30, 2019
University of Wisconsin-Madison

Satellite Discussion—Improving Teaching: One Professor’s Experience

Featured Speakers: Sandy Baum (Urban Institute); Harry Brighouse (University of Wisconsin-Madison); Michael S. McPherson (formerly, Spencer Foundation)

VIRTUAL EVENTS

April 9, 2020

How to Talk to Coronavirus Skeptics

Featured Speaker: Naomi Oreskes (Harvard University)

April 21, 2020

Immigration’s “Malaise” in the Age of COVID-19

Featured Speaker: Marcelo Suárez-Orozco (University of Massachusetts Boston; formerly, University of California, Los Angeles)

April 30, 2020

The Science and Epidemiology of COVID-19

Featured Speakers: Lawrence Corey (Fred Hutchinson Cancer Research Center; University of Washington); Jaime Sepulveda (University of California, San Francisco). *Moderator:* Nancy C. Andrews (Duke University School of Medicine)

May 13, 2020

Gender, Work, and COVID-19

Featured Speakers: Frances McCall Rosenbluth (Yale University); Debora Spar (Harvard Business School). *Introduction:* Nannerl Keohane (Princeton University)

May 27, 2020

How the Arts Are Surviving the COVID-19 Pandemic

Featured Speakers: Robert Lynch (Americans for the Arts); Michael O’Bryan (The Village of Arts and Humanities). *Moderator:* Tania Munz (American Academy of Arts and Sciences)

June 11, 2020

Our Common Purpose: Reinventing American Democracy for the 21st Century

Featured Speakers: Danielle Allen (Harvard University); David Brooks (*The New York Times*); Stephen B. Heintz (Rockefeller Brothers Fund); Eric Liu (Citizens University); Judy Woodruff (PBS)

July 9, 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 S. Holloway (Rutgers, The State University of New Jersey); Melissa Nobles (Massachusetts Institute of Technology); Robert B. Townsend (American Academy of Arts and Sciences)

July 20, 2020

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

Featured Speakers: Danielle Allen (Harvard University); Stephen B. Heintz (Rockefeller Brothers Fund); Eric Liu (Citizen University)

August 20, 2020

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

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

August 24, 2020

Morton L. Mandel Public Lecture

Does Meritocracy Destroy the Common Good?

Featured Speakers: T.J. Jackson Lears (Rutgers, The State University of New Jersey); Michael J. Sandel (Harvard University); Anna Deavere Smith (New York University)

September 16, 2020

Earning Trust in the Age of the Pandemic

Featured Speakers: Francis S. Collins (National Institutes of Health); Evelyn Hammonds (Harvard University); Seth Mnookin (Massachusetts Institute of Technology); Monica Schoch-Spana (Johns Hopkins University). *Introduction:* Victor J. Dzau (National Academy of Medicine); David W. Oxtoby (American Academy of Arts and Sciences). *Moderator:* Erica Palma Kimmerling (American Academy of Arts and Sciences; Association of Science and Technology Centers)

September 24, 2020

Launching a New Report: Civil Justice for All

Featured Speakers: Kenneth C. Frazier (Merck & Company); John G. Levi (Legal Services Corporation; Sidley Austin LLP); Martha Minow (Harvard University). *Moderator:* David M. Rubenstein (The Carlyle Group)

September 30, 2020

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

Featured Speakers: Norman R. Augustine (Lockheed Martin Corporation, ret.); Neal Francis Lane (Rice University); Jeanette M. Wing (Columbia University). *Moderator:* Nancy C. Andrews (Duke University School of Medicine)

October 7, 2020

Celebration of New Members

Featured Speakers: Danielle Allen (Harvard University); Nancy C. Andrews (Duke University School of Medicine); Karl W. Eikenberry (former U.S. Ambassador to Afghanistan and Lieutenant General, U.S. Army, ret.); John Lithgow (Los Angeles, CA); David W. Oxtoby (American Academy of Arts and Sciences); 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*

Featured Speakers: William Howell (University of Chicago); Tracey Meares (Yale University); Susan Stokes (University of Chicago); Diane P. Wood (United States Court of Appeals, Seventh Circuit). *Moderator:* Eric Slauter (University of Chicago)

October 22, 2020

Telling our Regional Story: The Narratives that Unite and Divide in North Carolina*

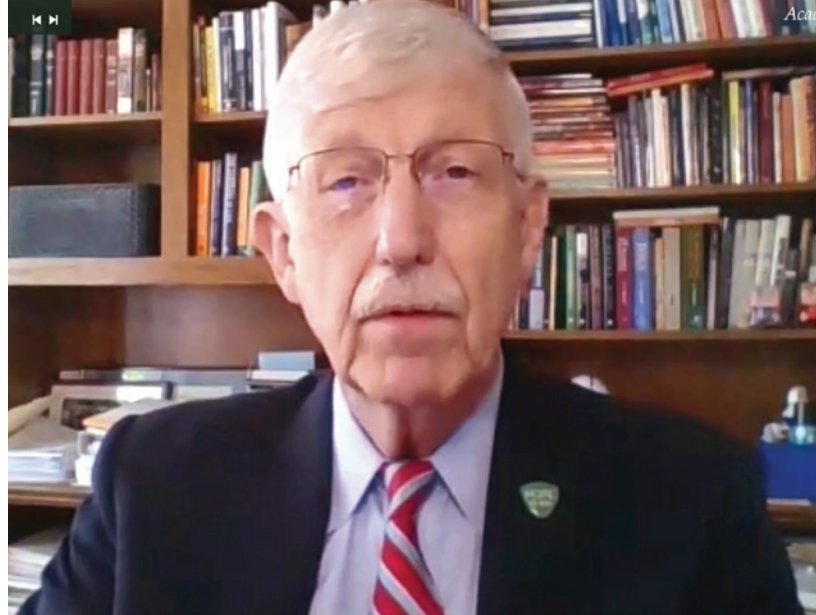
Featured Speakers: David E. Price (U.S. House of Representatives); John Aldrich (Duke University); Phoebe Stein (Federation of State Humanities Councils); William Sturkey (University of North Carolina, Chapel Hill)

November 16, 2020

A Toast to New Members in Chicago*



Sherry Turkle



Francis Collins



Natasha Trethewey



Top: David Oxtoby and T. J. Jackson Lears; Bottom: Michael Sandel and Anna Deavere Smith



Danielle Allen



Eric Liu

ACADEMY PRIZES

Recent Prizes



EMERSON-THOREAU MEDAL

Margaret Atwood (Toronto, Canada) – 2019 recipient



TALCOTT PARSONS PRIZE

William Labov (University of Pennsylvania) – 2019 recipient

All Prizes

FRANCIS AMORY PRIZE

First awarded in 1940, this prize was established by a bequest made in 1912 by Francis Amory to recognize significant scientific advances in reproductive biology and medical care. Recipients of the Francis Amory Prize include Karl Sune Detlof Bergstroem, Eugene M. Bricker, Min-Chueh Change, Justin L. Cordonnier, Frederic B. Foley, David L. Garbers, Harry Goldblatt, Peter N. Goodfellow, Alexander Benjamin Gutman, Geoffrey Wingfield Harris, J. Hartwell Harrison, Charles Brenton Huggins, David M. Hume, Elwood Vernon Jensen, Willem Johan Kolff, Ernest Laqueur, Henry Lardy, Choh Hao Li, Robin H. Lovell-Badge, Mary Frances Lyon, Thaddeus R. R. Mann, Guy Frederic Marrian, Joseph Francis McCarthy, John P. Merrill, Barbara Jean Meyer, Benjamin F. Miller, Terence J. Millin, Beatrice Mintz, Carl Richard Moore, Joseph E. Murray, Warren O. Nelson, Susumu Ohno, David C. Page, George Nicholas Papanicolaou, Eugene F. Poutasse, George W. Thorn, Hans Henriksen Ussing, Selman Abraham Waksman, Frederick J. Wallace, Patrick C. Walsh, Lawson Wilkins, Howard Guy Williams-Ashman, Jean D. Wilson, and Hugh Hampton Young.

AWARD FOR EXCELLENCE IN PUBLIC POLICY AND PUBLIC AFFAIRS

Established in 2018, this award is presented to individuals for their distinction, independence, effectiveness, and work on behalf of the common good. The inaugural recipient of the Award for Excellence in Public Policy and Public Affairs is Ernest J. Moniz.

DISTINGUISHED LEADERSHIP AWARD

First awarded in 2016, the Distinguished Leadership Award recognizes individuals who exemplify a legacy of leadership and dedication to the founding ideals of the American Academy. Recipients of the Distinguished Leadership Award include Jonathan F. Fanton, Jerrold Meinwald, and Don M. Randel.

EMERSON-THOREAU MEDAL

The Emerson-Thoreau Medal was established in 1958 to give special recognition to distinguished achievement in the broad field of literature. The prize is awarded to a person for his or her total literary achievement rather than for a specific work. Recipients of the Emerson-Thoreau Medal include Hannah Arendt, Saul Bellow, Henry Beston, Mark Van Doren, Thomas Stearns Eliot, James T. Farrell, Robert Frost, Joseph Wood Krutch, Norman Mailer, Samuel Eliot Morison, Toni Morrison, Lewis Mumford, Katherine Anne Porter, John Crowe Ransom, I. A. Richards, Philip Roth, Robert Penn Warren, and Edmund Wilson. The recipient of the 2019 Emerson-Thoreau Medal is Margaret Atwood.

FOUNDERS AWARD

Established in 2005 on the occasion of the 225th anniversary of the Academy's founding, this award honors individuals and institutions that have advanced the ideals of the Founders of the Academy. Recipients embody the spirit of the Founders: a commitment to intellectual inquiry, leadership, and active engagement. Recipients of the Founders Award include Robert J. Birgeneau, John H. Bryan, Richard J. Franke, John L. Hennessy, George Lucas, Jack Peltason, and Don M. Randel.

DON M. RANDEL AWARD FOR HUMANISTIC STUDIES

The Award for Humanistic Studies was established in 1975 by the Council of the Academy to acknowledge superior humanistic scholarship and raise its visibility with the general reading public. The award was renamed in 2017 in honor of musicologist and former Chair of the Academy's Board of Directors Don M. Randel. The award complements the Emerson-Thoreau Medal for achievement in literature. Recipients of the Award for Humanistic Studies include Meyer Abrams, Kenneth Burke, Denis Donoghue, Martha Craven Nussbaum, Helen Vendler, and Jean-Pierre Vernant.

RUMFORD PRIZE

Established in 1839, the Rumford Prize is one of the oldest scientific prizes in the United States. It recognizes contributions to the fields of heat and light, broadly interpreted. The endowment was created by a bequest to the Academy from Benjamin Thompson, Count Rumford, in 1797. Recipients of the Rumford Prize include Charles Greeley Abbot, Edward Goodrich Acheson, John A. Ball, Ernst Bamberg, C. C. Bare, Alan H. Barrett, Carl Barus, Hans Albrecht Bethe, Ira Sprague Bowen, Edward Boyden, Percy Williams Bridgeman, Norman W. Broten, Charles Francis Brush, Bernard F. Burke, Federico Capasso, Joseph C. Carter, Subrahmanyan Chandrasekhar, R. M. Chisholm, Alfred Cho, Alvan Clark, Carry G. Clark, William Weber Coblentz, Marshall H. Cohen, William David Coolidge, Samuel Cornette Collins, Arthur Holly Compton, Karl Taylor Compton, George Henry Corliss, James Madison Crafts, Patricia P. Crowther, Charles Gordon Curtis, Hans Georg Dehmelt, Karl Deisseroth, Martin Deutsch, Robert Henry Dicke, John William Draper, Sidney D. Drell, Thomas Alva Edison, John Ericsson, George Feher, Enrico Fermi, James Franck, John A. Galt, Josiah Willard Gibbs, Herbert P. Gush, George Ellery Hale, Robert Hare, George Russell Harrison, Joseph Harrison, Jr., Edmund Newton Harvey, Peter Hegemann, Vernon Willard Hughes, Frederic Eugene Ives, Herbert E. Ives, David L. Jauncey, Joseph J. Katz, James Edward Keeler, Kenneth I. Kellerman, Willis E. Lamb, Jr., Edwin Herbert Land, Samuel Pierpont Langley, Irving Langmuir, Thomas H. Legg, Robert B. Leighton, Jack L. Locke, Frank J. Low, Theodore Lyman, John C. Mather, William David McElroy, Charles W. McLeish, Charles Edward Mees, Albert Abraham Michelson, Gero Miesenböck, Robert Mills, James M. Moran, Jr., Georg Nagel, Edward Leamington Nichols, Ernest Fox Nichols, James R. Norris, Sam Nunn, Lars Onsager, William J. Perry, Edward Charles Pickering, John Stanley Plaskett, Norman Foster Ramsey, Roger S. Richards, Alan E. E. Rogers, Bruno Rossi, Henry Augustus Rowland, Henry Norris Russell, Lewis Morris Rutherford, Maarten Schmidt, Harlow Shapley, George P. Shultz, Joel Stebbins, Elihu Thomson, Charles Hard Townes, Daniel Treadwell, Cornelis B. Van Niel, George Wald, Gregorio Weber, E. Bright Wilson, Robert Williams Wood, Chen Ning Yang, Jul Lin Yen, and Vladimir Kosma Zworykin.

SARTON AWARD FOR POETRY

Presented for the first time in 2008, the Sarton Award for Poetry recognizes emerging poets of exceptional promise and distinguished achievement. It was established by a fund created by Academy Fellow May Sarton, a poet, novelist, and teacher who encouraged the work of young poets during her lifetime. Recipients of the Sarton Award for Poetry include Arda Collins, Matthew Dickman, Dawn Lundy Martin, Meghan O'Rourke, Vanesha Pravin, and Matthew Zapruder.

SARTON PRIZE FOR THE HISTORY OF SCIENCE

Presented for the first time in 1999, the Sarton Prize for the History of Science recognizes early-career historians of science whose work demonstrates exceptional promise. It was established by a fund created by Academy Fellow May Sarton to honor the memory of her father, Academy Fellow George Sarton, a preeminent leader in the field of history of science. Recipients of the Sarton Prize for the History of Science include Melinda Baldwin, Jenny Bulstrode, and Cristina Chimisso.

SCHOLAR-PATRIOT AWARD

This award, established in 2000, recognizes the extraordinary contributions of individuals who share the commitment of the Academy's Founders, a group of patriots who devoted their lives to promoting the arts and sciences in service to the nation. Recipients of the Scholar-Patriot Award include Leo L. Beranek, Louis W. Cabot, William T. Golden, Edward M. Kennedy, Yo-Yo Ma, and Morton L. Mandel.

TALCOTT PARSONS PRIZE

First awarded in 1974, this prize was established to honor the noted sociologist and former president of the Academy. It is awarded for contributions to the social sciences, broadly defined. Recipients of the Talcott Parsons Prize include Daniel Bell, Robert Dahl, Clifford Geertz, Joseph H. Greenberg, Albert Hirschman, Daniel Kahneman, Robert K. Merton, Joan Wallach Scott, William Julius Wilson, and C. Vann Woodward. The recipient of the 2019 Talcott Parsons Prize is William Labov.

Members Elected in 2020, by Class & Section

A list of all active Members, arranged by Class and Section, Affiliation, or Year of Election, is available on the Academy's website at www.amacad.org/directory. IHM designates an International Honorary Member.

Class I Mathematical and Physical Sciences

SECTION 1: Mathematics, Applied Mathematics, and Statistics

Gelman, Andrew
Columbia University

Hofer, Helmut
Institute for Advanced Study

Meng, Xiao-Li
Harvard University

Neves, André
University of Chicago

Razborov, Alexander
University of Chicago

Toro, Tatiana
University of Washington

SECTION 2: Physics

Aprile, Elena
Columbia University

Canfield, Paul
Iowa State University and
Ames Laboratory

Hasan, M. Zahid
Princeton University

Kim, Philip
Harvard University

**Narasimhan, Shobhana
(IHM)**
Jawaharlal Nehru Centre
for Advanced Scientific
Research, India

Phillips, Philip
University of Illinois

Shapiro, Marjorie
University of California,
Berkeley

Silverstein, Eva
Stanford University

SECTION 3: Chemistry

Bagchi, Biman (IHM)
Indian Institute of Science,
India

Drennan, Catherine
Massachusetts Institute
of Technology

Gagliardi, Laura
University of Chicago

Galli, Giulia
University of Chicago

García-Garibay, Miguel
University of California,
Los Angeles

Mapp, Anna
University of Michigan

Mayer, James
Yale University

Nuckolls, Colin
Columbia University

Odom, Teri
Northwestern University

Sarpong, Richmond
University of California,
Berkeley

Walker, Suzanne
Harvard Medical School

Zanni, Martin
University of
Wisconsin-Madison

SECTION 4: Astronomy, Astrophysics, and Earth Sciences

Bony, Sandrine (IHM)
Centre National de la
Recherche Scientifique,
France

Grassian, Vicki
University of California,
San Diego

Hirschmann, Marc
University of Minnesota

Hornberger, George
Vanderbilt University

Karato, Shun-ichiro
Yale University

Lozier, Susan
Georgia Institute of
Technology

Ma, Chung-Pei
University of California,
Berkeley

Ostriker, Eve
Princeton University

Ramirez-Ruiz, Enrico
University of California,
Santa Cruz

Stone, James
Institute for Advanced Study

SECTION 5: Engineering and Technology

Armstrong, Robert
Massachusetts Institute
of Technology

Huang, Yonggang
Northwestern University

Lee, Ruby
Princeton University

Lipson, Michal
Columbia University

Pettigrew, Roderic
Texas A&M University

Smits, Alexander
Princeton University

Stebe, Kathleen
University of Pennsylvania

Su, Lisa
Advanced Micro Devices, Inc.

SECTION 6: Computer Sciences

Adve, Sarita
University of Illinois at
Urbana-Champaign

Henzinger, Thomas (IHM)
Institute of Science and
Technology Austria, Austria

Jurafsky, Dan
Stanford University

Martonosi, Margaret
Princeton University

Paulraj, Arogyaswami
Stanford University

Pereira, Fernando
Google Inc.

Rubinfeld, Ronitt
Massachusetts Institute
of Technology

Spafford, Eugene
Purdue University

Yannakakis, Mihalis
Columbia University

Class II Biological Sciences

SECTION 1: Biochemistry, Biophysics, and Molecular Biology

Chang, Howard
Stanford University

Collins, Kathleen
University of California,
Berkeley

Dejean, Anne (IHM)
Institut Pasteur, France

Emerson, Beverly
Oregon Health & Science
University

Hill, Christopher
University of Utah School
of Medicine

Hochschild, Ann
Harvard Medical School

Muir, Tom
Princeton University

Stark, George
Cleveland Clinic

Wallace, Susan
University of Vermont

SECTION 2: Cellular and Developmental Biology

Bellen, Hugo
Baylor College of Medicine

Capel, Blanche
Duke University School
of Medicine

Davis, Trisha
University of Washington

Dean, Caroline (IHM)
John Innes Centre,
United Kingdom

Finley, Daniel
Harvard Medical School

Hopper, Anita
Ohio State University

Lozano, Guillermina
University of Texas MD
Anderson Cancer Center

Pederson, Thoru
University of Massachusetts
Medical School

Rando, Thomas
Stanford University

SECTION 3: Neurosciences

Clandinin, Thomas
Stanford School of Medicine

Lipscombe, Diane
Brown University

Mooney, Richard
Duke University School
of Medicine

Patapoutian, Ardem
Scripps Research Institute

Raman, Indira
Northwestern University

Steel, Karen (IHM)
King's College London,
United Kingdom

Wang, Fan
Duke University

Wolf, Clifford
Harvard Medical School

SECTION 4: Evolution and Ecology

Andrade, Maydianne (IHM)
University of Toronto
Scarborough, Canada

Bergelson, Joy
University of Chicago

Cavender-Bares, Jeannine
University of Minnesota

Chown, Steven (IHM)
Monash University, Australia

Collins, James
Arizona State University

Eguarte Fruns, Luis (IHM)
Universidad Nacional
Autónoma de México,
Mexico

Elena Fito, Santiago (IHM)
Consejo Superior de
Investigaciones Científicas,
Spain

Kalish, Susan
University of Tennessee

Kokko, Hanna (IHM)
University of Zurich,
Switzerland

Kruuk, Loeske (IHM)
Australian National
University, Australia

Lieberman, Daniel
Harvard University

Menge, Bruce
Oregon State University

Peichel, Catherine
University of Bath,
Switzerland

Przeworski, Molly
Columbia University

Trut, Lyudmila (IHM)
Russian Academy of
Sciences, Russia

SECTION 5: Medical Sciences

Armstrong, Katrina
Massachusetts General
Hospital

Barry, Michele
Stanford University School
of Medicine

Fuentes-Afflick, Elena
University of California,
San Francisco

Kaelin, William
Harvard Medical School

Mukwege, Denis (IHM)
Panzhi Hospital, Democratic
Republic of the Congo

Qiao, Jie (IHM)
Peking University Third
Hospital, China

Sheffield, Val
University of Iowa Carver
College of Medicine

Siliciano, Robert
Johns Hopkins University
School of Medicine

Woodruff, Teresa
Northwestern University
Feinberg School of Medicine

SECTION 6: Microbiology and Immunology

Belkaid, Yasmine
National Institutes of Health

Damania, Blossom
University of North Carolina
at Chapel Hill

Guillemin, Karen
University of Oregon

Hatfull, Graham
University of Pittsburgh

Heitman, Joseph
Duke University School
of Medicine

Lovett, Susan
Brandeis University

Orphan, Victoria
California Institute
of Technology

Overbaugh, Julie
Fred Hutchinson Cancer
Research Center

Segre, Julie
National Institutes of Health

Wellems, Thomas
National Institutes of Health

Class III Social and Behavioral Sciences

SECTION 1: Psychological Sciences

Chen, Edith
Northwestern University

Dawson, Geraldine
Duke University

Keltner, Dacher
University of California,
Berkeley

Murphy, Gregory
New York University

Pollak, Seth
University of
Wisconsin-Madison

Rajaram, Suparna
Stony Brook University

Richeson, Jennifer
Yale University

Tenenbaum, Joshua
Massachusetts Institute
of Technology

SECTION 2: Economics

Abraham, Katharine
University of Maryland

Chiappori, Pierre-André
Columbia University

Donaldson, Dave
Massachusetts Institute
of Technology

Forges, Françoise (IHM)
Université Paris-Dauphine,
France

Hoxby, Caroline
Stanford University

Kranton, Rachel
Duke University

Miguel, Edward
University of California,
Berkeley

**Sotomayor, Marilda Antonia
de Oliveira (IHM)**
University of São Paulo,
Brazil

Yariv, Leeat
Princeton University

SECTION 3: Political Science

Boone, Catherine
London School of
Economics and Political
Science, United Kingdom

Howell, William
University of Chicago

Jamal, Amaney
Princeton University

Jones, Bryan
University of Texas at Austin

Mares, Isabela
Yale University

Scheve, Kenneth
Stanford University

Soskice, David (IHM)
London School of
Economics and Political
Science, United Kingdom

Vavreck, Lynn
University of California,
Los Angeles

SECTION 4: Law

Barron, David
United States Court of
Appeals for the First Circuit

Feeley, Malcolm
University of California,
Berkeley School of Law

Gertner, Nancy
Harvard Law School

Holder, Eric
Covington & Burling, LLP

Jowell, Jeffrey (IHM)
Blackstone Chambers,
United Kingdom

Martinez, Jenny
Stanford Law School

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

Mnookin, Jennifer
University of California,
Los Angeles School of Law

O'Connell, Anne
Stanford Law School

Rodríguez, Cristina
Yale Law School

Tamale, Sylvia (IHM)
Makerere University, Uganda

Treanor, William
Georgetown University
Law Center

Wells, Jr., Theodore
Paul, Weiss, Rifkind,
Wharton & Garrison

SECTION 5: Anthropology and Archaeology

Antón, Susan
New York University

Brondizio, Eduardo
Indiana University
Bloomington

Ferguson, James
Stanford University

Fuentes, Agustín
Princeton University

Larsen, Clark
Ohio State University

Marshall, Fiona
Washington University
in St. Louis

SECTION 6: Sociology, Demography, and Geography

Liverman, Diana
University of Arizona

McKittrick, Katherine (IHM)
Queen's University, Canada

**Moreton-Robinson,
Aileen (IHM)**
RMIT University, Australia

Naughton, Lisa
University of
Wisconsin-Madison

Nee, Victor
Cornell University

Nelson, Alondra
Social Science Research
Council

Pattillo, Mary
Northwestern University

Rogerson, Peter
University at Buffalo, The
State University of New York

Small, Mario
Harvard University

Torche, Florencia
Stanford University

Ueno, Chizuko (IHM)
University of Tokyo, Japan

SECTION 7: Education

Gutiérrez, Kris
University of California,
Berkeley

Kaestle, Carl
Brown University

Loeb, Susanna
Brown University

Noguera, Pedro
University of Southern
California

Spillane, James
Northwestern University

Valdés, Guadalupe
Stanford University

Class IV Humanities and Arts

SECTION 1: Philosophy and Religious Studies

Calhoun, Cheshire
Arizona State University

Churchland, Paul
University of California,
San Diego

Collins, Adela
Yale Divinity School

Dupré, John (IHM)
University of Exeter,
United Kingdom

Faure, Bernard
Columbia University

Fricker, Miranda
City University of New York

Nadler, Steven
University of
Wisconsin-Madison

Olivelle, Patrick
University of Texas at Austin

Ruetsche, Laura
University of Michigan

Stone, Michael (IHM)
Hebrew University of
Jerusalem, Israel

MEMBERS ELECTED IN 2020, BY CLASS & SECTION

SECTION 1: Philosophy and Religious Studies, *continued*

Sueki, Fumihiko (IHM)
International Research
Center for Japanese
Studies, Japan

Sullivan, Winnifred
Indiana University
Bloomington

Zaman, Muhammad
Princeton University

SECTION 2: History

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Parnassus Books

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Yale University

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Detour Film Production

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Second Stage Theater

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Maria Schneider Orchestra

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The Morning Star Institute

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Phelps de Cisneros, Patricia
Fundación Cisneros

Philbin, Ann
Hammer Museum at UCLA

Sarris, Gregory
Federated Indians of Graton
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individuals became
inactive members of the
Academy:

Michael John Laver
Geoffrey P. Miller
Dennis F. Thompson

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Notice received through November 3, 2020

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Perry Lee Adkisson
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Alberto Alesina
Frances Elizabeth Allen
Angelika Amon
Philip Warren Anderson
Richard Allen Askey
Bernard Bailyn
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Lucius Barker
Leslie Cohen Berlowitz
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