NATIONAL ACADEMIES Sciences Engineering Medicine

National Science, Technology, and Security Roundtable

Sixth Meeting

SPEAKER BIOGRAPHIES

Ann Campbell is currently the Director for Weapons Design & Assurance at Sandia National Laboratories. Sandia is a multi-program Federally Funded Research & Development Center for the National Nuclear Security Agency within the U. S. Department of Energy. Ann's previous leadership roles at Sandia include Director, Electronic Systems; Director, Systems Assessment & Research; Director, Information Solutions & Services; and several Senior Manager roles developing and leading programs to address a broad range of national security challenges. Her research as a Principal member of Sandia's technical staff focused on development of advanced materials and microelectronics assessment techniques.

In addition to her responsibilities at Sandia, Ann has served on several National Academies committees focused on technology and capability surprise. She is a Senior Member of IEEE and has served as an officer of the IEEE Reliability Society. Ann is also an MIT Seminar XXI Fellow (2009 – 2010 Class).

Fred H. Cate is Vice President for Research, Distinguished Professor and C. Ben Dutton Professor of Law, and Senior Fellow for the Center for Applied Cybersecurity Research at Indiana University.

Professor Cate specializes in information privacy and security law issues. He has testified before numerous congressional committees and speaks frequently before professional, industry, and government groups.

In addition to his appointment in the Law School and as Vice President for Research, he is an Adjunct Professor of Informatics and Computing at Indiana University. From 2003 to 2014, he served as the founding director of IU's Center for Applied Cybersecurity Research, a National Center of Academic Excellence in Information Assurance Research and Information Assurance Education, where he is now a senior fellow.

Professor Cate currently chairs the National Academies' study on Law Enforcement and Intelligence Access to Encrypted Content, and he is a member of the National Academies' Forum on Cyber Resilience as well as many other government, industry, and not-for-profit advisory panels. He serves as a senior policy advisor to the Centre for Information Policy Leadership at Hunton & Williams LLP.

Professor Cate attended Oxford University and received his JD and his AB with Honors and Distinction from Stanford University. A former Senator and President of the Phi Beta Kappa Society, he is a fellow of Phi Beta Kappa and the American Bar Foundation, and an elected member of the Council on Foreign Relations and the American Law Institute.

John C. Mester is President and Chief Executive Officer of the Universities Research Association (URA). URA, a consortium of 90 leading research universities, was founded to build and operate unique research facilities in the national interest. In coordination with the URA Board of Trustees, Dr. Mester provides leadership in the strategic planning, governance, and administration of the organization, and corporate relations with Federal government, industry, and general public.

URA's primary responsibility for more than 50 years has been the management and operation, recently in partnership with the University of Chicago through the Fermi Research Alliance, LLC (FRA), of the Department on Energy's Fermi National Accelerator Laboratory. Dr. Mester is a member of the FRA Board of Directors. Through a National Science Foundation (NSF) award, URA provides US support for the operation of the Pierre Auger (cosmic ray) Observatory in Argentina. As part of a Honeywell-led team under the awarded contract for the management and operation of Sandia National Laboratories (NSL) by the DOE National Nuclear Security Administration (NNSA), URA is assuming an important new role in supporting and enhancing SNL scientific and educational activities.

Prior to his appointment at URA, Dr. Mester served as Associate Vice President for Research and Professor in the College of Optical Sciences at the University of Arizona. Prior to that, John was Vice President for Science and Programs at Associated Universities, Inc., which manages the $864 million cooperative agreement for the management and operation of the National Radio Astronomy Observatory for the National Science Foundation.

Dr. Mester earned his doctoral and master's degrees in physics from Harvard University and his undergraduate degree in physics and mathematics, Phi Beta Kappa, from The Johns Hopkins University.

Dawn Meyerricks is an independent consultant. She is currently a board member and advisor to market leading technology verticals, both public and private, opening new markets and enduring platform capabilities. From 2014-2021, Dawn led the iconic CIA Directorate of Science and Technology, directing the organization's first restructure in their fabled 57 year history, defining and delivering global capabilities beyond state-of-the-art even in the midst of significant workforce societal and health concerns. Prior to that, Dawn redefined technical oversight for the Intelligence Community, with a topline of $60B+, enabling on-time, on-budget delivery while returning 30% of her own budget and staff to mission. Prior to that, Dawn led the restructure of AOL Products to ensure alignment to business objectives, leading M&A technical assessments and ribbon-cutting new global facilities. Concurrently, she served on the National Security Agency (NSA) Corporate Board for over a decade, also supporting both their Technical Strategy and Information Assurance subcommittees. During this time, NSA adopted and

migrated all mission IT to the cloud and revamped their approach to encryption and defense in depth.

Her board memberships include KnightSwan, Acquisition Corporation, ARKA, QTS, Primer.ai, ColdQuanta, Altana, and the National Cybersecurity Center. She is a leadership consultant to Blackstone and a MITRE Senior Visiting Fellow.

Craig Partridge is chair of the Computer Science department at Colorado State University. Prior to coming to CSU, he was Chief Scientist at Raytheon BBN Technologies. Dr. Partridge is a Fellow of IEEE and ACM, a member of the Internet Hall of Fame and a member of the National Academies' Computer Science and Telecommunications Board. His research centers on problems in data communications, ranging from error recovery to high performance networking to securing networked systems.

Teresa L. Smetzer is currently an independent consultant supporting initiatives aimed at transformation of national security missions. She previously served as Salesforce's Vice President, National Security Programs as a business development executive. In April 2019, she retired as CIA's Director of Digital Futures in the Directorate of Digital Innovation. She returned to CIA after spending 14 years in the private sector as a CEO, business strategist, and investor. In this capacity, she leveraged her expertise from both the public and private sectors to accelerate the identification and adoption of industry leading digital technologies with the goal of modernizing, advancing, and transforming mission. She was awarded both CIA's Distinguished Intelligence Medal and Distinguished Career Intelligence Medal for her CIA service.

Earlier in her career, Ms. Smetzer served 17 years at CIA as a technical analyst and senior manager, participating in and leading multiple transformation-related task forces and programs aimed at modernizing the business of intelligence, including the development of the first Directorate of Intelligence strategic plan. She conceptualized and led an innovative initiative aimed at aligning fragmented intelligence production processes into a secure, web-based, collaborative, real-time production environment.

In 2004, Ms. Smetzer served on the White House Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction. Ms. Smetzer then established her own strategic management consulting company, Jasmah Consulting. After her company was acquired in 2008, Ms. Smetzer held senior executive positions in business development and operations in large and small businesses, served on multiple Boards of Directors, and invested in and mentored several emergent technology companies.

Sarah Spreitzer represents the American Council on Education (ACE) and its members on matters related to research policy and funding, international students, immigration, and federal and legislative issues.

Before joining ACE, Spreitzer held senior positions in higher education advocacy at the University of Missouri System, Lewis-Burke Associates LLC, and the University of Washington's Office of Federal Relations. At the University of Missouri System, she served as the director of federal relations, working to connect system and campus leadership, as well as faculty and staff, with congressional offices and key science and education agencies to influence federal policy, inform the university of federal opportunities, and position the university within emerging federal initiatives. At Lewis-Burke, she represented an array of public and private institutions of higher education before Congress and the federal agencies, including the University of Illinois System, the University of Southern California, the University of Virginia, and the University of Cincinnati. Before coming to Lewis-Burke, Spreitzer served as the assistant director of the University of Washington's Office of Federal Relations, where she focused on federal student aid policy and funding, and advocacy efforts with federal science agencies.

Spreitzer received a bachelor's degree in anthropology from Beloit College in Wisconsin and a master's degree in medieval studies from the Catholic University of America in Washington, DC.

Krysten Stevens is Director of Technical Operations for the Research and Education Networks – Information Sharing and Analysis Center (REN-ISAC) hosted by Indiana University. She has over 22 years of information technology experience in industry and non-profit, spending the last 13 years in higher education. Within higher education she held several different operations roles in database administration, application administration, and cybersecurity. She has her MS in Cybersecurity Management as well as the CISSP, GCTI and GCIH certifications. Her daily focus is the infrastructure that provide technical and security services to both the REN-ISAC staff and members.

Wendy D. Streitz is the President of the Council on Governmental Relations (COGR) and has previously served on the COGR Board and on the Research Security & Intellectual Property (RSIP) Committee, which she also chaired for a time. Prior to joining COGR, Ms. Streitz was the Executive Director of Research Policy Analysis & Coordination for the University of California system. Prior to that, she was Associate Director of Auburn University's Intellectual Property and Technology Transfer office, after having spent many years in industry as an electrical engineer. Ms. Streitz earned her Bachelor's in Engineering from Harvey Mudd College, and MS in Electrical Engineering from Johns Hopkins University.

Brandon Wales is the Cybersecurity and Infrastructure Security Agency (CISA)'s first Executive Director, serving as the senior career executive helping oversee execution of CISA operations. He is responsible for leading long-term strategy development, managing CISA-wide policy initiatives and ensuring effective operational collaboration across the Agency.

From November 2020 to July 2021, he was designated as the Acting Director of CISA. In this capacity, Wales oversaw CISA's efforts to defend civilian networks, manage systemic risk to national critical functions, and work with stakeholders to raise the security baseline of the Nation's cyber and physical infrastructure.

Prior to serving as Executive Director, Wales directly supported the Secretary of Homeland Security from August 2017 to December 2019 and he has served DHS since 2005.
Wales' contributions have been recognized with an Exceptional Performance Award from the Director of National Intelligence, a DHS Secretary's Award for Excellence, and two DHS Distinguished Service Medals.

SPEAKER BIOGRAPHIES
CLOSED SESSIONS

Bruce Alberts is Professor Emeritus of Biochemistry and Biophysics at the University of California, San Francisco.

A prominent biochemist with a strong commitment to the improvement of science and mathematics education, Bruce Alberts, was awarded the National Medal of Science by President Barack Obama in 2014 and the 2016 Lasker-Koshland Special Achievement Award in Medical Science. Dr. Alberts served as Editor-in-Chief of *Science* (2009-2013) and as one of the first three United States Science Envoys (2009-2011). He is now the Chancellor's Leadership Chair in Biochemistry and Biophysics for Science and Education at the University of California, San Francisco, to which he returned after serving two six-year terms as the president of the National Academy of Sciences (NAS).

During his tenure at the NAS, Alberts was instrumental in developing the landmark National Science Education Standards that have been implemented in school systems nationwide. For the period 2000 to 2009, he served as the co-chair of the InterAcademy Council, an organization in Amsterdam governed by the presidents of 15 national academies of sciences and established to provide scientific advice to the world.

Committed in his international work to the promotion of the "creativity, openness and tolerance that are inherent to science," Alberts believes that "scientists all around the world must now band together to help create more rational, scientifically-based societies that find dogmatism intolerable."

Alberts serves on the advisory boards of more than 25 non-profit institutions, including the Gordon and Betty Moore Foundation.

Andrea Liu is a theoretical soft and living matter physicist at the University of Pennsylvania, where she is the Hepburn Professor of Physics and Director of the Center for Soft and Living Matter. She served recently in the Speaker line of the Council of the American Physical Society (APS) and Chair line of the Physics Section of the American Association for the Advancement of Science (AAAS), is currently a member the National Academies' Committee on Human Rights, and will join the NAS Council in July. She is a fellow of the APS, AAAS and the American Academy of Arts and Sciences, and a member of the National Academy of Sciences.

Kendra Sharp leads the Office of International Science and Engineering at the National Science Foundation. In her role as OISE head, Sharp focuses on increasing access for U.S. principal investigators to engage in global research that addresses pressing challenges; building greater capacity for U.S.-based students and faculty to access training and other opportunities in science diplomacy; developing and supporting robust collaborations between international universities or university consortia; and collaborating with other federal agencies.

Sharp was a faculty member in mechanical engineering at Oregon State University and held the Richard and Gretchen Evans Professorship of Humanitarian Engineering from 2015 to 2020. Her research and teaching interests include design for international development, applications of technology in humanitarian engineering, and sustainable water and energy systems. Sharp founded and directed the school's humanitarian engineering program. She also served as the university’s Senior Advisor for Global Affairs, providing leadership for the development and implementation of strategic initiatives in internationalization and global engagement at OSU, and as Associate Vice Provost for Faculty Development.