

**National Science, Technology, and Security Roundtable  
Meeting 12**

**Pacific Regional Meeting  
Stanford University and the Hoover Institution**

**January 23-24, 2024**

**SPEAKER BIOGRAPHIES**

**Carol Burns** is responsible for the development, implementation, and stewardship of Lawrence Berkeley National Laboratory's research enterprise and serves as the lab's chief research liaison with the U.S. Department of Energy's (DOE) Office of Science, the University of California, the other national labs, and other key partners. She joined Berkeley Lab in August 2021. Burns brings more than 25 years of scientific leadership experience in a national laboratory setting, most recently serving as executive officer to the Deputy Director for Science, Technology, and Engineering at Los Alamos National Laboratory, assisting in oversight of line and DOE program organizations and coordinating the integration of science and technology strategy as well as associated investments and stewardship mechanisms. She is a recognized expert in f-element and radiochemistry with more than 100 peer-reviewed publications and invited book chapters. She has served on a number of editorial boards, review boards, and advisory panels. She pioneered the development of an entirely new class of high-valent uranium compounds containing metal-ligand multiple bonds, contributing substantially to the understanding of the electronic structure of the early actinides. She is the recipient of a number of awards for scientific achievement and leadership, most recently the American Chemical Society's Francis P. Garvan-John M. Olin Medal, recognizing distinguished service in chemistry by women chemists. She is a fellow of the American Association for the Advancement of Science. Burns has extensive experience in the systems enabling the research enterprise in the U.S. national laboratories, including a deep commitment to workforce development and diversity in STEM. She has experience in science policy at the national level, having served as a senior policy analyst in the Office of Science and Technology Policy. Burns received her B.A. in chemistry from Rice University and her Ph.D. in chemistry as a Hertz Foundation Fellow at UC Berkeley.

**Alexander A. Bustamante** is the Senior Vice President and Chief Compliance and Audit Officer for the University of California system. He leads the Office of Ethics, Compliance and Audit Services and oversees the University's corporate compliance, investigative, and audit programs.

Most recently, Mr. Bustamante and his team have dedicated significant effort to current and emerging compliance issues related to research security and emergent technology. His office also routinely conducts cyber-risk audits across the system to strengthen UC's critical infrastructure, protect federally funded research, and safeguard UC's large data sets used in operations and research, including machine

learning and artificial intelligence (e.g., Center for Data-driven Insights and Innovations). As co-chair of the UC Presidential Artificial Intelligence Council, he and his team created guidelines for the use of AI applications within the UC system.

Prior to coming to the University of California, Mr. Bustamante served as the Inspector General for the Los Angeles Police Department, where he was responsible for providing independent oversight of the Department. Mr. Bustamante also served as an Assistant United States Attorney for the Central District of California from 2002 to 2011, where he received the United States Attorney General's Award for Exceptional Service, the Department of Justice's highest award, for handling a landmark case involving the federal government's first use of civil rights statutes to combat racially motivated gang violence against African Americans.

Mr. Bustamante received his Juris Doctor degree from the George Washington University Law School and his bachelor's degree in Rhetoric from the University of California, Berkeley.

**Bill Dally** joined NVIDIA in January 2009 as Chief Scientist, after spending 12 years at Stanford University, where he was chairman of the Computer Science Department. Dally and his Stanford team developed the system architecture, network architecture, signaling, routing and synchronization technology that is found in most large parallel computers today. He was previously at the Massachusetts Institute of Technology from 1986 to 1997, where he and his team built the J-Machine and the M-Machine, experimental parallel computer systems that pioneered the separation of mechanism from programming models and demonstrated very low overhead synchronization and communication mechanisms. From 1983 to 1986, he was at California Institute of Technology (Caltech), where he designed the MOSSIM Simulation Engine and the Torus Routing chip, which pioneered "wormhole" routing and virtual-channel flow control. He is a member of the National Academy of Engineering, a Fellow of the American Academy of Arts & Sciences, a Fellow of the IEEE and the ACM, and has received the ACM Eckert-Mauchly Award, the IEEE Seymour Cray Award, and the ACM Maurice Wilkes award. He has published over 250 papers, holds over 120 issued patents, and is an author of four textbooks. Dally received a bachelor's degree in Electrical Engineering from Virginia Tech, a master's in Electrical Engineering from Stanford University and a Ph.D. in Computer Science from Caltech. He was a cofounder of Velio Communications and Stream Processors.

**Bruce DeBruhl** is an Associate Professor at Cal Poly San Luis Obispo in the Computer Science and Software Engineering Department. He is also affiliated with the Computer Engineering Program. DeBruhl's educational goal is to develop opportunities for diverse students to get hands on experience with security and privacy. DeBruhl research interests include wireless security, cyber-physical security, location privacy, and automotive security. He received his PhD and MS degrees in Electrical and Computer Engineering at Carnegie Mellon University Silicon Valley, under the guidance of Patrick Tague, and his BS degree in Electrical Engineering from Kettering University.

**Larry Diamond** is a Senior Fellow at the Hoover Institution and the Mosbacher Senior Fellow in Global Democracy at the Freeman Spogli Institute for International Studies (FSI) at Stanford University. He also chairs the Hoover Institution Project on Taiwan in the Indo-Pacific Region and is the principal investigator of the Global Digital Policy Incubator, part of Stanford's Cyber Policy Center. For more than six years, he directed FSI's Center on Democracy, Development, and the Rule of Law, where he now

leads its Program on Arab Reform and Democracy. During 2017–18, he cochaired, with Orville Schell, a working group formed of researchers from Hoover and from the Asia Society Center on US-China Relations, culminating in the report *China's Influence and American Interests: Promoting Constructing Vigilance* (published by the Hoover Institution Press in 2019). He is the founding coeditor of the *Journal of Democracy* and also serves as senior consultant at the International Forum for Democratic Studies of the National Endowment for Democracy. Diamond's research focuses on democratic trends and conditions around the world and on policies and reforms to defend and advance democracy. His latest book, *Ill Winds: Saving Democracy from Russian Rage, Chinese Ambition, and American Complacency*, analyzes the challenges confronting liberal democracy in the United States and around the world at this potential "hinge in history," and offers an agenda for strengthening and defending democracy at home and abroad. Diamond is professor by courtesy of Political Science and Sociology at Stanford University, where he teaches courses on democracy and American foreign policy. He is currently offering *Comparative Democratic Development* as a massive open online course (MOOC) on the edX platform. During 2002–03, Diamond served as a consultant to the U.S. Agency for International Development (USAID) and was a contributing author of its report *Foreign Aid in the National Interest*. He has also advised and lectured to universities and think tanks around the world, and to the World Bank, the United Nations, the State Department, and other governmental and nongovernmental agencies dealing with governance and development.

**Sigfrid Elschot** is Associate Professor of Aeronautics and Astronautics at Stanford University. Professor Elschot's research involves space weather detection and modeling for improved spacecraft designs, and advanced signal processing and electromagnetic wave interactions with plasma for ground-to-satellite communication systems. These topics fall under the Space Situational Awareness (SSA) umbrella that include environmental remote sensing using satellite systems and ground-based radar. Her current efforts include using dust accelerators and light-gas guns to understand the effects of hypervelocity particle impacts on spacecraft along with Particle-In-Cell simulations and using ground-based radars to characterize the space debris and meteoroid population remotely. She also has active programs in hypersonic plasmas associated with re-entry vehicles.

**Drew Endy** is Martin Family University Fellow in Undergraduate Education; Senior Fellow (by courtesy), Freeman Spogli Institute; Science & Senior Fellow, by courtesy, Hoover Institution; and Faculty Co-Director of Degree Programs, Hasso Plattner Institute of Design, Stanford University. His research teams pioneered amplifying genetic logic, rewritable DNA data storage, reliably-reuseable standard biological parts, and genome refactoring. Endy helped launch the new undergraduate majors in bioengineering at both MIT and Stanford; he also co-founded the iGEM competition, a global genetic engineering "olympics" now engaging over 6,000 students annually ([igem.org](http://igem.org)). Endy co-founded the BioBricks Foundation, a public-benefit charity supporting free-to-use standards and technology that enable the engineering of biology. In 2013 the White House recognized Endy for his work on open-source biotechnology and, more recently, he received an honorary doctorate from the Technische Universiteit Delft. Endy has served on the U.S. National Science Advisory Board for Biosecurity and the Committee on Science, Technology, & Law. He currently serves on the World Health Organization's Smallpox Advisory Committee. Endy was a co-founder of Gen9, Inc., a DNA construction company; he returned to serve as a director while Gen9 was successfully acquired. Endy worked briefly with the Rapid Evaluation team at Google [X] and also served on the building project team for the Shriram Center at Stanford. He

is a founding co-director of the NIST/Stanford Joint Initiative for Metrology in Biology. *Esquire* magazine recognized Drew as one of the 75 most influential people of the 21st century. Endy's research group works to strengthen the foundations and expand the frontiers of synthetic biology. Their foundational work includes (i) advancing reliable reuse of bio-measurements and -materials via standards that enable coordination of labor, and (ii) developing and integrating measurement and modeling tools for representing and analyzing living matter at whole-cell scales. The lab's work beyond the frontiers of current practice includes (iii) bootstrapping biotechnology tools in unconventional organisms (e.g., mealworms, wood fungus, skin microbes), and (iv) exploring the limits of whole-genome recoding and building cells from scratch. The Endy lab also supports strategy and policy work related to biosafety, security, economy, equity, justice, and leadership.

**Aine Hanly**, PhD, serves as Chief Technology Officer at Vir Biotechnology, where she is responsible for overseeing the Company's technical operations. Her purview includes product and process development, supply chain, manufacturing, quality and CMC strategy for multi-modality products addressing the world's most serious infectious diseases including COVID-19, hepatitis B virus, influenza A and human immunodeficiency virus. Hanly is also responsible for the company's Data Strategy where the integration of Data Science, IT and functions converge to enable advancement of Virs pipeline. Hanly's career in the biomanufacturing industry, which has spanned roles in the UK, Ireland and the US, has been dedicated to advancing innovative solutions to accelerate commercialization and the delivery of medicines to patients. Prior to joining Vir, Hanly served as the Vice President of Process Development for Amgen, accountable for clinical manufacturing and global supply of clinical trial materials. During her nearly decade-long tenure, she led teams enabling the commercialization of Amgen's pipeline products as well as providing technical support for ongoing commercial manufacturing operations. Additionally, as site head at Amgen's Cambridge facility, Hanly led the site's transformation and staff growth, and together with the research and development team, greatly increased Amgen's partnerships and presence within the local Cambridge ecosystem. She also worked for more than 10 years at Pfizer (formerly, Wyeth), where she held roles of increasing responsibility in analytical R&D, process development, quality and product supply strategy. Hanly received her bachelor's degree in biological chemistry and a PhD in physical organic chemistry, from the University of Ulster, Northern Ireland. She completed her post-doctoral fellowship at Creighton University School of Medicine before joining the collaborative research wing at Yale University and CuraGen Corporation as lead scientist studying gene isolation and subsequent confirmation using a variety of molecular biology techniques.

**Siegfried Hecker** is a professor emeritus (research) in the Department of Management Science and Engineering and a senior fellow emeritus at the Freeman Spogli Institute for International Studies (FSI). He was co-director of CISAC from 2007-2012. From 1986 to 1997, Dr. Hecker served as the fifth Director of the Los Alamos National Laboratory. Hecker is an internationally recognized expert in plutonium science, global threat reduction, and nuclear security. Hecker's current research interests include nuclear nonproliferation and arms control, nuclear weapons policy, nuclear security, the safe and secure expansion of nuclear energy, and plutonium science. At the end of the Cold War, he has fostered cooperation with the Russian nuclear laboratories to secure and safeguard the vast stockpile of ex-Soviet fissile materials. In June 2016, the Los Alamos Historical Society published two volumes edited by Hecker. The works, titled *Doomed to Cooperate*, document the history of Russian-U.S. laboratory-to-

laboratory cooperation since 1992. Hecker's research projects at CISAC focus on cooperation with young and senior nuclear professionals in Russia and China to reduce the risks of nuclear proliferation and nuclear terrorism worldwide, to avoid a return to a nuclear arms race, and to promote the safe and secure global expansion of nuclear power. He also continues to assess the technical and political challenges of nuclear North Korea and the nuclear aspirations of Iran. Hecker joined Los Alamos National Laboratory as graduate research assistant and postdoctoral fellow before returning as technical staff member following a tenure at General Motors Research. He led the laboratory's Materials Science and Technology Division and Center for Materials Science before serving as laboratory director from 1986 through 1997, and senior fellow until July 2005. Among his professional distinctions, Hecker is a member of the National Academy of Engineering; foreign member of the Russian Academy of Sciences; fellow of the TMS, or Minerals, Metallurgy and Materials Society; fellow of the American Society for Metals; fellow of the American Physical Society, honorary member of the American Ceramics Society; and fellow of the American Academy of Arts and Sciences. His achievements have been recognized with the Presidential Enrico Fermi Award, the 2020 Building Bridges Award from the Pacific Century Institute, the 2018 National Engineering Award from the American Association of Engineering Societies, the 2017 American Nuclear Society Eisenhower Medal, the American Physical Society's Leo Szilard Prize, the American Nuclear Society's Seaborg Medal, the Department of Energy's E.O. Lawrence Award, the Los Alamos National Laboratory Medal, among other awards including the Alumni Association Gold Medal and the Undergraduate Distinguished Alumni Award from Case Western Reserve University, where he earned his bachelor's, master's, and doctoral degrees in metallurgy.

**Larry James** has served as Deputy Director and Chief Operating Officer of NASA's Jet Propulsion Laboratory (JPL) since 2013. As the Laboratory's Chief Operating Officer, he is responsible for the day-to-day management of JPL's resources and activities. This includes managing the Laboratory's solar system exploration, Mars, astronomy, physics, Earth science, interplanetary network programs, and all business operations. These activities employ 6,000 scientists, engineers, technicians, and business support personnel, generating \$2.6 billion in annual revenues. Prior to his retirement from active duty in 2013, Lt. Gen. James was the Air Force Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance at the Pentagon. He was responsible to the Secretary and Chief of Staff of the Air Force for policy formulation, planning, evaluation, oversight, and leadership of Air Force intelligence, surveillance and reconnaissance capabilities and led more than 20,000 Intelligence, Surveillance and Reconnaissance officers, enlisted and civilians across the Air Force ISR Enterprise. James received his Bachelor of Science in Astronautical Engineering (1978) from the US Air Force Academy (Distinguished Graduate) and his Master of Science in Aeronautics and Astronautics (1983) from the Massachusetts Institute of Technology in Cambridge, MA. He was also a Draper Fellow at the Charles Stark Draper Laboratory in Cambridge, MA and is a Fellow of the American Institute of Aeronautics and Astronautics.

**Christopher Keane** is Senior Advisor to the Provost at Washington State University (WSU) and Professor of Physics. From July 2014 to December 2023, he served as Vice President for Research at WSU and Vice Chancellor for Research of the WSU Pullman campus. He led WSU efforts to expand research and scholarship opportunities for WSU faculty and staff, bring WSU innovations to the marketplace, improve the University's research infrastructure and operational performance, and enhance research funding. During his tenure WSU tripled its large research awards and expanded partnerships with other leading research institutions. Prior to joining WSU in 2014, Keane performed a

variety of scientific and leadership roles related to inertial confinement fusion (ICF) at the Lawrence Livermore National Laboratory (LLNL), ultimately serving as Director of the National Ignition Facility (NIF) User Office. Keane also served in the U.S. Department of Energy National Nuclear Security Administration as a member of the Senior Executive Service, where he led the U.S. ICF Program, including construction of the stadium-sized NIF laser and development of the NIF ignition program. Keane holds B.S. degrees in Physics and Engineering from the University of Rochester, and a PhD in astrophysics from Princeton University. He is a Fellow of the American Association for the Advancement of Science (AAAS), and a member of the Washington State Academy of Sciences and the American Physical Society. He is the recipient of the NNSA Silver Medal, the Defense Programs Award of Excellence, and the Fusion Power Associates Special Award.

**Rebecca Spyke Keiser**, PhD, is Chief of Research Security Strategy and Policy at the National Science Foundation (NSF). She has served as head of OISE since coming to NSF in 2015. The office promotes an integrated, international strategy and manages internally focused programs that are innovative, catalytic and responsive to a broad range of NSF and national interests. Keiser is the first CRSSP, a position established in March 2020 to ensure the security of federally funded research while maintaining open international collaboration. In this role, Keiser provides the NSF director with policy advice on all aspects of research security strategy. She also leads NSF's efforts to develop and implement efforts to improve research security and the agency's coordination with other federal agencies and the White House.

**Harriet Kung** is the Deputy Director for Science Programs in the Office of Science at the U.S. Department of Energy (DOE). As Deputy Director for Science Programs, Kung is the senior career official providing scientific and management direction and oversight for the SC research programs, including Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, and Nuclear Physics, as well as other supporting functions and offices. Kung served in various leadership roles in Basic Energy Sciences, the largest program in Office of Science, from 2002 - 2020. Before joining DOE in 2002, Dr. Kung was a technical staff member and a project leader at Los Alamos National Laboratory. Her research focused primarily on nanoscale materials and high temperature superconductivity. With over 20 years of service in the Department of Energy, Kung led and cultivated one of the Nation's premier physical sciences programs. During her tenure, she developed a new basic research paradigm in team-science approach to advance DOE's science and energy missions by spearheading a decade-long strategic planning initiative to assure timely, science-based solutions. She also positioned the Office of Science as a National Quantum Initiative leader by establishing strategies to capitalize on strong synergy between disciplines such as physics, biology, materials, and engineering, as well as the world-leading scientific user facilities. She has chaired and co-chaired high-level interagency working groups to develop and implement national science priorities. Kung received her MS and PhD degrees from Cornell University. She is the recipient of numerous awards including the Presidential Meritorious Executive Rank Award in 2009 and the Distinguished Executive Rank Award in 2022.

**Steve Laderman** is the Vice President for Agilent Research Laboratories, part of the CTO organization. In Labs, Agilent looks beyond the evolution of current products and platforms to create the technologies and applications that will underlie tomorrow's breakthroughs enabling Agilent customers to answer new questions at the leading edge of life science research, diagnostics, and the applied

markets. The company's horizon is broad, encompassing synergies across Agilent and seeding new businesses to create competitive differentiation and compelling value for current and future customers and shareholders.

Laderman received his undergraduate degree in physics from Wesleyan University and his Ph.D. in materials science from Stanford University. After taking on roles of increasing responsibility in research and development advancing a wide range of high performance electronic and optoelectronic devices within the Hewlett-Packard Company, Laderman redirected his efforts to emerging opportunities in the life sciences. Since then, he has managed interdisciplinary teams comprising molecular and cellular biologists, synthetic, analytical, and physical chemists, computational biologists, computer scientists, mathematicians, physicists, and engineers, who together helped Agilent become the company it is today.

**Michael S. Lauer**, MD, is the Deputy Director for Extramural Research at the National Institutes of Health (NIH), where he serves as the principal scientific leader and advisor to the Director of the NIH on all matters relating to the substance, quality, and effectiveness of the NIH extramural research program and administration. He received education and training at Rensselaer Polytechnic Institute, Albany Medical College, Harvard Medical School, Harvard School of Public Health, and the NHLBI's Framingham Heart Study. He spent 14 years at Cleveland Clinic as Professor of Medicine, Epidemiology, and Biostatistics. During his tenure at the Clinic, he led a federally funded internationally renowned clinical epidemiology program that applied big data from large-scale electronic health platforms to questions regarding the diagnosis and management of cardiovascular disease. From 2007 to 2015 he served as a Division Director at the National Heart, Lung, and Blood Institute (NHLBI), where promoted efforts to leverage big data infrastructure to enable high-efficiency population and clinical research and efforts to adopt a research funding culture that reflected data-driven policy. He has received numerous awards including the NIH Equal Employment Opportunity Award of the Year and the Arthur S. Flemming Award for Exceptional Federal Service in recognition of his efforts to grow a culture of learning and accountability.

**Abbas Milani** is a research fellow at the Hoover Institution and the Hamid & Christina Moghadam Director of Iranian Studies at Stanford University. He joined Stanford in 2002 and is one of the founding co-directors of the Iran Democracy Project. His expertise is U.S.-Iran relations as well as Iranian cultural, political, and security issues. Until 1986, he taught at Tehran University's Faculty of Law and Political Science, where he was also a member of the Board of Directors of the university's Center for International Relations. After moving to the United States, he was for fourteen years the Chair of the Political Science Department at the Notre Dame de Namur University. For eight years, he was a visiting Research Fellow in University of California, Berkeley's Middle East Center.

**Michael McFaul** is the Director at the Freeman Spogli Institute for International Studies, the Ken Olivier and Angela Nomellini Professor of International Studies in the Department of Political Science, and the Peter and Helen Bing Senior Fellow at the Hoover Institution. He joined the Stanford faculty in 1995. McFaul also is an International Affairs Analyst for *NBC News* and a columnist for *The Washington Post*. He served for five years in the Obama administration, first as Special Assistant to the President and Senior Director for Russian and Eurasian Affairs at the National Security Council at the White House (2009-2012), and then as U.S. Ambassador to the Russian Federation (2012-2014). He has authored several books, most

recently the *New York Times* bestseller *From Cold War to Hot Peace: An American Ambassador in Putin's Russia*. Earlier books include *Advancing Democracy Abroad: Why We Should, How We Can; Transitions To Democracy: A Comparative Perspective* (eds. with Kathryn Stoner); *Power and Purpose: American Policy toward Russia after the Cold War* (with James Goldgeier); and *Russia's Unfinished Revolution: Political Change from Gorbachev to Putin*. He is currently writing a book called *Autocrats versus Democrats: Lessons from the Cold War for Competing with China and Russia Today*. He teaches courses on great power relations, democratization, comparative foreign policy decision-making, and revolutions.

McFaul received his B.A. in International Relations and Slavic Languages and his M.A. in Soviet and East European Studies from Stanford University in 1986. As a Rhodes Scholar, he completed his D. Phil. in International Relations at Oxford University in 1991. His DPhil thesis was *Southern African Liberation and Great Power Intervention: Towards a Theory of Revolution in an International Context*.

**Bindu Nair**, PhD, is Director of Basic Research at the U.S. Department of Defense, within the Office of the Secretary of Defense (OSD). In this role, she is responsible for oversight and coordination of the Department's \$2.2 billion investment in basic science. This investment supports high risk and high pay-off basic research projects in fields including physical science, life science, environmental science, applied mathematics, and others that probe the limits of today's technologies and discover new phenomena and know-how that may ultimately lead to future technologies for the Department. Prior to her assignment to OSD, Dr. Nair worked for the Department of the Army with oversight responsibilities over the science and technology program in power and energy. She has worked in the DoD laboratory system at Natick Soldier Research, Development and Engineering Center as well as in private industry at Foster Miller (Waltham, MA). Her research expertise is in the field of Material Science and Engineering including nanomaterials, polymers, and organic electronic materials, and she has taught graduate level courses in Polymer Synthesis. She has published primarily in membrane and materials development fields and holds patents in fuel cell technologies. Dr. Nair holds a BSc from the University of Florida and a PhD from the Massachusetts Institute of Technology in Materials Science and Engineering.

**Alison Nordt** is the Director for Space Science and Instrumentation at Lockheed Martin's Advanced Technology Center. Her work involves maturing technology and developing instruments to support current and future space science missions. One such instrument that Nordt has worked on is NIRCam – the Near Infrared Camera – which is the primary imager on the James Webb Space Telescope that launched in 2021. The Webb Telescope is NASA's successor to the Hubble and Spitzer telescopes and is the largest and most powerful space telescope ever built. Nordt was there with NIRCam from the beginning of its development in 2002, starting with structural analysis, through duties as program manager and principal engineer. NIRCam has helped Webb make history by capturing the oldest galaxies ever observed! In her work on the program, Nordt was responsible for the design, development, testing and delivery of the NIRCam instrument including optics, structures, mechanisms, electronics and software. In 2023, Nordt received the AIAA Engineer of the Year Award from the American Institute of Aeronautics and Astronautics for her work on spearheading the development of James Webb Space Telescope's primary imager.

**Dave Orr** is the Director of Engineering for Artificial Intelligence (AI) Safety and Alignment at Google DeepMind. Since 2012, he has worked at Google as a Product Manager for Language AI, a Group Product



Manager for Assistant NLP, and a Director of Product Management. He also served as the Co-founder of 13 Parsecs, a cloud-based product management app. From 2005-2008, Orr worked for Yahoo as a Research Scientist where he identified and tested features in multiple machine learning environments, along with creating and overseeing a system for gathering judgement data from a team of editors. Prior to Yahoo, Orr was Director of Technology at Startup Inc. where he was responsible for building and managing software design, development, and operations. He also assisted senior management with transitioning to a new business model when the company adapted a new business plan. As Senior Software Engineer at CyberSource Corporation in 1995, Orr developed fraud detection software to identify valid credit card transactions and a developed an e-commerce site known as Beyond.com. Orr received his B.S. in Symbolic Systems; Artificial Intelligence in 2005.

**William Pike** is the Chief Science and Technology Officer for Pacific Northwestern National Laboratory's (PNNL) National Security Directorate. He guides organizational strategy and investments across the laboratory's diverse national security portfolio. His office is responsible for establishing long-term vision and R&D directions for national security challenges in AI and advanced computing, nonproliferation and nuclear science, chem/bio defense, and systems engineering and deployment. He guides organizational processes for connecting geopolitical and technological trends with market needs to deliver mission impact for PNNL's sponsors in the Department of Energy, Department of Defense, Department of Homeland Security, the Intelligence Community, and the Department of State. Previously, Pike served as the Division Director for Computing and Analytics at PNNL for eight years, where he grew an R&D capability in advanced computing, data science, and cybersecurity to over 550 staff. Through a growing footprint in downtown Seattle, his team connected US Government R&D needs with the innovation and partnership ecosystem in the Pacific Northwest. Pike was also the R&D coordinator for the National Visualization and Analytics Center and has led programs in intelligence analysis and threat discovery, disaster response, cyber situational awareness, and identity management, commercializing many of these capabilities. He currently serves on advisory boards for several academic data science and computer science programs. Pike earned a bachelor's degree in geoscience from Carleton College and a PhD from Penn State. He was recognized as an Oppenheimer Science and Energy Leadership Fellow in 2022.

**Condoleezza Rice** is an American diplomat and political scientist who is the current director of the Hoover Institution at Stanford University. A member of the Republican Party, she previously served as the 66th United States secretary of state from 2005 to 2009 and as the 19th U.S. national security advisor from 2001 to 2005. Rice was the first female African-American secretary of state and the first woman to serve as national security advisor. Until the election of Barack Obama as president in 2008, Rice and her predecessor, Colin Powell, were the highest-ranking African Americans in the history of the federal executive branch (by virtue of the secretary of state standing fourth in the presidential line of succession). At the time of her appointment as Secretary of State, Rice was the highest-ranking woman in the history of the United States to be in the presidential line of succession. She obtained her bachelor's degree from the University of Denver and her master's degree from the University of Notre Dame, both in political science. In 1981, she received a PhD from the School of International Studies at the University of Denver.<sup>[1][2]</sup> She worked at the State Department under the Carter administration and served on the National Security Council as the Soviet and Eastern Europe affairs advisor to President George H. W. Bush during the dissolution of the Soviet Union and German reunification from

1989 to 1991. Rice later pursued an academic fellowship at Stanford University, where she later served as provost from 1993 to 1999. On December 17, 2000, she joined the Bush administration as President George W. Bush's national security advisor. In Bush's second term, she succeeded Colin Powell as Secretary of State, thereby becoming the first African-American woman, second African-American after Powell, and second woman after Madeleine Albright to hold this office. Following her confirmation as secretary of state, Rice pioneered the policy of Transformational Diplomacy directed toward expanding the number of responsible democratic governments in the world and especially in the Greater Middle East. That policy faced challenges as Hamas captured a popular majority in Palestinian elections, and influential countries including Saudi Arabia and Egypt maintained authoritarian systems (with U.S. backing). While in the position, she chaired the Millennium Challenge Corporation's board of directors. In March 2009, Rice returned to Stanford University as a political science professor and the Thomas and Barbara Stephenson Senior Fellow on Public Policy at the Hoover Institution. In September 2010, she became a faculty member of the Stanford Graduate School of Business and a director of its Global Center for Business and the Economy. In January 2020, it was announced that Rice would succeed Thomas W. Gilligan as the next director of the Hoover Institution on September 1, 2020. She is on the Board of Directors of Dropbox and Makena Capital Management, LLC.

**Richard Saller** is the President of Stanford University. As president, Dr. Saller's emphasis is on sustaining excellence in Stanford's core mission of teaching and research and maintaining the university's strength across disciplines. He is dedicated to ensuring that faculty have the resources they need to make new discoveries and excel in teaching. He is also committed to ensuring that students have opportunities to dive deeply into their chosen fields, grow in their knowledge and skills, and build supportive and diverse communities during their years at Stanford.

Saller is scholar of Roman history who has previously served in several academic leadership roles, including as dean of the School of Humanities and Sciences at Stanford, provost of the University of Chicago, and dean of the Social Sciences Division of the University of Chicago. A dedicated teacher, Saller has also published widely on Roman social, economic, and cultural history. He earned his undergraduate degrees in history and ancient Greek at the University of Illinois, Urbana-Champaign in 1974, and his PhD at the University of Cambridge in 1978. He was a research fellow at Cambridge and has held faculty positions at Swarthmore College and the University of Chicago, where he was awarded the Quantrell Award for Excellence in Undergraduate Teaching in 1992. In 1994, Saller was appointed Dean of the Social Sciences Division at the University of Chicago. From 2002 to 2006, Saller served as the tenth provost of the University of Chicago. As provost, he oversaw the expansion of the university's humanities and social sciences library and the construction of new residences, maintained high standards for faculty recruitment, and supported the development of a new university art center. Saller came to Stanford in 2007 to serve as Dean of the School of Humanities and Sciences. He held this position through August 2018, when he stepped down to return to teaching. As dean of Stanford's largest school, Saller was a strong advocate for the humanities, arts, and sciences. He recruited and retained world-class faculty, bolstered enrollment in humanities courses, increased endowed chairs and graduate fellowships, and focused on providing researchers with the resources they need to make significant contributions to their fields. He also oversaw the construction of major new arts and sciences facilities. From 2021-2023, Saller served as chair of the Classics Department at Stanford. Since 2022, he

has also been faculty director of the Stanford Distinguished Careers Institute, a program that helps accomplished leaders in mid-life reinvent their lives and careers with social impact in mind.

**Edi Schamiloglu** joined the University of New Mexico (UNM) as Assistant Professor in 1988 and he is currently Distinguished Professor of Electrical and Computer Engineering. He is also the *Special Assistant to the Provost for Laboratory Relations*. He lectured at the U.S. Particle Accelerator School (Harvard University in 1990 and at MIT in 1997). He coedited *Advances in High Power Microwave Sources and Technologies* (IEEE Press/Wiley, New York, NY, 2001) (with R.J. Barker), he has co-authored *High Power Microwaves, 3<sup>rd</sup> Ed.* (CRC Press, Boca Raton, FL, 2016) (with J. Benford and J. Swegle), and he is coediting *Advances in High Power Microwave Sources and Technologies using Metamaterials* (with J.W. Luginsland, J.A. Marshall, and A. Nachman) (IEEE Press/Wiley, New York, NY, 2021). Schamiloglu has co-authored over 170 refereed journal papers, over 270 reviewed conference papers, and 8 patents. His publications have been cited over 8000 times. His h-index is 38 and his i10-index is 141. He has been PI on over \$35M of contracts and grants at UNM. Professor Schamiloglu is a Fellow of the IEEE, a Fellow of the American Physical Society, and an EMP Fellow (sponsored by the Summa Foundation). He was awarded the 2013 IEEE Nuclear and Plasma Sciences Society's Richard F. Shea Distinguished Member Award "For outstanding contributions to the IEEE Nuclear and Plasma Sciences Society through its Pulsed Power Science and Technology and Plasma Science and Applications Technical Committees," the 2014 IEC '1906 Award' "For his valuable technical contributions to SC77C projects and specifically for his technical contributions with respect to HPEM source technologies to support the standardization of test techniques for HPEM/IEMI," the 2015 IEEE NPSS PPST Peter Haas Award "For research in the area of pulsed power, beams, and microwaves, and for his dedicated service to the current and future pulsed power community through his leadership and educational endeavors," the 2017 UNM Senior Faculty Research Excellence Award, and the 2019 (inaugural) IEEE NPSS Magne "Kris" Kristiansen Award "For outstanding contributions in experimental nuclear and plasma science."

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