

# New Voices in Sciences, Engineering, and Medicine

## Committee

### Bernard Amadei

#### Member

Distinguished Professor of Civil Engineering, University of Colorado Boulder

Dr. Amadei is Distinguished Professor and Professor of Civil Engineering at the University of Colorado at Boulder. He received his PhD in 1982 from the University of California at Berkeley. Dr. Amadei is the Founding Director of the Mortenson Center in Engineering for Developing Communities. He is also the Founding President of Engineers Without Borders - USA and the co-founder of the Engineers Without Borders-International network. Among other distinctions, Dr. Amadei is the 2007 co-recipient of the Heinz Award for the Environment; the recipient of the 2008 ENR Award of Excellence; the recipient of the 2015 Washington and ASCE OPAL awards; the recipient of the 2016 C. H. Dunn Award of the Construction Industry Institute; an elected member of the U.S. National Academy of Engineering and the National Academy of Construction; and an elected Senior Ashoka Fellow. He holds seven honorary doctoral degrees (UMass Lowell; Carroll College; Clarkson; Drexel; SUNY-ESF; Worcester Polytechnic Institute; and Technion in Israel). In 2013 and 2014, Dr. Amadei served as a Science Envoy to Pakistan and Nepal for the U.S. Department of State. Dr. Amadei holds a commercial pilot license (multi-engine land, instrument).

### Gilda A. Barabino

#### Member

Chair, AAAS Board of Directors

Gilda A. Barabino is President of Olin College of Engineering. Previously, she served as the Daniel and Frances Berg Professor and Dean of Engineering at The City College of New York's (CCNY) Grove School of Engineering. Prior to joining CCNY, she served as Associate Chair for Graduate Studies and Professor in the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory. At Georgia Tech she also served as the inaugural Vice Provost for Academic Diversity. Prior to Georgia Tech and Emory, she rose to the rank of Full Professor of Chemical Engineering and served as Vice Provost for Undergraduate Education at Northeastern University. She is a noted investigator in the areas of sickle cell disease, cellular and tissue engineering, and the role of race/ethnicity and gender in science and engineering. Her many honors include an honorary degree from Xavier University of Louisiana and the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, and she is a Fellow of several scientific societies. Dr. Barabino is an elected member of the National Academy of Engineering, the National Academy of Medicine, and the American Academy of Arts and Sciences. She chairs the National Academies Committee on Women in Sciences, Engineering, and Medicine and is the President-elect of the American Association for the Advancement of Science.

## Joel P. Baumgart

### Member

Associate Vice Provost, Emory University

Dr. Joel P. Baumgart is the Associate Vice Provost at Emory University and an Adjunct Assistant Professor of Pharmacology at Cornell University Weill Medical College. Joel was a U.S. Fulbright Scholar in Tanzania in 2015-16. Before his time abroad, Joel was an American Association for the Advancement of Science (AAAS) Science & Technology Policy Fellow in the Office of the Director at the National Institutes of Health and a Christine Mirzayan Science and Technology Fellow at the National Academy of Engineering. In addition to his policy experience, Joel is a Diplomate of the American Board of Toxicology and was selected to the inaugural class of the New Voices at the National Academies of Sciences, Engineering, and Medicine. He was the recipient of the Eric W. Lothman Award for Outstanding Achievement in Neuroscience, the Award for Excellence in Scholarship in the Sciences & Engineering, and the Early Achievement Alumni Award from the University of Virginia, the Dr. Louis B. Fink Capstone Award from the Johns Hopkins Bloomberg School of Public Health, and the Zora Neale Hurston Thesis Award for the Social Sciences from Columbia University. Dr. Baumgart has recently been awarded the MacVittie Emerging Leader Award from the American Association of University Administrators and was inducted into the Bouchet Society at Cornell University in 2012.

## John G. Hildebrand

### Member

Regents Professor Emeritus, University of Arizona

JOHN G. HILDEBRAND (NAS), originally trained in chemistry, biology and biochemistry, is a neuroethologist whose research focuses on the neural mechanisms and behavioral roles of olfaction in insects including agricultural pests and disease vectors. Dr. Hildebrand has received many honors and awards, including election to the German National Academy of Sciences 'Leopoldina' (1998), Norwegian Academy of Science and Letters (1999), American Academy of Arts and Sciences (2001), U.S. National Academy of Sciences (2007), Royal Norwegian Society of Sciences and Letters Academy (2011), American Philosophical Society (2014), Brazilian Academy of Sciences (2019), and The World Academy of Sciences (2022). Following earlier faculty appointments at Harvard and Columbia Universities, he joined the University of Arizona in Tucson in 1985 as the founding head of its Department of Neuroscience. He currently is Regents Professor Emeritus of Neuroscience. Colleagues cite Dr. Hildebrand for his advocacy for general education in STEM and for access to and success in scientific careers for women and minorities, in addition to his work in neuroscience. He has been International Secretary of the NAS since 2014.

## **Jorge A. Huete-Pérez**

### **Member**

Teaching Professor, Georgetown University

Dr. Jorge A. Huete-Pérez is one of Central America's top scholars in the biotechnology area and a highly regarded member of the scientific community internationally. He is currently a teaching professor at the Science, Technology and International Affairs Program (STIA) at Georgetown University's Edmund A. Walsh School of Foreign Service. He has more than two decades of experience working on science and technology policy with a focus on Latin America. In 2009 Dr. Huete, along with a select group of scientists, organized the Academy of Sciences of Nicaragua, becoming its founding president. In 2014, Dr. Huete was named Senior Vice President of Research and Social Outreach at the University of Central America, a position he still holds.

Dr. Huete has worked for a number of non-governmental organizations and international development agencies. Throughout the past three decades he has been a member of numerous international scientific organizations, including the Global Young Academy, the Executive Board of the Inter-American Network of Academies of Science, IANAS, and the V Regional Committee of the PEW Latin American Fellows Program in Biomedical Sciences. As an outspoken advocate for improving science education and the appropriate use of biotechnology for development, Dr. Huete has played a leading role in promoting international cooperation in STI in Central America.

Biotech research carried out in Dr. Huete's lab has included molecular parasitology and microbiology, agricultural pathogens, forensic DNA typing, bioprospecting for industrial enzymes and the impact of development on the environment. His current work at Georgetown examines the state of STI policy development in Central America and investigates programs that promote the growth of bio-economy industries in the region. Dr. Huete is fluent in Spanish, English, Russian and Portuguese.

## **Neil Jacobstein**

### **Member**

Chair of Artificial Intelligence and Robotics Track, Singularity University

Neil Jacobstein is the Chair of the Artificial Intelligence and Robotics Track at Singularity University. He is a founding Singularity Expert, and past President of Singularity. Jacobstein is a MediaX Distinguished Visiting Scholar at Stanford University, where his work since 2007 focuses on augmented decision systems. He is actively involved in applying AI to practical business problems. He was CEO of Teknowledge Corp, a pioneering AI company that did successful AI application work but was too early for the mass adoption we see today. Neil has practical and strategic AI/ML system building and technical R&D consulting experience with a long list of industrial and governmental partners, including: Deloitte, E&Y, PWC, Boeing, GM, Ford, BMW, GE, Applied Materials, Texas Medical Center, NASA, Defense Advanced Research Projects Agency, National Science Foundation, NIH, EPA, DOE, the U.S. Army, the U.S. Air Force, GM, Ford, Boeing, Applied Materials, Xero, National Institute of Standards and Technology, and more.

## Kei Koizumi

### Member

Former Principal Deputy Director for Science, Society and Policy at the White House Office of Science and Technology Policy

Kei Koizumi (he/his) is a longtime science-policy leader, science policy researcher, and social scientist in Washington, DC. From January 2021 to January 2025, he served as President Biden's appointee at the White House Office of Science and Technology Policy (OSTP), most recently as Special Assistant to the President and Principal Deputy Director for Science, Society, and Policy, earlier as Principal Deputy Director for Policy, Chief of Staff, and Acting Director. He was also Acting Executive Director of the National Science and Technology Council from 2022-2024. Before that, he served as Senior Advisor for Science Policy at the American Association for the Advancement of Science (AAAS) between 2017 and 2019. He was Assistant Director for Federal R&D, and Senior Advisor for the National Science and Technology Council, at OSTP from 2009 to 2016 in the Obama Administration. Before that, he was the longtime Director of the AAAS R&D Budget and Policy Program. Mr. Koizumi received his MA in International Science and Technology Policy at the George Washington University (where he has taught science policy) and his BA from Boston University in Political Science and Economics. He is a Fellow of the AAAS.

## Hussam Nabil Mahmoud

### Member

Craig E. Philip Endowed Chair of Engineering and Director, Vanderbilt Center for Sustainability, Energy and Climate, Vanderbilt University

Hussam Mahmoud is the Craig E. Philip Endowed Chair of Engineering and Director, Vanderbilt Center for Sustainability, Energy and Climate at Vanderbilt University. He obtained his BSc and MSc in civil engineering from the University of Minnesota and his PhD from the University of Illinois at Urbana-Champaign. Dr. Mahmoud's research is focused on sustainable and resilient infrastructure and communities with emphasis on developing socio-physical to capture the recovery of systems as influenced by human behavior and socio-economic policies. He has been developing models for risk-informed recovery of infrastructure with focus on hospitals and schools using complex systems analysis. He has authored over 250 publications and has given more than 120 presentations including 100 invited talks at national and international conferences and workshops. He has chaired and served on numerous technical committees, including the ASCE Committees on Fire Protection and on Multi-hazard Mitigation. Dr. Mahmoud is a Fellow of the Structural Engineering Institute and is the recipient of various awards, including the American Institute of Steel Construction early faculty career award, the American Iron and Steel Institute Robert J. Dexter Memorial Lecture award, and the Air Force summer faculty fellowship award. He has recently been selected by The National Academies among the 22 New Voices Cohort from across the U.S. He has been invited to various symposia by the U.S. National Academies, the Royal Academy of Engineering, and the Royal Institute of International Affairs. His research has received media coverage through citations and interviews in numerous venues, including Nature Climate Change, The U.S. National Academy of Engineering, Smithsonian Magazine, and CNN.

## Patricia Silveyra

### Member

Associate Professor, Indiana University

Dr. Patricia Silveyra is the Anthony D. Pantaleoni Eminent Scholar, Associate Professor, and Chair of the Department of Environmental and Occupational Health at Indiana University Bloomington School of Public Health. She earned her bachelor's and master's degrees in Molecular Biology and Biotechnology, and her PhD in Biochemistry, from the University of Buenos Aires, Argentina and did her postdoctoral training as a Rotary International Ambassadorial Scholar at Penn State College of Medicine. In 2013, she established her research program as an Assistant Professor, and between 2015-2016, she served as the Director for Diversity, Equity and Inclusion in Education at Penn State College of Medicine. From 2018-2020, she led the Biobehavioral Laboratory at the University of North Carolina at Chapel Hill, and in 2021, she joined Indiana University Bloomington. Dr. Silveyra has served in various national organizations and committees committed to increase representation of women and minorities in STEM, including the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), where she was board member and Treasurer. She was part of the first cohort of the New Voices program, and she served in the NASEM Board on Higher Education and Workforce (BHEW). Dr. Silveyra has received numerous awards for her research accomplishments, her mentoring of underrepresented and international trainees, and her efforts to promote diversity in STEM at the local, national, and international level.

## Gregory Weiss

### Member

Professor and Chair of Chemistry, New York University

Gregory Weiss earned his PhD from Harvard in 1997 for research in the laboratory of Prof. Stuart L. Schreiber focused on non-peptide ligands to MHC receptors. He next pursued post-doctoral studies with Dr. Jim Wells, then at Genentech. In 2000, he joined the faculty at UCI where his laboratory focuses on the interface between chemistry and biology, including bioconjugation, bioelectronics, and the dissection, and engineering of enzymes. In January 2026, he moved to NYU and become their Chair of the Department of Chemistry. His awards include Outstanding Professor in the School of Physical Sciences at UCI (elected by the graduating students), Beckman Foundation Young Investigator, and Fellow of the American Association for the Advancement of Science. He was awarded an Ig Nobel Prize in Chemistry for leading the team that "partially unboiled the egg." The Co-Founder of three biotech companies, including Debut Biotechnology, Greg was named UCI's Entrepreneurial Leader of the Year in 2018 and a Faculty Innovation Fellow in 2020.