

**NATIONAL
ACADEMIES** *Sciences
Engineering
Medicine*

**Assessing Research Security Efforts in Higher Education
A Meeting of Experts**

National Academy of Sciences Building
Room 125
2101 Constitution Avenue, NW
Washington, DC 20418

September 4, 2025

SPEAKER BIOGRAPHIES

Deanna D. Caputo is Chief Scientist for Insider Threat Capabilities and Senior Principal Behavioral Psychologist at the MITRE Corporation, applying deep expertise in the behavioral sciences to insider risk and threat efforts in government and critical infrastructure industries, including higher education. Caputo is an internationally recognized expert in insider threat, and the intersection of cybersecurity and behavioral science. She has 30 years of experience designing, conducting, and analyzing research with human participants using experimental, quantitative, and qualitative analyses. In 2008 she built and led MITRE's Human Behavior and Cybersecurity capability and team focused on insider risk, usable security/technology adoption, cyber risk perceptions/awareness, and cybersecurity exercise assessment.

Caputo built and now leads MITRE's Insider Threat Research and Solutions Capability and multi-disciplinary team. She created and pioneered development of Insider Threat applied research with 20 IP disclosures, and an air-gapped, secure MITRE Insider Threat Lab. She uses behavioral methodologies and analytics to reduce insider threats by analyzing how human behavior manifests in human, organizational, and cyber sensors, and developing solutions to identify and change employee attitudes, intentions, and/or behaviors. Caputo holds a bachelor's in psychology from Santa Clara University and doctorate in social and personality psychology from Cornell University.

Tam Dao serves as the Assistant Vice President (AVP) for Research Security at Rice University, where he is responsible for formulating and executing the institution's strategy for research security. His role involves collaborating with faculty, staff, and students across the university to protect the intellectual property, knowledge, and outcomes originating from Rice University's research endeavors against both foreign and domestic threats. Additionally, he acts as the primary liaison for law enforcement and intelligence agencies seeking involvement or assistance from Rice University.

Before joining Rice University, Dao held various positions at the Federal Bureau of Investigation (FBI). In 2020, he was promoted to oversee the FBI's Counterintelligence Task Force, leading initiatives to expose, prevent, and investigate economic espionage. He has conducted over 300 classified briefings for senior White House staff, members of Congress, heads of U.S. federal funding agencies, and university administrators. His 2014 investigation into malign foreign talent programs resulted in the identification of over 400 instances of foreign influence on extramural research and the recognition of more than 200 scientists at more than 65 academic

institutions with foreign influence concerns. Dao is widely acknowledged as a subject matter expert on research security, economic espionage, and foreign influence on federally-funded research. He is also a certified FBI Hostage Negotiator and regularly instructs at the FBI's Crisis Negotiation Unit and the FBI's Counterintelligence Training Center. In 2021, he was honored with the FBI's Medal of Excellence for his contributions to counterintelligence.

Prior to his tenure at the FBI, Dao held a tenure-track professorship at the University of Houston. He is the recipient of the Walter G. Klopfer Award for distinguished contributions to the literature in personality assessment and the University of Houston Faculty Research Excellence Award for outstanding research and scholarship. Dao has received federal and state grants for his research and has authored over 50 scientific articles and book chapters on personality assessment. He holds a bachelor's degree in psychology from the University of Texas at Austin, a master's from the University of Pennsylvania, and a doctorate from Florida State University. He also completed a postdoctoral fellowship in advanced psychology and psychiatry at the Michael E. DeBakey Veterans Affairs Medical Center in Houston.

The Honorable **Christine Fox** is a Senior Fellow at the Johns Hopkins University Applied Physics Laboratory. She also serves on many governance and advisory boards for both government and private industry including the National Infrastructure Advisory Board, the Strategic Competitive Studies Project, the Atlantic Council, and Palantir Technologies. Previously, she was the Assistant Director for Policy and Analysis at JHU/APL, a position she held from 2014 to early 2022. Before joining APL, Fox served as Acting Deputy Secretary of Defense from 2013 to 2014 and as Director of Cost Assessment and Program Evaluation (CAPE) from 2009-2013. As Director, CAPE, Fox served as chief analyst to the Secretary of Defense. Prior to her DoD positions, she served as president of the Center for Naval Analyses from 2005 to 2009, after working there as a research analyst and manager since 1981. Fox holds a bachelor and Master of Science degree from George Mason University.

Kristopher E. Gardner is the Director for Science and Technology (S&T) Protection in the S&T Program Protection office in the Office of the Under Secretary of Defense for Research and Engineering. Gardner is responsible for developing options for protecting emerging S&T to maintain U.S. Department of Defense (DoD) technical advantage. He generates DoD S&T protection policy and ensures its consistent implementation across the Department. Prior to his current role, Gardner served as the Director for Army S&T Special Programs and Intelligence, where he was responsible for integrating Army S&T Enterprise research and development (R&D) activities with the Intelligence Community. Gardner also served as the Acting Director for Research and Technology (R&T) in the office of the Deputy Assistant Secretary of the Army for R&T, where he was the principal planner, advisor, and top-level coordinator for the Army S&T program. He oversaw the development and defense of the Army's Applied Research and Advanced Technology Development investment strategies, prioritization, integration, program justification, and coordination with users. He also managed the S&T Special Access Programs, Technology Maturation Initiative (competitive prototyping), and Manufacturing Technology investments. Gardner's Army S&T experience also includes his service as Director for the Command, Control, Communications and Intelligence (C3I) S&T Portfolio, providing oversight of Army S&T efforts for C3I systems including communications, mission command, electronic warfare, cyber, and intelligence-related information and materiel needs to enable planning and operation by Army forces. Additionally, Gardner previously worked in the Office of the Assistant Secretary of Defense for Research and Engineering (R&E) as Director of the Office of Technical Intelligence. In this role, he identified emerging and potentially disruptive S&T, recommended efficient R&D strategies, and coordinated intelligence collection, analysis, and dissemination plans to inform R&E activities.

Gardner holds a Bachelor of Science (B.S.) in Chemical Engineering from the University of Virginia. He is an Eagle Scout and Assistant Scoutmaster for two Scouts' BSA Troops.

Amanda Humphrey is Co-Director, SECURE and Chief Research Operations Officer for Northeastern University. Humphrey oversees the research security, export compliance, and training programs, as well as

contributing to compliance and operational objectives for the university. Humphrey is an active member of the Federal Demonstration Partnership (FDP), National Council of University Research Administrators (NCURA), and the Council of Governmental Relations (COGR). She received an NCURA Global Fellowship in 2019 and visited Aalto University in Finland. Humphrey holds the designation of Certified Research Administrator. She has degrees from Smith College, University College London, and Northeastern University, where she worked full-time while completing her Master of Business Administration.

Benjamin F. Jones, Ph.D., M.Phil., is the Gordon and Llura Gund Family Professor of Entrepreneurship and a Professor of Strategy at Northwestern Kellogg School of Management. An economist by training, Jones studies the sources of economic growth in advanced economies, with an emphasis on innovation, entrepreneurship, and scientific progress. He also studies global economic development, including the roles of education, climate, and national leadership in explaining the wealth and poverty of nations. His research has appeared in journals such as *Science*, the *Quarterly Journal of Economics*, and the *American Economic Review* and has been profiled in media outlets such as the *Wall Street Journal*, the *Economist*, and *The New Yorker*.

A former Rhodes Scholar, Jones served in 2010-2011 as the senior economist for macroeconomics for the White House Council of Economic Advisers and earlier served in the U.S. Department of the Treasury.

Jones is a non-resident senior fellow of the Brookings Institution, a research associate of the National Bureau of Economic Research (NBER), where he co-directs the Innovation Policy Working Group, a senior fellow of the Institute for Progress, and a member of the Council on Foreign Relations (COGR).

Rebecca Spyke Keiser is the Chief of Research Security Strategy and Policy (CRSSP) at the National Science Foundation (NSF).

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.

Until March 2020, Keiser was the head of the Office of International Science & Engineering (OISE) at NSF. Keiser had served as head of OISE since coming to NSF in 2015.

Susan A. Martinis is Vice Chancellor for Research and Innovation at the University of Illinois Urbana-Champaign, where she provides leadership for ten campus-wide interdisciplinary research institutes, University of Illinois Research Park, Illinois Quantum and Microelectronics Park, as well as serves as an Executive Sponsor for Innovate Illinois led by the Governor of the State of Illinois. She promotes new research initiatives, entrepreneurship, and oversees the administrative and business processes that ensure the safe, ethical, and productive conduct of research at Illinois.

Vice Chancellor Martinis was elected as chair of the APLU Council on Research in 2023, after serving on its Executive Committee, is Chair of the Big 10 Senior Research Officer cohort, was named to the Senior Research Officer Steering Committee of the American Association of Universities (AAU) in 2022, and has served as President of the Association of Medical and Graduate Departments of Biochemistry (AMGDB) across North America. She was elected Chair of the Board for UIDP (University-Industry Demonstration Partnership) in 2023 and serves on the Board of Illinois Ventures and *CURRENT*. On behalf of campus, she received the APLU COR "Research Response to a Community in Crisis Award: for the University of Illinois' "SHIELD" efforts to manage the COVID-19 pandemic response.

Dewey Murdick is the Executive Director at Georgetown University's Center for Security and Emerging Technology, where he oversees daily operations and strategic initiatives. Previously, he served as Director of

Science Analytics at the Chan Zuckerberg Initiative, Deputy Chief Scientist at the Department of Homeland Security, and Co-Director of the Anticipating Surprise Office/Program Manager at the Intelligence Advanced Research Projects Activity.

Murdick's experience in the public, private, and academic sectors spans artificial intelligence policy, emerging technology analysis, data science, machine learning application development, technology foresight, and research and development portfolio oversight. He pioneered work in anticipatory intelligence via high-risk, high-payoff research programs supporting national security missions. His work has directly informed U.S. and international policymakers on critical technology issues.

Murdick's contributions have been recognized with multiple honors, including the DHS Under Secretary's Award for Outstanding Collaboration, the ODNI Exceptional Achievement Award, and the Distinguished Analysis Award for Excellence in Intelligence Community Collaboration.

Murdick holds a Ph.D. in Engineering Physics from the University of Virginia and a B.S. in Physics from Andrews University.

Lisa Nichols is Executive Director, Research Security, at the University of Notre Dame where she has oversight for research and information security, export controls, and conflict of interest. She previously held roles at the University of Michigan, National Institutes of Health, National Science Foundation, the White House Office of Science and Technology Policy (OSTP) and the Council on Governmental Relations (COGR). At COGR she engaged with federal agencies on research security concerns on behalf of institutions of higher education and at OSTP, in the development of National Security Presidential Memorandum-33. She served as Principal Investigator on an NSF cooperative agreement to develop research security training for the U.S. research community and currently serves as PI on a SECURE (Safeguarding the Entire Community in the U.S. Research Environment) Center subaward to develop research security resources using a community centered approach. Nichols holds a Ph.D. in neuroscience from Purdue University and is a former American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellow.

Lori Ann Schultz is the Assistant Vice President for Research Administration at Colorado State University and Co-Director of the NSF SECURE Center Southwest Region. She has worked in research administration for over 30 years, and supports faculty researchers through policy, process, research security, and a host of topics related to external funding. She works on evidence-based policies, marshaling research data in the service of the institution and the faculty who do research, and using data to forecast and plan strategies for a resilient future for research. Schultz has conducted presentations and training on research, data, and technology topics at the Association of American Universities, Association of Public and Land-grant Universities, National Council of University Research Administrators (NCURA), Society of Research Administrators International, the Federal Demonstration Partnership, the Council on Governmental Relations (COGR), and Educause. She is on the Board of Directors of ORCID, COGR, and NCURA. Lori has many years of experience in research, software development, non-profit board leadership, and data management and analysis. She has a particular passion for using data to improve the working lives of the researchers who help us understand the world.

Daniel B. Schwab, is a Senior Advisor for International Policy & Programs in the U.S. Department of Energy's Office of Science. In this role, he addresses research security risks and supports the development of related policy for Office of Science investments in financial assistance and the National Laboratories. Previously, Dr. Schwab served as an AAAS Science and Technology Policy Fellow at the Department of Defense Basic Research Office and as an Embassy Science Fellow at the U.S. Embassy in Tokyo. With over ten years of experience as a researcher, he holds a Ph.D. in Evolution, Ecology, and Behavior from Indiana University, Bloomington and a B.S. in Biology from the College of William & Mary.

Patricia A. Valdez is the Chief Extramural Research Integrity Officer in the National Institutes of Health (NIH) Office of Extramural Research (OER) where she and her team handle various integrity concerns, including

research misconduct, harassment, peer review integrity, and foreign interference in NIH-funded extramural research. Valdez has been involved in various government-wide and international efforts in promoting Research Security. She has helped lead NIH efforts on foreign interference since 2016. Prior to joining the OER, Valdez was a Staff Scientist at NIH/NIAID and the Manager of Publication Ethics for ASBMB. Valdez received her Ph.D. from the University of California, Berkeley and carried out her postdoctoral training at Genentech.