Over the past year, the National Academy of Medicine (NAM) has worked diligently to address critical issues in health and medicine, sparking meaningful change to improve lives across the United States and around the world. Our shared commitment to vital concerns like ensuring the effective and equitable application of artificial intelligence (AI) in health care, the impact of climate change on human health, and the well-being of the health workforce transcends boundaries, specialties, and institutions, uniting us in our collective mission to shape a healthier world.

The promise of AI technologies for health care is immense, but it is critical these innovations be developed and used responsibly. To this end, we announced an initiative to develop an AI Code of Conduct that can promote equitable and responsible use of AI in health, medical care, and health research. This effort directly responds to the growing call for unified AI guidelines that can enable consistent governance for its development and application across the health sector.

Recognizing the transformative potential of emerging technologies in health and medicine, we also collaborated with the broader National Academies of Sciences, Engineering, and Medicine to release a report that describes a governance framework to ensure that the development and application of transformative technologies adheres to ethical and equitable principles throughout the entire innovation life cycle. This framework aims to advance equitable innovation and support an ecosystem that is more responsive to the needs of a broader range of individuals and is better able to recognize and address inequities as they arise.

Across all specialties and care settings, clinicians grapple with the immense weight of their profession. In 2023, we marked the first anniversary of the NAM National Plan for Health Workforce Well-Being by launching a campaign to help organizations operationalize the recommendations. Hundreds of health care organizations nationwide have already joined this effort, affirming their dedication to weaving clinician well-being into the very fabric of their institutions. This national initiative represents a critical step in sparking a movement to champion the well-being of the healthcare workforce and drive systemic transformation. Another important step was the establishment of a Health Workforce Well-Being Day of Awareness, with the inaugural day occurring this past March.

We have seen growing global recognition that human health is inextricably linked to health of our planet. Last year, the United Nations Climate Change Conference held its first-ever Health Day, where I spoke about the connection between climate change and health outcomes. As part of our Grand Challenge on Climate Change, Human Health, and Equity, the NAM launched a National Movement to mobilize health care organizations to prioritize actionable approaches to address the impact of climate change on health and to build upon the groundswell of movement across the health sector and beyond. In addition, we launched the Climate Communities Network—an ambitious model bringing together communities disproportionately impacted by climate change to design solutions to climate-related health inequities and advance community priorities. We also released a journey map to guide health care delivery organizations in reducing greenhouse gas emissions.

We are nearing the end of our second phase of the Culture of Health Program in partnership with and with funding from the Robert Wood Johnson Foundation. We are excited to build on the NAM’s health equity work in this space, including our internal Committee to Advance Racial Equity. We will bring together and advance health equity science across the National Academies in 2025 and beyond.

Finally, the NAM recognizes the need to address major challenges to public health, including firearm violence and obstacles to reproductive health care access and quality. In 2023, we supported the transition of several ad hoc NAM working groups to formal, NASEM-wide initiatives—the Forum on the Science and Practice of Preventing Firearm Injury and Mortality and the Standing Committee on Reproductive Health, Equity, and Society—both of which offer new opportunities for collaboration, coordination, and evidence-based decision making in these crucial areas of need.

These accomplishments are possible only through the generosity, expertise, and unwavering commitment demonstrated by the NAM’s donors, members, volunteers, and staff. Collectively, we are charting a course to a healthier, more sustainable future for all.

VICTOR J. DZAU
President, National Academy of Medicine
May 2024
## Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2023-2024 Council</td>
</tr>
<tr>
<td>3</td>
<td>Organizational Chart</td>
</tr>
<tr>
<td>5</td>
<td>Program Highlights</td>
</tr>
<tr>
<td></td>
<td>Responding to Pressing Issues</td>
</tr>
<tr>
<td></td>
<td>Advising on U.S. &amp; Global Health &amp; Science Policy</td>
</tr>
<tr>
<td></td>
<td>Tackling Grand Challenges &amp; Advancing Bold Ideas</td>
</tr>
<tr>
<td>12</td>
<td>Featured Consensus Reports from the National Academies of Sciences, Engineering, and Medicine</td>
</tr>
<tr>
<td>17</td>
<td>Member Highlights</td>
</tr>
<tr>
<td></td>
<td>Campaign for the NAM Surpasses Fundraising Goal</td>
</tr>
<tr>
<td></td>
<td>Members Elected in 2023</td>
</tr>
<tr>
<td></td>
<td>2023 Nobel Prize in Physiology or Medicine</td>
</tr>
<tr>
<td></td>
<td>National Medal of Science and National Medal of Technology and Innovation</td>
</tr>
<tr>
<td></td>
<td>The Jonathan B. Perlin, MD, and Donna J. Perlin, MD, Director of NAM Programs</td>
</tr>
<tr>
<td></td>
<td>In Memoriam</td>
</tr>
<tr>
<td>29</td>
<td>Awards</td>
</tr>
<tr>
<td></td>
<td>NAM Member Awards</td>
</tr>
<tr>
<td></td>
<td>Cecil Awards</td>
</tr>
<tr>
<td></td>
<td>Fellowships &amp; Emerging Leaders</td>
</tr>
<tr>
<td>41</td>
<td>Finances 2023</td>
</tr>
<tr>
<td>43</td>
<td>2023 Honor Roll of Donors</td>
</tr>
</tbody>
</table>
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Program Highlights

Responding to Pressing Issues

Advising on U.S. & Global Health & Science Policy

Tackling Grand Challenges & Advancing Bold Ideas
Clinician Well-Being

During the year, the NAM expanded its commitment to enhancing health workforce well-being through strategic, collaborative initiatives. The National Plan for Health Workforce Well-Being, first introduced in 2022, gained global recognition and influenced curricula and professional frameworks across fields. In October, the NAM launched the Change Maker Campaign to encourage health organizations to affirm their commitment to advancing well-being across the health sector, aligned with Priority 6 of the National Plan, and join the growing movement to support health worker well-being. As of March 2024, more than 350 organizations have pledged to institutionalize well-being as a core value. Alongside the campaign launch, the NAM announced the creation of a national Health Workforce Well-Being (HWWB) Day, which received U.S. Senate support for the inaugural observance on March 18, 2024. The day serves as an opportunity to recognize the importance of protecting health workers’ well-being to sustain our health system and ensure quality patient care. HWWB Day is also a day for action—learning from one another to advance a national movement and expand evidence-informed solutions to make system-wide changes to improve health worker well-being and transform working and learning cultures. To support efforts to put the National Plan priorities into action, the NAM released a series of videos featuring health leaders at organizations implementing the National Plan, emphasizing support for health workers and patient care. In addition, the NAM, in collaboration with the Council for Medical Specialty Societies and the University of Kansas Medical Center, held an event to explore innovative strategies to address workforce shortages and enhance well-being, particularly in rural health settings.

The U.S. Opioid Epidemic

Throughout the year, the NAM continued to build on its work to address the nation’s ongoing substance use and overdose crises. The NAM’s Action Collaborative on Combating Substance Use and Opioid Crises refreshed its strategic priorities to align with continuously evolving public health challenges posed by substance misuse and drug overdose. In April, the Collaborative—in partnership with the Interdisciplinary Association for Population Health Science—published two papers emphasizing the need to integrate social determinants of health into overdose epidemic responses. In August, the Collaborative released an updated research agenda to guide institutions and funders in addressing opioid and polysubstance use crises. The agenda covers key areas of health professional education and training; pain management guidelines and evidence standards; prevention, treatment, and recovery; and telehealth for substance use disorders and chronic pain management. In September, the Collaborative published a discussion paper outlining a framework for cross-sectoral prevention strategies, emphasizing comprehensive, equity-based prevention practices. During National Recovery Month in September, the Collaborative contributed an article to USA Today focused on ending the stigma of addiction. In October, the Collaborative shared an action agenda proposing steps to advance hybrid care models for chronic pain management and substance use disorder care.
Structural Racism & Health Equity

Everyone in the United States deserves the opportunity to be healthy and reach their full potential no matter who they are or where they live. The NAM’s Culture of Health Program, funded by the Robert Wood Johnson Foundation, is a multiyear collaborative effort to identify strategies to create and sustain conditions that support equitable good health for all. In March, the program held a public meeting to examine the history and impact of structural and systemic racism in the United States. The event also announced the development of a forthcoming publication exploring strategies for systems-level change to remove barriers to address health inequities. In July, the program held a public event to better understand the impacts of structural and systemic racism on health outcomes, explore intersectionality as a framework to understand health outcomes, and highlight examples of communities working to address systemic racism and create new, equitable systems.

Identifying Innovative Solutions to Address the STI Epidemic

The National Academies, in collaboration with the Centers for Disease Control and Prevention and the National Association of County and City Health Officials, organized in-person and virtual hackathons to address the rising rates of sexually transmitted infections (STIs) in the United States through innovative technology. The events challenged participants to generate technological solutions as recommended in the consensus report Sexually Transmitted Infections: Adopting a Sexual Health Paradigm. Participants received mentorship and had the opportunity to present their ideas to a panel of expert judges and their competitors. Ten teams were awarded $84K in prizes across the two events. The teams received opportunities for ongoing mentorship to enhance and implement their winning solutions as well as publication in the NAM’s academic journal, NAM Perspectives. Of the prizes awarded, the NAM Catalyst Fund on Reproductive Health, Equity, and Society sponsored two innovation prizes.
Reproductive Health, Equity & Society

The National Academies and NAM Standing Committee on Reproductive Health, Equity, and Society was formally announced in September. The committee brings together a cross-disciplinary group of experts to focus on assessing the health, social, and economic implications of reproductive health care access in the United States and globally. In October, the committee hosted its first full-day hybrid workshop to discuss data challenges and needs to effectively measure impacts on access and care following the Dobbs v. Jackson Women’s Health Organization decision. Since its inception, the committee has held several webinars in an “After Roe” series—on topics such as workforce implications, challenges in the provision of care, and harassment against health professionals—to explore the myriad societal impacts of restricted reproductive health care access and has released summary reports of its events. The committee aims to improve health and well-being through access to reproductive health, address misinformation, and recommend experts for future endeavors.

Credible Online Health Information

In May, the NAM released a discussion paper developed in collaboration with the Council for Medical Specialty Societies and the World Health Organization to provide guidance on identifying credible health information from a broad range of sources, including non-accredited nonprofits, for-profit organizations, and individuals. The paper—which emphasizes using diverse, equitable voices to communicate health information—expanded on guidance in a 2021 paper focused on social media sources. The papers have had widespread impact: YouTube began labeling content from credible sources in several countries based on the recommendations; in the United Kingdom, it helped influence national health content standards; and, in Germany, it was used to inform efforts to create a source certification process for potential adoption by the country’s health ministry. In November, the NAM held a meeting to further explore content evaluation and potential opportunities for National Academies work on evaluating credible sources of health information.
Advising on U.S. & Global Health & Science Policy

Emerging Science, Technology, & Innovation in Health and Medicine

In 2023, a consensus study was released through the Committee on Emerging Science, Technology, and Innovation. The report describes a governance framework for decisions throughout the innovation life cycle to advance equitable innovation and support an ecosystem that is more responsive to the needs of a broader range of individuals and is better able to recognize and address inequities as they arise.

U.S. Health System Transformation

In 2023, the NAM Leadership Consortium focused on countering health system fragmentation and pursuing alignment across health system stakeholders and sectors. The four Action Collaboratives held meetings throughout the year to advance priorities in their respective domains: Value Incentives and Systems; Evidence Mobilization; Digital Health; and Culture, Inclusion, and Equity.

During the year, the NAM Leadership Consortium developed a strategic approach for scaling and spreading the Core Learning Health System Principles focused on aspects like engagement, equity, and continuous improvement. The ten Core Principles offer a roadmap for aligning science, informatics, incentives, and culture, in order to foster improvement and innovation across the health system.

Preparatory work began for the Commission on Investment Imperatives for a Healthy Nation, launched to identify priorities for creating cross-sector alignment to overcome systemic fragmentation, misaligned incentives, inequities, and distrust in the health system. Expert working groups were established in five critical areas: individual and community health goals; inclusive, equitable systems; digital and data architecture; health financing; and private investments in health.

Work also progressed on developing guidance to advance responsible AI in health, medical care, and health research. In July, the NAM launched the Artificial Intelligence (AI) Code of Conduct initiative in recognition of the need to ensure the ethical and responsible advancement and use of AI tools in health. This interdisciplinary collaborative effort is tasked with developing a framework for achieving accurate, safe, reliable, and ethical AI advancements that can transform health, health care, and biomedical science.

In October, the NAM Leadership Consortium convened a workshop to enhance understanding of the implications of generative AI and large language models in health and medicine. Resources were also released to help stakeholders assess and guide meaningful community engagement in health programs and policies.

Building on a conceptual model released in 2022, the NAM Leadership Consortium project on assessing community engagement in health programs released resources to help stakeholders evaluate and guide their community engagement efforts. The project aims to identify metrics for assessing the extent, process, and impact of such engagement.
Emerging Stronger from COVID-19: Priorities for Health System Transformation

For decades, the U.S. health system has fallen far short of its potential to support and improve individual and population health. The COVID-19 pandemic has presented death and devastation—but also an unprecedented opportunity to truly transform U.S. health, health care, and health delivery. To capitalize on this opportunity, the NAM field leaders from across all of the major health system sectors to assess how each sector has responded to the pandemic and the opportunities that exist for health system transformation. The opportunity is now to capitalize on the hard-won lessons of COVID-19 and build a health care system that centers patients, families, and communities; cares for clinicians; supports care systems, public health, and biomedical research to perform at the best of their abilities; applies innovations from digital health and quality, safety, and standards organizations; and encourages health care payers and health product manufacturers and innovators to produce products that benefit all.

Valuing America’s Health: Aligning Financing to Reward Better Health and Well-Being

The Valuing America’s Health Special Publication explores opportunities to transform the current U.S. health and health care system to one that promotes whole person and whole population health in response to declining American life expectancy related to the COVID-19 pandemic, opioid epidemic, high burden of chronic disease, and systemic and structural inequities, among other issues. The publication emphasizes the need for a bold vision and sustainable financing strategies to prioritize health and well-being for all, with authors highlighting the importance of building a movement to prioritize health, repairing systemic failures, holding stakeholders accountable, controlling health care costs, incentivizing health promotion, adopting collaborative financing and policy-making approaches, and empowering individuals and communities in health decision-making.
Tackling Grand Challenges & Advancing Bold Ideas

Healthy Longevity

In 2023, the NAM made significant contributions to the global movement toward healthy longevity. As part of the Healthy Longevity Global Competition, more than 100 innovators worldwide received Catalyst Awards totaling $6 million for their novel ideas to enhance human health and well-being over the life course. Part of the Competition, the third annual Global Innovator Summit convened academics, policy experts, industry leader, and entrepreneurs to connect stakeholders in healthy longevity, highlighting topics like health equity and artificial intelligence. Related to the 2022 Global Roadmap for Healthy Longevity consensus report, the NAM co-hosted a regional summit in Riyadh, Saudi Arabia in early 2023, to discuss how the report recommendations can help reshape our societies to promote healthy aging for all. The NAM, with the World Health Organization and select U.N. Member States, also supported an event held alongside the 76th World Health Assembly in Geneva, Switzerland, to discuss how to maximize opportunities to extend the human healthspan, particularly during the U.N. Decade of Healthy Ageing.

Climate Change, Human Health, & Equity

The NAM continued its leadership in driving action toward addressing climate change impacts on health, focusing on collaboration and engagement both in the United States and globally. In 2023, the NAM released its 2024-2028 Strategic Plan, which outlines the academy’s commitment to addressing climate change as an urgent threat.

Through its Grand Challenge on Climate Change, Human Health, and Equity, the NAM led several key activities. The Climate Communities Network launched and announced 18 members and 11 strategic partners. The inaugural cohort will work together to amplify community voices and living experiences and leverage community expertise to address the structural drivers of climate-related health inequities at the local level. The Action Collaborative on Decarbonizing the U.S. Health Sector completed its first phase, which brought together more than 70 interdisciplinary and multi-sectoral leaders from across health care and related communities to co-develop and implement an action agenda to reduce the environmental impacts of the health sector and strengthen its sustainability and resiliency. Among the more than 30 resources the Collaborative produced were the interactive Sustainability Journey Map and Key Actions Shortlist to Reduce Greenhouse Gas Emissions by U.S. Hospitals and Health Systems. Both resources—which have been downloaded or viewed online almost 16,000 times—are designed to support hospitals, health care systems, and health care suppliers as they accelerate their decarbonization and sustainability efforts.

The NAM’s suite of climate action efforts were represented at international events throughout the year, including at the World Health Summit in Berlin, Germany, the United Nations Climate Change Conference, or COP28, in Dubai, United Arab Emirates, and the World Economic Forum’s Annual Meeting in Davos, Switzerland. NAM President Victor J. Dzau spoke at the first-ever Health Day held at COP28, highlighting the growing recognition of the critical link between climate and health.

Looking ahead, the Collaborative announced its second phase focusing on mobilizing health care organizations to accelerate the national climate and health movement. The NAM will host an inaugural Health Day for Climate Group’s U.S. Climate Action Summit as part of this initiative. In addition, the NAM has launched work to support creation of regional research and innovation hubs, with initial hubs developed in Southeast Asia and the Caribbean, demonstrating the academy’s dedication to advancing action on climate and health on the global stage.
Featured Consensus Reports from the National Academies of Sciences, Engineering, and Medicine
Toward Equitable Innovation in Health and Medicine: A Framework

Advances in biomedical science, data science, engineering, and technology are leading to high-pace innovation with potential to transform health and medicine. These innovations simultaneously raise important ethical and social issues, including how to fairly distribute their benefits and risks. The National Academies of Sciences, Engineering, and Medicine, in collaboration with the NAM, established the Committee on Creating a Framework for Emerging Science, Technology, and Innovation in Health and Medicine to provide leadership and engage broad communities in developing a framework for aligning the development and use of transformative technologies with ethical and equitable principles. The resulting report describes a governance framework for decisions throughout the innovation life cycle to advance equitable innovation and support an ecosystem that is more responsive to the needs of a broader range of individuals and is better able to recognize and address inequities as they arise.

Federal Policy to Advance Racial, Ethnic, and Tribal Health Equity

Racially and ethnically minoritized populations and tribal communities often face preventable inequities in health outcomes due to structural disadvantages and diminished opportunities around health care, employment, education, and more. Federal Policy to Advance Racial, Ethnic, and Tribal Health Equity analyzes how past and current federal policies may create, maintain, and/or amplify racial, ethnic, and tribal health inequities. This report identifies key features of policies that have served to reduce inequities and makes recommendations to help achieve racial, ethnic, and tribal health equity.

Social Media and Adolescent Health explores the effect of social media on mental and physical health and lays out recommendations for policymakers, regulators, industry, and others in an effort to maximize the good and minimize the bad.

Low Birth Weight Babies and Disability provides an overview of the current status of the identification, treatment, and prognosis of low birth weight (LBW) babies, including trends in survivability, in the U.S. population under age 1 year.
Complementary Feeding Interventions for Infants and Young Children Under Age 2: Scoping of Promising Interventions to Implement at the Community or State Level summarizes evidence and provides information on interventions addressing complementary feeding of infants and young children that could be scaled up or implemented at a community or state level.

Review of the Department of Veterans Affairs Presumption Decision Process reviews the VA revised process document used to identify medical conditions to evaluate for presumption status, the factors that such an evaluation entails, and the governance process for the review and approval of a presumption recommendation.

The Future Pediatric Subspecialty Physician Workforce: Meeting the Needs of Infants, Children, and Adolescents outlines recommendations that, if fully implemented, can improve the quality of pediatric medical subspecialty care through a well-supported, superbly trained, and appropriately used primary care, subspecialty, and physician-scientist workforce.

Substance Misuse Programs in Commercial Aviation: Safety First reviews available evidence on the effectiveness of the Human Intervention Motivation Study and the Flight Attendant Drug and Alcohol Program and offers recommendations for improving these programs.

Nonhuman Primate Models in Biomedical Research: State of the Science and Future Needs analyzes current and future use of nonhuman primates in National Institutes of Health-supported biomedical research, as well as opportunities for new approach methodologies to complement or reduce reliance on nonhuman primate models.

Advancing Health and Resilience in the Gulf of Mexico Region: A Roadmap for Progress explores key challenges and priorities in Gulf states, including Alabama, Florida, Louisiana, Mississippi, and Texas and evaluates recent progress, and makes recommendations for closing gaps and implementing approaches that focus on the diverse needs and experiences of people in the Gulf region.
Appearing in the Diagnosis and Evaluation of Disabling Physical Health Conditions presents a summary of the evidence and information around a selected subset of diagnostic and evaluative techniques that have become generally available in the past 30 years for cardiovascular, neurological, respiratory, hematological, and digestive conditions.

Using Population Descriptors in Genetics and Genomics Research: A New Framework for an Evolving Field focuses on understanding the current use of population descriptors in genomics research, examining best practices for researchers, and identifying processes for adopting best practices within the biomedical and scientific communities.

Review of Four CARA Programs and Preparing for Future Evaluations explores processes of Substance Abuse and Mental Health Services Administration grant programs; actions taken by grantees and their partners; impacts to clients, patients, the community, and public; and structural or environmental changes that might have resulted from grant funding, as well as analyzes how future congressionally mandated evaluations can be structured and carried out.

Achieving Whole Health: A New Approach for Veterans and the Nation presents findings and recommendations that provide a roadmap for improving health and well-being for veterans and the nation.

Dietary Reference Intakes for Energy presents Estimated Energy Requirements equations that provide a baseline for dietary planners and assessors who are estimating energy needs and monitoring energy balance to enhance the general health of individuals and populations.

Wastewater-based Disease Surveillance for Public Health Action presents a vision for a national wastewater surveillance system that would track multiple pathogens simultaneously and pivot quickly to detect emerging pathogens, and offers recommendations to ensure that the system is flexible, equitable, and economically sustainable for informing public health actions.
Member Highlights

Campaign for the NAM

Members Elected in 2023

2023 Nobel Prize in Physiology or Medicine

National Medal of Science and National Medal of Technology and Innovation

The Jonathan B. Perlin, MD, and Donna J. Perlin, MD, Director of NAM Programs

In Memoriam
In 2023, the NAM celebrated raising over $128 million—exceeding the original fundraising goal by over 20%—for the Campaign for the NAM, which closed in December. The ambitious Campaign, launched among members in 2015 and opened publicly in 2021, lends critical support to the NAM in its efforts to achieve a healthier future for all by building the next generation of health leaders; ensuring healthy longevity in our aging populations; addressing the critical links between climate change, human health, and equity; and fostering a culture of health in communities across the nation. The NAM is grateful for the support of the generous donors whose contributions made this fundraising effort a resounding success!
The Campaign by the Numbers

- **$128.8M Raised in Total**
- **$100M Goal**
- **$54.4M Raised for two Grand Challenges**
- **$12.1M to build leadership capacity for the next generation of health and medical leaders**
- **$4.6M in endowment gifts**
- **$3.5M in new planned gifts**

- 65% member giving participation rate
- 590 donors who made their first gift during the campaign
- 1732 donors
- 190 donors who contributed each year of the campaign
Members Elected in 2023

DANIEL G. ANDERSON, PHD
Institute for Medical Engineering and Science, Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology

KIMBERLY DAWN ANDERSON-ERISMAN, PHD
Case Western Reserve University/MetroHealth System

MICHAEL S. AVIDAN, MB BCH, FCA SA
Washington University School of Medicine in St. Louis

KAREN BANDEEN-ROCHE, PHD
Johns Hopkins Bloomberg School of Public Health

KURT BARNHART, MD, MSCE
Perelman School of Medicine, University of Pennsylvania

REGINA BARZILAY, MS, PHD
Jameel Clinic for Machine Learning and Health, Massachusetts Institute of Technology

SUSAN J. BASERGA, MD, PHD
Yale University

RASHID BASHIR, PHD
University of Illinois at Urbana-Champaign

BRADLEY BERNSTEIN, MD, PHD
Dana-Farber Cancer Institute, Harvard Medical School

JOSEPH R. BETANCOURT, MD, MPH
The Commonwealth Fund

MARIAN E. BETZ, MD, MPH
University of Colorado, Aurora

SARA NAOMI BLEICH, PHD
Harvard T.H. Chan School of Public Health, Harvard University

JOHN D. CARPTEN, PHD
City of Hope

PATRICK M. CARTER, MD
Institute for Firearm Injury Prevention, Injury Prevention Center, Medical School, School of Public Health, University of Michigan

TIMOTHY A. CHAN, MD, PHD
Global Center for Immunotherapy and Precision Immunology, Cleveland Clinic and Case Western Reserve University

MICHAEL F. CHIANG, MD, MA
National Eye Institute, National Institutes of Health

TUMAINI RUCKER COKER, MD, MBA
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<td>JOSEPH V. SAKRAN, MD, MPH, MPA, FACS</td>
<td>Johns Hopkins Medicine</td>
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<tr>
<td>REBECCA ANNE SEGUIN-FOWLER, PHD, RDN</td>
<td>Institute for Advancing Health Agriculture, Texas A&amp;M University</td>
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<tr>
<td>MORGAN SHENG, MBBS, PHD</td>
<td>Massachusetts Institute of Technology, Broad Institute of MIT and Harvard</td>
</tr>
<tr>
<td>CATHERINE Y. SPONG, MD</td>
<td>University of Texas Southwestern Medicine Center</td>
</tr>
<tr>
<td>TIMOTHY A. SPRINGER, PHD</td>
<td>Boston Children's Hospital/Harvard Medical School</td>
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<tr>
<td>BRENT R. STOCKWELL, PHD</td>
<td>Columbia University, Vagelos College of Physicians and Surgeons, Columbia University Irving Medical Center</td>
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<tr>
<td>RUDOLPH EMILE TANZI, PHD</td>
<td>Harvard University, Massachusetts General Hospital</td>
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<tr>
<td>JULIAN F. THAYER, PHD</td>
<td>University of California, Irvine</td>
</tr>
<tr>
<td>METHODIOS GAMUO TUULI, MD, MPH, MBA</td>
<td>Warren Alpert Medical School, Brown University, Women and Infants Hospital of Rhode Island, Care New England</td>
</tr>
<tr>
<td>ROBERT OTTO BURCIAGA VALDEZ, PHD, MHSA</td>
<td>Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services</td>
</tr>
<tr>
<td>TERRY L. VANDEN HOEK, MD, FACEP</td>
<td>Center for Advanced Resuscitation Medicine, Center for Cardiovascular Research, UI Health, University of Illinois College of Medicine Chicago</td>
</tr>
<tr>
<td>ROBERT H. VONDERHEIDE, MD, DPHIL</td>
<td>Abramson Cancer Center, Perelman School of Medicine, University of Pennsylvania Health System, University of Pennsylvania</td>
</tr>
<tr>
<td>EMILY AI-HUA WANG, MD, MAS</td>
<td>SEICHE Center for Health and Justice, Yale University School of Medicine</td>
</tr>
<tr>
<td>JENNIFER A. WARGO, MD, MMSC</td>
<td>Platform for Innovative Microbiome and Translational Research, University of Texas MD Anderson Cancer Center</td>
</tr>
</tbody>
</table>
International Members Elected in 2023

CHARLES O. AGYEMANG, PHD, MPH
University of Amsterdam

CELSO ARANGO, MD, PHD
Institute of Psychiatry and Mental Health, Hospital General Universitario Gregorio Marañón

LUKOYE ATWOLI, MBCHB, MMED PSYCH, PHD
Medical College East Africa, Brain and Mind Institute, The Aga Khan University Medical College, East Africa

NILS BROSE, PHD
Max Planck Institute for Multidisciplinary Sciences

HÉLÈNE CARABIN, DVM, MSC, PHD
School of Public Health, Université de Montréal

DANIEL DRUCKER, MD
University of Toronto, Lunenfeld-Tanenbaum Research Institute, Mt. Sinai Hospital, Toronto

CHRISTIAN T. HAPPI, MSC, PHD
Redeemer’s University, African Center of Excellence for Genomics of Infectious Diseases

MARTA IMAMURA, MD, PHD
University of São Paulo School of Medicine

ANNE M. JOHNSON, MB BS, MSC, MD
Institute for Global Health, University College London

JENS NIelsen, PHD, DRTECHN, DRMEDHC
BiolInnovation Institute, Chalmers University of Technology
The 2023 Nobel Prize in Physiology or Medicine was awarded jointly to Katalin Karikó and Drew Weissman for discoveries that enabled the development of effective mRNA vaccines against COVID-19.

The two laureates’ discoveries shed new light on how mRNA interacts with the immune system and fundamentally changed the field of vaccine development. Their work was crucial to developing effective vaccines against COVID-19. Karikó and Weissman were elected to the NAM in 2022.
In 2023, the National Medal of Science—the highest recognition the United States confers on scientists and engineers—was awarded to six NAM members:

- **Huda Akil** (University of Michigan), for pioneering contributions to understanding of the brain biology of emotions.
- **Eve Marder** (Brandeis University), for advancing the understanding of neuronal circuit plasticity, homeostatic regulation of neuronal excitability, and individual variability.
- **Gregory A. Petsko** (Harvard Medical School and Brigham and Women’s Hospital), for advancing the understanding of neurodegenerative diseases.
- **Subra Suresh** (Massachusetts Institute of Technology and Brown University), for pioneering research across engineering, physical sciences, and life sciences.
- **Shelley E. Taylor** (University of California Los Angeles), for innovative research into mental health and the power of human connection.
- **Sheldon Weinbaum** (The City College of the City University of New York), for groundbreaking research in biomechanics.

The National Medal of Technology and Innovation—the nation’s highest honor for technological achievement—was awarded to NAM member **Steven A. Rosenberg** (National Cancer Institute), for pioneering the development of immunotherapy.
In 2023, member Jonathan B. Perlin, MD, and Donna J. Perlin, MD, endowed a position at the NAM: the Jonathan B. Perlin, MD, and Donna J. Perlin, MD, Director of NAM Programs. The position oversees all NAM programs and is critical to the success of its mission.

“The National Academies are a national treasure and an international resource. We hope that decision-makers and leaders not only appreciate the National Academy of Medicine as a resource for objective, evidence-based advice but support and expand the Academy’s work as the country tackles increasingly complex health care and social challenges,” said the Perlins.

“Jonathan B. Perlin, president and CEO of The Joint Commission, was elected to the NAM in 2015. He is a member of the NAM’s Action Collaborative on Decarbonizing the U.S. Health Sector and Leadership Consortium. Donna J. Perlin is a pediatric emergency medicine specialist.
In Memoriam

The NAM honors members who passed away between January 1, 2023, and May 31, 2024.

ADORA A. ADIMORA
NANCY E. ADLER
C. DAVID ALLIS
NORMAN B. ANDERSON
K. FRANK AUSTEN
PAUL BERG
KENNETH I. BERNS
HENRY R. BOURNE
LEWIS M. BRANSCOMB
MARY B. BUNGE
WILLIAM A. CATTERALL
CONNIE J. EAVES
VICTOR R. FUCHS
ALFRED L. GOLDBERG
EMIL C. GOTSCHLICH
J. THOMAS GRAYSTON
MICHAEL R. GREEN
JOHN S. GREENSPAN
HOWARD H. HIATT
FELICIA HILL-BRIGGS
THOMAS F. HORNBEIN
ELLIOTT D. KIEFF
CLAUDE LENFANT
JAY LOEFFLER
GERALD L. MANDELL
GUY M. MCKHANN
DAVID MEYERS
JOHN H. MOXLEY
PHILIP NEEDLEMAN
ELENA O. NIGHTINGALE
MICHAEL B. OLDSTONE
HERBERT PARDES
DONALD L. PRICE
DARWIN J. PROCKOP
ABRAHAM M. RUDOLPH
RALPH L. SACCO
STUART F. SCHLOSSMAN
IRIS R. SHANNON
KRISHNA V. SHENOY
ALVIN R. TARLOV
CHRISTOPHER T. WALSH
JOHN E. WENNBERG
RUBY L. WILSON
HARALD ZUR HAUSEN
Awards

NAM Member Awards

Gustav O. Lienhard Award for Advancement of Health Care

Rhoda and Bernard Sarnat International Prize in Mental Health

David and Beatrix Hamburg Award for Advances in Biomedical Research and Clinical Medicine

Cecil Awards
NAM Member Awards

In 2023, the NAM honored three members for their outstanding service — Edward Shortliffe, adjunct professor and chair emeritus, Department of Biomedical Informatics, Columbia University; Kenneth Olden, director emeritus, National Institute of Environmental Health Sciences; Linda P. Fried, dean and DeLamar Professor of Public Health, Mailman School of Public Health, Columbia University; and John E.I. Wong, executive director, Center for Population Health, National University of Singapore.

Shortliffe received the Walsh McDermott Medal, which recognizes a member for distinguished service to the National Academies of Sciences, Engineering, and Medicine over an extended period. Elected to NAM in 1987, he served on the NAM Council for six years, two full terms on the membership committee, and as chair of the full membership committee from 2018 to 2020. His contributions include several National Academies roles, including as a member of the Computer Science and Telecommunications Board and the Committee on National Statistics, among others. Shortliffe has been a member of 13 committees and chaired 7 committees, including for the National Academies consensus reports Medications in Single-Dose Vials: Implications of Discarded Drugs and A Smarter National Surveillance System for Occupational Safety and Health in the 21st Century. He is a current member of the NAM’s Health Policy and Health Care Systems committee and the National Associates Program.

Olden received the Adam Yarmolinsky Medal, which is awarded to a member from a discipline outside the health and medical sciences. Elected to the NAM in 1994, he supported its establishment of the National Academies’ Roundtable on Environmental Health Sciences, Research, and Medicine. Olden served as director of the National Institute of Environmental Health Sciences (NIEHS), where he targeted health science investments toward marginalized and underserved communities and ensuring impacted communities were represented in decision-making, while also educating NIEHS staff, all in pursuit of environmental justice. Working with the Environmental Protection Agency (EPA), Olden conceived of and funded the NIEHS/EPA Children’s Environmental Health and Disease Prevention Research Centers in 1998, which has changed the course of research in environmental health in the U.S. After leaving the NIEHS, Olden was the founding dean of the School of Public Health at Hunter College, City University of New York, and directed the EPA’s National Center for Environmental Assessment and Human Health Risk Assessment Research Program. The NIEHS hosts an annual Olden Lecture Series in his honor.
Fried and Wong were each a recipient of the **David Rall Medal**, which is given to members who have demonstrated distinguished leadership as chair of a study committee or other activity. They are recognized for the remarkable success of the NAM’s first Grand Challenge, the Global Roadmap for Healthy Longevity initiative, which they co-chaired. Fried has a long history of commitment to NAM and the field of public health and aging, and Wong has led national efforts in aging, cancer, and precision medicine. As co-chairs, Fried and Wong worked to fulfill and enhance the vision for the grand challenge, driving its far-ranging approach and showing careful consideration in selecting the first topic on which to focus. Beginning in 2019, Fried and Wong worked synergistically through three years of report development—including leading the committee during a global pandemic, pausing at times to allow the committee’s public health experts to focus on COVID-19 in their home nations—and publishing their groundbreaking report in August 2022. Their innovative approach to the roadmap started with a vision for healthy longevity in 2050, and then worked to determine the changes needed to make that vision a reality. The committee’s work has already had a significant impact—with launch events held in Singapore, the U.S., Saudi Arabia, Japan, and China, and planning underway for events in Africa and Latin America. The report has received international recognition and continues to shape the development of the NAM’s other grand challenges.
Gustav O. Lienhard Award for Advancement of Health Care

Robert Califf received the 2023 Gustav O. Lienhard Award for Advancement of Health Care for his instrumental role leading clinical trials and health outcomes research and his ability to translate research into advances in science, evidence-based medicine, and improved public health. The award, which recognizes Califf’s achievements with a medal, was presented at the NAM's annual meeting in October. Califf is the commissioner of the U.S. Food and Drug Administration.

Rhoda and Bernard Sarnat International Prize in Mental Health

Dennis Charney, John Krystal, and Husseini Manji are the recipients of the 2023 Rhoda and Bernard Sarnat International Prize in Mental Health for their discovery of the rapid antidepressant effects of ketamine and the identification of its efficacy for treatment-resistant depression, which led to the development of the antidepressant esketamine, the first mechanistically novel U.S. Food and Drug Administration-approved antidepressant in over 50 years.

The award, which recognizes their achievements with a medal and $20,000, was presented at the NAM's annual meeting in October. Charney is Anne and Joel Ehrenkranz Dean and professor in the departments of psychiatry, neuroscience, and pharmacological sciences at Icahn School of Medicine at Mount Sinai and president for Academic Affairs at Mount Sinai Health System. Krystal is Robert L. McNeil Jr. Professor of Translational Research, professor of psychiatry, neuroscience, and psychology, and chair, department of psychiatry, Yale University. Manji is a professor at Oxford University, visiting professor at Duke University, and co-chair, U.K. Government Mental Health Mission.
The team from the Center for Vaccine Development (CVD) at Texas Children's Hospital and Baylor College of Medicine is the recipient of the 2023 David and Beatrix Hamburg Award for Advances in Biomedical Research and Clinical Medicine for developing a safe, effective, and affordable recombinant protein-based COVID-19 vaccine technology.

The award, which recognizes their achievements with a medal and $50,000, was presented at the NAM's annual meeting in October to team leaders and CVD co-directors Peter J. Hotez, dean of the National School of Tropical Medicine at Baylor College of Medicine, and Maria Elena Bottazzi, senior associate dean of the National School of Tropical Medicine at Baylor College of Medicine. The award-winning team includes Wen-Hsiang Chen, assistant professor in pediatric tropical medicine at Baylor College of Medicine; Jason Kimata, associate professor of molecular virology and microbiology at Baylor College of Medicine; Jungsoon Lee, tropical medicine research director at Baylor College of Medicine; Zhuyun Liu, tropical medicine research director at Baylor College of Medicine; Jeroen Pollet, assistant professor of pediatric tropical medicine at Baylor College of Medicine; and Bin Zhan, associate professor of pediatric tropical medicine at Baylor College of Medicine.
The Cecil Awards recognize staff from throughout the National Academies who have demonstrated superb skill and commitment in furthering the mission of the NAM: to improve health for all by advancing science, accelerating health equity, and providing independent, authoritative, and trusted advice nationally and globally.

The following individuals were chosen for the 2023 Cecil Awards by a committee composed of NAM members and staff representatives from across the National Academies.

**Sandra H. Matthews Cecil Award for Administrative Excellence**

Iliaana Espinal, Senior Membership Associate, NRC Executive Office

Sandra H. Matthews supported three presidents throughout her tenure at the Institute of Medicine, in addition to contributing her guidance and wisdom to many other projects, including the National Academies’ African American Histories Program. She is the only staff member to have an award issued in her honor.

**Cecil Award for Individual Excellence**

Karen Helsing, Senior Program Officer, Health and Medicine Division

**Cecil Award for Excellence of a Group/Team**

Tracy Lustig, Laurene Graig, Nikita Varman, Rukshana Gupta, Kaitlyn Friedman (The National Imperative to Improve Nursing Home Quality Report, Health and Medicine Division)
The NAM administers the following fellowships and leadership programs to build future leadership capacity, promote innovation, and accelerate advances in health, medicine, and biomedical sciences.

**Robert Wood Johnson Foundation (RWJF) Health Policy Fellows** — offers the nation’s most comprehensive fellowship experience at the nexus of health, science, and policy in Washington, D.C.

**Distinguished Nurse Scholar-in-Residence** — provides a one-year immersion experience at the NAM for outstanding nurse leaders

**NAM Fellowships for Health Science Scholars** — offers ten distinct programs across diverse disciplinary areas of focus for high-potential early-career professionals

**International Fellowships** — provides an opportunity for emerging leaders from abroad to become directly involved with the work of the NAM and the National Academies and to contextualize our work to a global setting

**NAM Scholars in Diagnostic Excellence** — supports the implementation and dissemination of programs that advance diagnostic excellence and equity at the national level across disciplines

**Emerging Leaders in Health and Medicine** — supports exceptional individuals as they develop innovative, creative interdisciplinary approaches to challenges in health and medicine
2023–2024 RWJF Health Policy Fellows

NANCY CONNOLLY, MD, MPH
Clinical Assistant Professor of Medicine
University of Washington
Seattle, WA
Placement: Office of Senator Brian Schatz

AMY LEWIS GILBERT, JD, MPH
Chief Science Officer
Office of the Secretary
Indiana Family & Social Services Administration
Indianapolis, IN
Placement: Office of the Vice President of the United States

MIRIAM LAUGESEN, PHD
Associate Professor, Health Policy and Management
Columbia University
New York, NY
Placement: Office of Senator Elizabeth Warren

GRACE LIN, MD, MBA
Professor of Medicine and Vice Chair of Circulatory Failure
Mayo Clinic
Rochester, MN
Placement: Congressional Budget Office

LUCY MARCIL, MD, MPH
Associate Professor, Pediatrics
Boston Medical Center, Boston University School of Medicine
Boston, MA
Placement: Office of Representative Katherine Clark

SHAMBRA MULDER, PHD
Deputy Commissioner
Kentucky Department of Behavior Health
Kentucky Cabinet for Health and Family Services
Lexington, KY
Placement: Office of the Surgeon General

2023–2024 Distinguished Nurse Scholar-in-Residence

MARGARET WILMOTH, PHD, MSS, RN, FAAN
Executive Vice Dean, Associate Dean for Academic Affairs
UNC School of Nursing
University of North Carolina, Chapel Hill
Chapel Hill, NC
NAM Fellowships for Health Science Scholars

Norman F. Gant/American Board of Obstetrics and Gynecology (ABOG) Fellowship

MICHELLE DEBBINK, MD, PHD (2023-2025)
Assistant Professor, Department of Obstetrics and Gynecology
University of Utah School of Medicine
Salt Lake City, UT

Gilbert S. Omenn Fellowship

RAVI B. PARIKH, MD, MPP (2023–2025)
Assistant Professor, Department of Medical Ethics and Health Policy and Medicine
University of Pennsylvania
Staff Physician, Corporal Michael J. Crescenz VA Medical Center
Director, Human-Algorithm Collaboration Lab
Philadelphia, PA

ABEM Emergency Medicine Fellowship

CAMERON GETTEL, MD, MHS (2023–2025)
Assistant Professor, Department of Emergency Medicine
Clinical Investigator, Center for Outcomes Research and Evaluation
Co-Director, Emergency Scholars Fellowship
Yale University
New Haven, CT

CAITLIN RUBLEE, MD, MPH (2022–2024)
Assistant Professor, Department of Emergency Medicine
Assistant Professor, Department of Environmental and Occupational Health
University of Colorado School of Medicine
Colorado School of Public Health
Aurora, CO

James C. Puffer, M.D./American Board of Family Medicine (ABFM) Fellowship

ALICIA COHEN, MD, MSC, FAAFP (2022–2024)
Core Investigator
Center of Innovation in Long Term Services and Supports
VA Providence Healthcare System
Assistant Professor of Family Medicine, Alpert Medical School
Assistant Professor of Health Services, Policy, and Practice
School of Public Health
Brown University
Providence, RI

RUCHI M. FITZGERALD, MD, FAAFP (2022–2024)
Assistant Professor, Department of Family and Preventive Medicine
Assistant Professor, Department of Psychiatry and Behavioral Sciences
Associate Program Director, Addiction Medicine Fellowship
Rush University
Chicago, IL
Service Chief of Inpatient Addiction Medicine
PCC Community Wellness Center
Oak Park, IL

STEPHANIE GOLD, MD, FAAFP (2023–2025)
Assistant Professor, Department of Family Medicine
University of Colorado
Scholar, Eugene S. Farley, Jr. Health Policy Center
University of Colorado Anschutz Medical Campus
Aurora, CO

SEBASTIAN TONG, MD, MPH (2023–2025)
Assistant Professor, Department of Family Medicine
University of Washington
Seattle, WA
Greenwall Fellowship in Bioethics

SANKET DHRUVA, MD, MHS (2023–2025)
Assistant Professor, Section of Cardiology
Department of Medicine
University of California, San Francisco
Staff Physician
San Francisco VA Health Care System
San Francisco, CA

American Academy of Nursing (AAN) Fellowship

PAULE V. JOSEPH, PHD, MS, FNP-BC, CTN-B, FAAN (2022-2024)
Co-Director, National Taste and Smell Center
National Institutes of Health
Bethesda, MD

NAM Fellowship in Pharmacy

INMACULADA HERNANDEZ, PHARMD, PHD (2022-2024)
Professor, Division of Clinical Pharmacy
Skaggs School of Pharmacy and Pharmaceutical Sciences
University of California, San Diego
La Jolla, CA

NAM Fellowship to Advance State Health Policy

BEN WESTON, MD, MPH, FAEMS (2022-2024)
Associate Professor, Department of Emergency Medicine
Medical College of Wisconsin
Chief Health Policy Advisor, Milwaukee County
Director of Medical Services
Milwaukee County Office of Emergency Management
Milwaukee, WI

NAM Fellowship in Osteopathic Medicine

STERLING HARING, DO, MPH (2022-2024)
Pain Medicine Physician
Southwell-Tift Regional Medical Center
Tifton, GA

NAM-HKU Fellowship in Global Health Leadership

NASON TAN, MBBS, MPH (2023-2024)
Senior Lecturer
Division of Community Medicine and Public Health Practice
LKS Faculty of Medicine School of Public Health
The University of Hong Kong
Hong Kong Special Administrative Region, China

International Fellowships

NAM International Health Policy Fellowship

KIM HEI-MAN CHOW, PHD, MPHIL (2023–2025)
Assistant Professor
School of Life Sciences
The Chinese University of Hong Kong
Hong Kong Special Administrative Region, China
2023–2024 NAM Scholars in Diagnostic Excellence

This listing includes the titles of project proposals submitted by Scholars as part of their application.

AKSHAR ABBOTT, MD
Staff Ophthalmologist
VISN 23 Clinical Resource Hub
Veterans Health Administration
U.S. Department of Veterans Affairs
Minneapolis, MN
*“Promoting Health Equity and Diagnostic Excellence for Eye Care in Rural Communities Using Collaborative Models of Ocular Telehealth”*

RAJA-ELIE ABDULNOUR, MD
Director of Educational Innovation
Lead Editor of NEJM Healer
NEJM Group
Assistant Professor of Medicine, Pulmonary, and Critical Care Medicine
Brigham and Women’s Hospital
Harvard Medical School
Boston, MA
*“Classification of Diagnostic Reasoning Skills with Machine Learning for Precision Education”*

CECILIA CANALES, MD, MPH
Assistant Professor, Department of Anesthesiology and Perioperative Medicine
David Geffen School of Medicine
University of California, Los Angeles
Los Angeles, CA
*“Advancing Language Equity in Diagnosing Perioperative Neurocognitive Disorders”*

CHRISTINA CIFRA, MD, MS
Assistant Professor of Pediatrics
Boston Children’s Hospital
Harvard Medical School
Boston, MA
*“I-PASS-to-PICU: Effective Communication to Bridge the Diagnostic Process Across Inter-Facility Transitions to a Higher Level of Care”*

BHAVIKA KAUL, MD, MAS
Core Investigator
Veterans Affairs Center for Innovation in Quality, Effectiveness, and Safety
Staff Physician
Pulmonary and Critical Care Medicine
Michael E. DeBakey VA Medical Center
Assistant Professor of Medicine
Baylor College of Medicine
Houston, TX
*“Lung Texture Analysis: A Novel Machine Learning Tool to Reduce Diagnostics Delays Among Veterans with Pulmonary Fibrosis”*

BHARTI KHURANA, MD, MBA
Associate Professor of Radiology
Harvard Medical School
Founding Director, Trauma Imaging Research and Innovation Center
Department of Radiology
Brigham and Women’s Hospital
Boston, MA
*“Uncovering the Imaging, Clinical, and Social Diagnostic Determinants of Intimate Partner Violence”*

BRANDON MAUGHAN, MD, MHS, MSHP
Associate Professor, Department of Emergency Medicine
Oregon Health & Science University
Portland, OR
*“Identifying Gender and Racial Implicit Bias to Improve Diagnosis of Pulmonary Embolism”*

ANAND NARAYAN, MD, PHD
Associate Professor and Vice Chair of Equity, Department of Radiology
Associate Director of Diversity, Equity, and Inclusion
University of Wisconsin Carbone Cancer Center
Madison, WI
*“Leveraging Electronic Medical Records to Reduce Disparities in the Breast Cancer Diagnostic Process”*
VINITA PARKASH, MBBS, MPH
Associate Professor of Pathology, Obstetrics, Gynecology, and Reproductive Services
Yale University School of Medicine
New Haven, CT
“Understanding Patient Perspectives for Pathology and Laboratory Medicine Test-Related Diagnostic Errors to Design Processes for Improved Diagnostic Outcomes”

SUSAN PETERSON, MD
Associate Professor and Associate Medical Director for Patient Safety and Quality
Department of Emergency Medicine
Johns Hopkins University School of Medicine
Baltimore, MD
“Maximizing Individual Diagnostic Feedback in the Emergency Department”

2023 Emerging Leaders in Health and Medicine Scholars

ADEWOLE S. ADAMSON, MD, MPP
Assistant Professor of Internal Medicine, Division of Dermatology, Dell Medical School, University of Texas at Austin

PETER CROUGHAN, MD
Deputy Secretary and Interim State Health Officer, Louisiana Department of Health

CESAR DE LA FUENTE, PHD
Presidential Assistant Professor, University of Pennsylvania

ELIZABETH M. CESPEDES FELICIANO, SCD, SCM
Research Scientist, Kaiser Permanente Northern California Division of Research

CÉLINE R. GOUNDER, MD*
Senior Fellow and Editor-at-Large for Public Health, KFF Health News; Medical Contributor, CBS News; and Clinical Associate Professor of Medicine and Infectious Diseases, NYU Grossman School of Medicine and Bellevue Hospital

VALERIE VAUGHN, MD, MSC
Assistant Professor and Director of Hospital Medicine Research
Department of Internal Medicine
University of Utah School of Medicine
Salt Lake City, UT
“Addressing and Reducing Diagnostic Momentum in Hospitalized Adults with Suspected Infection”

JERREED D. IVANICH, PHD
Assistant Professor, Centers for American Indian and Alaska Native Health, Colorado School of Public Health, University of Colorado Anschutz Medical Campus

LUCINDA B. LEUNG, MD, PHD, MPH
Assistant Professor of Medicine and Psychiatry, David Geffen School of Medicine at the University of California, Los Angeles, and West Los Angeles VA Medical Center

AKINYEMI ONI-ORISAN, PHARMD, PHD
Assistant Professor, University of California, San Francisco

ANITA SHUKLA, PHD
Elaine I. Savage Associate Professor of Engineering, Brown University School of Engineering

JUDY WAWIRA GICHOYA, MBCHB, MS
Assistant Professor of Radiology, Emory University

*Elected to the NAM in 2023
Finances 2023

Revenues

- Grants, Contributions, & Other: $14M
- NRC Indirects: $3.7M
- Endowment Payout: $3.3M

Expenses

- Programs: $9.9M
- Membership & Council: $2.0M
- Health Policy Fellowships: $3.8M
- Operations: $5.4M
2023 Honor Roll of Donors
We gratefully acknowledge the support of private contributors to the National Academy of Medicine. The collective, private philanthropy of our members and friends helps to enhance the NAM’s mission to advance science, inform policy, and catalyze action to achieve human health, equity, and well-being. We acknowledge contributions made as personal gifts or as gifts facilitated by the donor through a donor advised fund, matching gift program, or family foundation.

Lifetime Giving Societies
We gratefully acknowledge the following members and friends who have made generous charitable lifetime contributions. Their collective, private philanthropy enhances the impact of the National Academies as advisors to the nation on matters of science, engineering, and medicine.

The Lincoln Society
In recognition of members and friends who have made lifetime contributions of $1 Million or more to the National Academy of Sciences, National Academy of Engineering, or National Academy of Medicine as of December 31, 2023. Boldfaced names are NAM members.

Bruce and Betty Alberts
Richard and Rita* Atkinson
Norman R. Augustine
Craig and Barbara Barrett
Jordan and Rhoda Baruch*
Stephen D. Bechtel, Jr.*
Arnold and Mabel Beckman*
Leonard Blavatnik
Harry E. Bovay, Jr.*
Donald Bren
George* and Virginia Bugliarello
Sigrid and Vint Cerf
Ralph J.* and Carol M. Cicerone
Harvey V. Fineberg and Mary E. Wilson
Bernard M. Gordon
Cecil H. Green*
John O. and Candace E. Hallquist
Michael and Sheila Held*
Jane E. Henney and Robert Graham
William R. and Rosemary B. Hewlett*
Ming and Eva Hsieh
Irwin and Joan Jacobs
Robert L.* and Anne K. James
Kenneth A. Jonsson*
Fred Kavli*
Daniel E. Koshland, Jr.*
Jill Howard Kramer
Tillie K. Lubin*
Whitney* and Betty MacMillan
John F. McDonnell
Robin K. and Rose M. McGuire
George P. Mitchell*
The Ambrose Monell Foundation
Gordon and Betty Moore
Philip* and Sima Needleman
Peter O'Donnell, Jr.*
Gilbert S. Omenn and Martha A. Darling
Jonathan B. and Donna J. Perlin
Robert* and Mayari Pritzker
Richard L. and Hinda G. Rosenthal*
Martine A. Rothblatt
Jack W. and Valerie Rowe
Fritz J. and Dolores H. Russ Prize Fund of the Russ College of Engineering and Technology at Ohio University
William Rutter
Dame Jillian Sackler
Raymond and Beverly Sackler*
Bernard and Rhoda Sarnat*
Leonard D. Schaeffer
Sara Lee and Axel Schupf
James H. and Marilyn Simons
John and Janet Swanson
Marci and James J. Truchard
Anthony J. Yun and Kimberly A. Bazar
Anonymous (1)

The Franklin Society
In recognition of members and friends who have made lifetime contributions of $500,000 to $999,999 to the National Academy of Sciences, National Academy of Engineering, or National Academy of Medicine as of December 31, 2023. Boldfaced names are NAM members.

John and Pat Anderson
Rose-Marie and Jack R. Anderson*
John and Elizabeth Armstrong
Kenneth E. Behring*
Gordon Bell
Elkan R.* and Gail F. Blout
Russell L. Carson
Charina Endowment Fund
James McConnell Clark*
Barry and Bobbi Coller
Ross and Stephanie Corotis
Henry David*
Richard Evans*
Eugene Garfield Foundation
Theodore Geballe*
Penny and Bill George, George Family Foundation
Christa and Detlef Gloge
William T.* and Catherine Morrison Golden
Wesley L. Harris
John L. Hennessy
Alexander Hollaender*
Thomas V. Jones*
Cindy and Jeong Kim
Douglas E. Koshland
Ralph and Claire Landau*
Asta and William W. Lang*
Marcia K. McNutt
Ruben F.* and Donna Mettler
Dane* and Mary Louise Miller
Oliver E. and Gerda K. Nelson*

*Deceased
The Curie Society

In recognition of members and friends who have made lifetime contributions of $250,000 to $499,999 to the National Academy of Sciences, National Academy of Engineering, or National Academy of Medicine as of December 31, 2023. Boldfaced names are NAM members.

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