

LEADERSHIP



Linton Brooks

Former Undersecretary of the National Nuclear Security Administration & Scholar in Residence

Ambassador Linton F. Brooks is an independent consultant on national security issues, a non-resident Senior Advisor at the Center for Strategic and International Studies, a Distinguished Research Fellow at the National Defense University, a member of the National Academy of Sciences Committee on International Security and Arms Control, one of the Board of Managers overseeing the operations of the Sandia National Laboratories, and an advisor to three other Department of Energy national laboratories. Ambassador Brooks has six decades of experience in national security, much of it associated with nuclear weapons. He served from July 2002 to January 2007 as Administrator of the U.S. Department of Energy's National Nuclear Security Administration, where he was responsible for the U.S. nuclear weapons program and for the Department of Energy's international nuclear nonproliferation programs. His government service includes service as Deputy Administrator for Nuclear Nonproliferation at the National Nuclear Security Administration, Assistant Director of the United States Arms Control and Disarmament Agency, Chief U.S. Negotiator for the Strategic Arms Reduction Treaty, Director of Defense Programs and Arms Control on the National Security Council staff and a number of Navy and Defense Department assignments as a 30-year career naval officer. Ambassador Brooks holds degrees in Physics from Duke University and in Government and Politics from the University of Maryland and is a Distinguished Graduate of the U.S. Naval War College. Since 2008 he has served as an Expert in Residence during the annual Public Policy and Nuclear Threats program.



Bethany Goldblum

Program Director

Dr. Bethany Goldblum is a staff scientist in the Nuclear Science Division at Lawrence Berkeley National Laboratory and an associate research engineer in the Department of Nuclear Engineering at the University of California, Berkeley. As Executive Director of the Nuclear Science and Security Consortium, she provides strategic direction for an effort bringing together seven universities and five U.S. DOE National Laboratories to train the next generation of nuclear security experts. Her research focuses on low-energy nuclear physics, neutron detection, and artificial intelligence for nuclear security applications. Goldblum leads the Bay Area Neutron Group, a research team focused on applied neutron physics for nuclear security applications, and founded and directs the Nuclear Policy Working Group, an interdisciplinary team of scholars developing policy solutions to strengthen global nuclear security. She has been involved with the Public Policy and Nuclear Threats Boot Camp nearly since its inception, and acted as director of the program since 2014. She is author or co-author of more than 80 publications on nuclear science and policy issues and recipient of the 2020 Coronas Award in Leadership, Community Building and Communication. Goldblum received a Ph.D. in Nuclear Engineering from the University of California, Berkeley.



Neil Narang

Principal Investigator

Neil Narang is Research Director at the Institute on Global Conflict and Cooperation and Associate Professor in the Department of Political Science at the University of California, Santa Barbara. He is currently faculty PI for the PPNT program. Previously, he served as a Senior Advisor in the Office of the Secretary of Defense for Policy on a Council on Foreign Relations International Affairs Fellow. His research primarily focuses on international security, conflict management and peacebuilding, and the relationship between international institutions and conflict. He is the editor of the books *Emerging Technologies* and *International Stability*

(2021) and Nuclear Posture and Nonproliferation Policy: Causes and Consequences for the Spread of Nuclear Weapons (2015), and his articles have appeared in the Journal of Politics, International Studies Quarterly, Journal of Conflict Resolution among others. He received his Ph.D. in political science from UC San Diego and he holds a B.A. in molecular cell biology and political science from the University of California, Berkeley. He has been a fellow at the University of Pennsylvania's Browne Center for International Politics, a nonproliferation policy fellow at the Los Alamos National Laboratory, and a junior faculty fellow at Stanford University's Center for International Security and Cooperation.

SPEAKERS



Paul Bernstein

Distinguished Fellow

Paul I. Bernstein is a Distinguished Fellow at the Center for the Study of Weapons of Mass Destruction, National Defense University in Washington, DC, and a member of the university's Research Faculty. He works in collaboration with the Office of the Secretary of Defense, Joint Staff, Services, combatant commands, and defense agencies. He is currently Senior Advisor to the Office of the Secretary of Defense (Nuclear Deterrence Policy) in support of the 2022 Nuclear Posture Review. Mr. Bernstein is a contributing author of the 2014 Department of Defense Strategy for Countering Weapons of Mass Destruction and has been an adviser to the Defense Science Board and the DoD Threat Reduction Advisory Committee. He is an instructor in the CAPSTONE program, guest lectures at other military education venues, and has developed multiple curricula for nuclear and WMD instruction.



Elaine Bunn

Consultant

M. Elaine Bunn is a consultant on strategic issues with 40 years of experience in the U.S. government working on defense policy. She addresses international audiences on nuclear policy, extended deterrence, and missile defense. Her writings include articles and book chapters on deterrence, assurance of allies, strategic planning, nuclear policy, missile defense, arms control, and preemption. She is a non-resident senior associate fellow at the Royal United Services Institute in London and member of the Nuclear Deterrence External Advisory Board at Sandia National Laboratories. Bunn served as deputy assistant secretary of defense for nuclear and missile defense policy (DASD/NMD)

from 2013 to early 2017. Bunn, a graduate of the National War College, received an M.A. from Johns Hopkins University's School of Advanced International Studies. She was a Fulbright scholar at the Université de Neuchâtel in Switzerland after graduating from the University of Georgia with a B.A. in international political communications.



Matthew Bunn

Professor

Matthew Bunn is the James R. Schlesinger Professor of the Practice of Energy, National Security, and Foreign Policy at the Harvard Kennedy School. His research interests include nuclear theft and terrorism; nuclear arms control and strategic stability; nuclear proliferation and measures to control it; the future of nuclear energy and its fuel cycle; and innovation in energy technologies. Before coming to Harvard, Bunn served as an adviser to the White House Office of Science and Technology Policy, as a study director at the National Academy of Sciences, and as editor of *Arms Control Today*. He is the author or co-author of more than 25 books or major technical reports (most recently *Revitalizing Nuclear Security in an Era of Uncertainty*), and over 150 articles in publications ranging from *Science* to *The Washington Post*.



Joseph Cirincione

Distinguished Non-Resident Fellow

Joseph Cirincione is a Distinguished Non-Resident Fellow at the Quincy Institute and a national security analyst and author with 40 years of experience working these issues in Washington, DC. He is the author or editor of seven books, including *Nuclear Nightmares: Securing the World before It Is Too Late* (2015) and *Bomb Scare: The History and Future of Nuclear Weapons* (2008). Cirincione served previously as president of the Ploughshares Fund, vice president for

national security at the Center for American Progress and director for nonproliferation at the Carnegie Endowment for International Peace, among other positions. He worked for over nine years on the professional staff of the Armed Services Committee and the Government Operations Committee in the U.S. House of Representatives. He served on the International Security Advisory Board for Secretaries of State Hillary Clinton and John Kerry, and is a member of the Council on Foreign Relations.



Toby Dalton

Analyst

Toby Dalton is co-director and a senior fellow of the Nuclear Policy Program at the Carnegie Endowment. An expert on nonproliferation and nuclear energy, his work addresses regional security challenges and the evolution of the global nuclear order. Dalton's research and writing focuses in particular on South Asia and East Asia. He is author (with George Perkovich) of *Not War, Not Peace? Motivating Pakistan to Prevent Cross-Border Terrorism* (Oxford University Press, 2016), which provides in-depth analysis of the conflict spectrum in South Asia. He also wrote (with Michael Krepon) *A Normal Nuclear Pakistan* and "Beyond Incrementalism: Rethinking Approaches to CBMs and Stability in South Asia." He co-edited *Perspectives on an Evolving Nuclear Order* and wrote "South Korea Debates Nuclear Options," (with Byun Sunggee and Lee Sang-Tae) and "South Korea's Search for Nuclear Sovereignty" (with Alexandra Francis). From 2002 to 2010, Dalton served in a variety of high-level positions at the U.S. Department of Energy.



Denia Djokić

Assistant Research Scientist

Denia Djokić is an Assistant Research Scientist at the University of Michigan's Fastest Path to Zero Initiative, and a former Postdoctoral Research Fellow at the Project on Managing the Atom at the Belfer Center for Science and International Affairs. She is broadly interested in governance of nuclear energy technology, and her current research explores topics in responsibility and liability in the context of severe nuclear accidents.

Prior to her appointment at Harvard, Denia worked as an advisor on issues in policy and governance of science, technology and innovation for the government of Ecuador. She holds an M.S. and a Ph.D. in Nuclear Engineering with a Designated Emphasis in Energy Science and Technology from the University of California, Berkeley, where she was a U.S. Department of Energy Office of Civilian Radioactive Waste Management Graduate Student Fellow. She also holds a B.S. in Physics from Carnegie Mellon University.



Bruce Goodwin

Senior Fellow

Bruce Goodwin is a Senior Fellow at the Center for Global Security Research at the Lawrence Livermore National Laboratory. Before becoming a Senior Fellow, he was the Associate Director-at-Large for National Security Policy and Research. In this role he was responsible for LLNL policy research and liaison with the U.S. military, U.S. government and non-governmental organizations. He has been a key player in the success of the nuclear weapons program since 1981, first at Los Alamos National Laboratory and since 1985 at LLNL. While at both Labs, he was design physicist on five nuclear tests. As the Principal Associate Director, he led the process to certify LLNL nuclear weapons and was responsible

for establishing priorities, developing strategies, and designing and maintaining LLNL's nuclear weapons. Goodwin received his doctorate and master's in Aerospace Engineering from the University of Illinois, and his bachelor's degree in Physics from City College of New York.



Garrett Harencak

Vice President

Garrett Harencak joined the Jacobs leadership team in 2018 upon retiring from the U.S. Air Force and has been engaged in several strategic activities for our Aerospace, Technology and Nuclear (ATN) line of business. USAF Major General (retired) Harencak enjoyed a distinguished career with the USAF prior to joining Jacobs. He has flown and commanded B-52, B-1 and B-2 units and the USAF Nuclear Weapons Center. At the time of his retirement, he was Commander of the Air Force Recruiting Service. He is an experienced, trusted and tested leader with over 35 years of military service delivering motivational mission accomplishment and consistently succeeding in high stress, high tempo environments. His program leadership and management expertise in diverse and challenging roles driving positive operational and cultural change has delivered proactive, high-caliber solutions through identification, problem resolution, policy creation and implementation of standard operating procedures for complex organizations.



Siegfried S. Hecker

Professor Emeritus

Siegfried S. 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 1986–1997, Dr. Hecker served as the fifth Director of the Los Alamos National Laboratory. Dr. Hecker is

an internationally recognized expert in plutonium science, global threat reduction, and nuclear security. Dr. 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.



Newell Highsmith

Adjunct Professor

Newell Highsmith is an adjunct professor of law at Georgetown University. He served as an attorney at the U.S. Department of State for 30 years on issues of arms control and nonproliferation, most recently as Deputy Legal Adviser from 2013 to 2017. He served as primary legal adviser to the U.S. negotiating teams for the 2015 Joint Comprehensive Plan of Action with Iran and for the 1994 Agreed Framework with North Korea. Mr. Highsmith was also involved with negotiating the 2008 agreement for peaceful nuclear cooperation with India, analyzing the legal issues raised by Syria's use of chemical weapons and its construction of a clandestine nuclear reactor, evaluating Russia's violations of its arms control obligations, responding to Indian and Pakistani nuclear testing, facilitating Libya's renunciation of weapons of mass destruction, and responding to the revelations regarding Iraq's nuclear weapons program. He earned his B.A. in English from the University of North Carolina at Chapel Hill and his J.D. from Harvard Law School.



Corey Hinderstein

Deputy Administrator

Corey Hinderstein was sworn in on Dec. 6, 2021, as Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration, where she leads NNSA's efforts to prevent state and non-state actors from developing nuclear weapons or acquiring weapons-usable nuclear or radiological materials, equipment, technology, and expertise. Prior to assuming her current role, she was vice president of International Fuel Cycle Strategies at the Nuclear Threat Initiative based in Washington, D.C., where she focuses on international nuclear fuel cycle and nonproliferation policy, global nuclear security, and arms control and nonproliferation monitoring and verification. From February 2015 through November 2017, Hinderstein was senior coordinator for nuclear security and nonproliferation policy affairs at the Defense Nuclear Nonproliferation office of the NNSA. She also has served in advisory capacities for multiple national laboratories and has published widely on nuclear nonproliferation, verification and monitoring and nuclear security.



Kim Knight

Staff Scientist

Kim Knight is a staff scientist at Lawrence Livermore National Laboratory focused on nuclear forensic research. A geochemist by training, she remains endlessly fascinated with radioactive materials. Knight worked as a postdoctoral researcher at the University of Chicago and Argonne National Laboratory prior to joining LLNL in 2008. Knight is primarily involved with the analysis of nuclear and associated materials to better understand clues about the origins, locations, or processes. She has been instrumental in the renaissance of historical fallout research to better understand fallout formation and interpretation of historic nuclear events. She presently leads a Strategic Initiative

focused on the fundamental science to understand the influence of different environments on the chemistry and physics of a nuclear explosion. This work develops the scientific basis necessary for improved interpretation of radiochemical data, supporting national goals in stockpile stewardship and nuclear threat reduction as well as operational response and environmental transport.



Michael Kofman

Research Program Director

Michael Kofman serves as Research Program Director in the Russia Studies Program at CNA and as a Fellow at the Kennan Institute, Woodrow Wilson International Center in Washington, DC. His research focuses on the Russia and the former Soviet Union, specializing in Russian armed forces, military thought, capabilities, and strategy. Mr. Kofman is also a Senior Editor at War on the Rocks, where he regularly authors articles on strategy, the Russian military, Russian decision-making, and related foreign policy issues. He runs a personal blog on the Russian armed forces at <https://russianmilitaryanalysis.wordpress.com/>.

Mr. Kofman has published numerous articles on the Russian armed forces, security issues in Russia/Eurasia, and analyses for the U.S. government. He holds an M.A. in International Security from the Edmund A. Walsh School of Foreign Service at Georgetown University.



Matthew Kroenig

Professor

Matthew Kroenig is the deputy director of the Atlantic Council's Scowcroft Center for Strategy and Security at the Atlantic Council and a tenured associate professor of government and foreign service at Georgetown University. He previously served in several positions in the U.S.

government, including in the Strategy Office in the Office of the Secretary of Defense and the Strategic Assessments Group at the Central Intelligence Agency. He regularly consults with a range of U.S. government entities. He is the author or editor of seven books, including “The Return of Great Power Competition: Democracy versus Autocracy from the Ancient World to the United States, Russia, and China Today” and “A Time to Attack: The Looming Iranian Nuclear Threat.” His articles and opinion pieces have appeared in American Political Science Review, Foreign Affairs, Foreign Policy, International Organization, Politico, the Wall Street Journal, the Washington Post and many other outlets. He has previously worked as a fellow at the Council on Foreign Relations, Harvard University and Stanford University. Kroenig provides regular commentary for major media outlets, including PBS, NPR, BBC, CNN and C-SPAN. He is a life member of the Council on Foreign Relations and holds an M.A. and Ph.D. in political science from UC Berkeley.



John Lauder

Retired

Mr. Lauder is a leading authority on weapons of mass destruction, nonproliferation, arms control, homeland security, and intelligence analysis and collection. Mr. Lauder retired from the United States government in the fall of 2004 with over 33 years of managerial, analytical and policy experience in the Central Intelligence Agency, National Reconnaissance Office, and as an arms control negotiator. He served subsequently for nine years as a senior manager and corporate officer within Arete' Associates, a research and development company. Mr. Lauder has been awarded the Distinguished Career Intelligence Medal, the Distinguished Intelligence Medal, the NRO Gold Medal, and the Director of Central Intelligence's Award for his leadership and innovation in collection systems, analytical approaches and

vital national security initiatives and decisions. He has a B.A. summa cum laude from Hiram College and an MA.



Jon Lindsay

Associate Professor

Jon Lindsay is an Associate Professor at the School of Cybersecurity and Privacy at the Georgia Institute of Technology (Georgia Tech). He has a joint appointment in the Sam Nunn School of International Affairs and a courtesy appointment in the School of Public Policy. He is the author of *Information Technology and Military Power* (Cornell University Press, 2020) and co-editor of *Cross-Domain Deterrence: Strategy in an Era of Complexity* (Oxford University Press, 2019), with Erik Gartzke, and *China and Cybersecurity: Espionage, Strategy, and Politics in the Digital Domain* (Oxford University Press, 2015), with Tai Ming Cheung and Derek Reveron, and well as publications in international relations, intelligence studies, and the sociology of technology. He is currently working on a book entitled *Age of Deception: Cybersecurity in International Relations*. He holds a Ph.D. in political science from the Massachusetts Institute of Technology and an M.S. in computer science and B.S. in symbolic systems from Stanford University.



Frank Miller

Principal

A Principal of The Scowcroft Group, Franklin C. Miller provides clients both strategic and tactical advice on defense, national security, foreign affairs, and intelligence policy. He is an internationally recognized expert on nonproliferation, nuclear deterrence and arms control policy, and defense. Mr. Miller served for thirty-one years in the U.S. government, including twenty-two years in the Department of Defense and four years as a Special Assistant

to President George W. Bush and Senior Director for Defense Policy and Arms Control on the National Security Council staff. For his government service, Mr. Miller received the Defense Department's highest civilian award, the Defense Distinguished Civilian Service Medal, five times. Mr. Miller currently serves on the U.S. Strategic Command Advisory Group. He is a member of the Council on Foreign Relations and a Director of the Atlantic Council of the United States. He is Chairman Emeritus of the Board of The Charles Stark Draper Laboratory in Cambridge, Massachusetts, and also serves on the Board of Directors of Airbus U.S. Space and Defense and Sandia National Laboratory.



Rolf Mowatt-Larsen

Senior Fellow

Rolf Mowatt-Larsen is a Senior Fellow at Harvard Belfer Center, having served until July 2019 as Director of the Center's Intelligence Project. Prior to that he was also a Senior Fellow. Before coming to the Belfer Center, Mowatt-Larsen served over three years as the Director of Intelligence and Counterintelligence at the U.S. Department of Energy. Prior to this, he served for 23 years as a CIA intelligence officer in various domestic and international posts, to include Chief of the Europe Division in the Directorate of Operations, Chief of the Weapons of Mass Destruction Department, Counterterrorist Center, and Deputy Associate Director of Central Intelligence for Military Support. He is a graduate of the United States Military Academy, West Point, NY. He is a recipient of the CIA Director's Award, the George W. Bush Award for Excellence in Counterterrorism, the Secretary of Energy's Exceptional Service Medal, the Distinguished Career Intelligence Medal, Secretary of Defense Civilian Distinguished Service Medal, and the National Intelligence Superior Performance Medal, among others.



Andrew Reddie

Assistant Professor of Practice

Dr. Andrew Reddie is an Assistant Professor of Practice in Cybersecurity at the University of California, Berkeley's School of Information where he works on projects related to cybersecurity, nuclear weapons policy, wargaming, and emerging military technologies. He is also the founder and faculty director for the Berkeley Risk and Security Lab.

Andrew is currently a Bridging the Gap New Era fellow, Hans J. Morgenthau fellow at Notre Dame University, a non-resident fellow at the Brute Krulak Center at Marine Corps University, faculty director at the Center for Long-Term Cybersecurity, and deputy director at the Berkeley APEC Study Center.

Previously, Andrew has served in roles at Sandia National Laboratories, Lawrence Livermore National Laboratory's Center for Global Security Research, and as an associate at the Council on Foreign Relations in Washington, DC.



Brad Roberts

Director

Dr. Brad Roberts has served as director of the Center for Global Security Research at Lawrence Livermore National Laboratory since 2015. From 2009 to 2013, he was deputy assistant secretary of defense for Nuclear and Missile Defense Policy. In this role, he served as policy director of the Obama administration's Nuclear Posture Review and Ballistic Missile Defense Review and led their implementation. Prior to entering government service, Dr. Roberts was a research fellow at the Institute for Defense Analyses and the Center for Strategic and International Studies, editor of The Washington Quarterly, and an adjunct professor at George Washington University. Between leaving the Office of the Secretary of Defense in 2013 and assuming his current responsibilities, Dr. Roberts was a consulting professor at

Stanford University and William Perry Fellow at the Center for International Security and Cooperation (CISAC). While at CISAC, he authored a book entitled *The Case for U.S. Nuclear Weapons in the 21st Century*, which won the Choice Award for Outstanding Academic Title in 2016.



Mareena Robinson Snowden

Senior Advisor

Dr. Mareena Robinson Snowden is a senior advisor in the Bureau of Arms Control, Verification, and Compliance (AVC) at the U.S. Department of State. She joined AVC in 2022, after serving as a senior engineer in the National Security Analysis Department at the Johns Hopkins Applied Physics Laboratory (JHU APL). Prior to joining JHU APL, Mareena was a Stanton Nuclear Security Fellow with the Nuclear Policy Program at the Carnegie Endowment for International Peace.

In 2017–2018, Robinson Snowden served as a National Nuclear Security Administration (NNSA) Graduate Fellow (NGFP) in the Office of Major Modernization Programs. Robinson Snowden was awarded the NNSA Stockpile Stewardship Graduate Fellowship (SSGF) in 2012, a four-year fellowship that supported her graduate work in the MIT Laboratory for Nuclear Security and Policy.

Robinson Snowden holds a Ph.D. from the Massachusetts Institute of Technology in nuclear engineering, and a B.S. in physics from Florida A&M University.



Laura Rockwood

Director

Laura Rockwood is the Director of Open Nuclear Network (ONN), a program of One Earth Future. In July 2012, she was honored with the Distinguished Service Award by the Institute of Nuclear Materials Management (INMM) for long-term noteworthy accomplishments in, and service to, the nuclear materials management profession. During her employment with the International Atomic Energy Agency (IAEA), she was the senior legal advisor on all aspects of the negotiation, interpretation and implementation of IAEA safeguards, and was the principal author of the document that became the Model Additional Protocol. She participated in high-level negotiations on Iran, Iraq and North Korea, and in the IAEA/US/Russian Federation negotiations on the Trilateral Initiative and the Plutonium Management and Disposition Agreement. Laura came to ONN from her position as Executive Director of the Vienna Center for Disarmament and Non-Proliferation (VCDNP) between 2015 and 2019. She received her B.A. degree from the University of California, Berkeley, and her Juris Doctor from the University of California's Hastings College of Law in San Francisco.



Scott Sagan

Caroline S. G. Munro Professor of Political Science

Scott D. Sagan is the Caroline S.G. Munro Professor of Political Science, the Mimi and Peter Haas University Fellow in Undergraduate Education, and Senior Fellow at the Center for International Security and Cooperation and the Freeman Spogli Institute at Stanford University. He also serves as Chairman of the American Academy of Arts and Sciences' Committee on International Security Studies. Before joining the Stanford faculty, Sagan was a lecturer in the Department of Government at Harvard University and served as special assistant to the director of the Organization of the Joint

Chiefs of Staff in the Pentagon. Sagan has also served as a consultant to the office of the Secretary of Defense and at the Sandia National Laboratory and the Los Alamos National Laboratory.



Victoria Samson

Washington Office Director

Victoria Samson is the Washington Office Director for Secure World Foundation and has twenty years of experience in military space and security issues. Before joining SWF, Ms. Samson served as a Senior Analyst for the Center for Defense Information (CDI), where she leveraged her expertise in missile defense, nuclear reductions, and space security issues to conduct in-depth analysis and media commentary. Prior to her time at CDI, Ms. Samson was the Senior Policy Associate at the Coalition to Reduce Nuclear Dangers, a consortium of arms control groups in the Washington, D.C. area, where she worked with Congressional staffers, members of the media, embassy officials, citizens, and thinktanks on issues surrounding dealing with national missile defense and nuclear weapons reductions. She is also a member of the International Astronautical Federation (IAF) committee on space security and the Space Security Working Group of the National Academies of Sciences, Engineering, and Medicine (NASEM)'s Committee on International Security and Arms Control (CISAC).



Mark Schanfein

Senior Nonproliferation Advisor

Mark Schanfein is Senior Nonproliferation Advisor at Idaho National Laboratory (INL). He has over 40 years' experience in nonproliferation and safeguards including a 20-year career at Los Alamos National Laboratory (LANL) in the weapons and nonproliferation programs. He served as a technical expert on the ground in the DPRK during the disablement

activities resulting from the 6-Party Talks under the Bush administration. He has previously worked for Pacific Northwest National Laboratory (PNNL) and oversight at Lawrence Livermore National Laboratory (LLNL). Mark has 8 years of experience working at the International Atomic Energy Agency (IAEA) in Vienna, Austria, 4 years as a safeguards inspector and 4 years as the Unit Head for Unattended Monitoring Systems (UMS), responsible for the installation of all IAEA unattended autonomous systems in nuclear fuel cycle facilities worldwide. He supports multiple safeguards training programs including International Nuclear Safeguards Engagement Program and Human Capital Development and has recently supported projects on pandemic considerations for the IAEA and State Regulatory Authorities. His current focus is on emerging technologies for applications in international safeguards with a current interest in digital twins, artificial intelligence and machine learning. In 2020, Mark was elected as the Vice President for the Institute of Nuclear Materials Management.



John Scott
Deputy Director

John Scott is Deputy Director of the Office of National Security and International Studies at the Los Alamos National Laboratory (LANL). John started at LANL in 1998 as a postdoc in the weapon design division after completing his Ph.D. in nuclear engineering at the University of California Berkeley. During his career, John has served as the system point of contact for two weapons systems and was the lead secondary designer for the Reliable Replacement Warhead project at LANL. John served as a member of the ASC Predictive Science Panel from 2009 to 2013 and was the project leader for weapons performance metrics in the Advanced Certification program from 2009–2017. He served as the group leader for the Integrated Design and Assessment Group within the

Theoretical Design Division and as the deputy division leader for stockpile work in the Theoretical Design Division.

Kevin Swearingen

Radiological and Nuclear Chemist Forensic Examiner

Kevin Swearingen has been a Radiological and Nuclear Chemist Forensic Examiner at the FBI Laboratory in Quantico, Virginia for the past 4 years. His duties include the analysis of any radioactive or nuclear material and directing conventional forensic examinations of evidence contaminated with radioactive material. This work is done in support of FBI investigations and to assist any local, state, federal, or international law enforcement organizations. Prior to joining the FBI, he received his Ph.D. from Washington State University, with a focus on analytical radiochemistry. Before starting graduate school, he spent time at Pacific Northwest National Laboratory researching fission product separation and nuclear waste glass.



Nina Tannenwald

Director

Nina Tannenwald is Director of the International Relations Program at Brown University's Watson Institute for International Studies and a Senior Lecturer in Political Science. Her research focuses on the role of international institutions, norms and ideas in global security issues, efforts to control weapons of mass destruction, and human rights and the laws of war. Her book, *The Nuclear Taboo: The United States and the Non-use of Nuclear Weapons Since 1945* was awarded the 2009 Lepgold Prize for best book in international relations. Her current research projects include targeted killing, the future of the nuclear normative order, and the effectiveness of the laws of war. In 2012-2013 she served as a Franklin Fellow in the Bureau of International Security and Nonproliferation in the U.S. State Department.

She holds a master's degree from the Columbia School of International and Public Affairs and a Ph.D. in international relations from Cornell University.



Jay Tilden

Associate Administrator

Since 2016, Jay Tilden has served as NNSA's Associate Administrator for Counterterrorism and Counterproliferation with responsibility in preparing for, responding to, and successfully resolving nuclear and radiological accidents and incidents worldwide. The mission includes providing technically informed policy and operational recommendations required to advance U.S. nuclear counterterrorism and counterproliferation objectives, while informing U.S. government agencies on nuclear threat devices (i.e., improvised nuclear devices, proliferant devices, and lost or stolen nuclear devices outside of state control). The office applies the Department of Energy's (DOE) and NNSA's existing nuclear expertise, science, technology, and engineering capabilities to support relevant whole-of-government activities, while sustaining deployable assets for both nuclear incident response and nuclear forensics activities. Mr. Tilden is a retired Army Chief Warrant Officer (counterintelligence and all-source intelligence) and served in both active and reserve capacities including the Desert Shield/Desert Storm and Enduring Freedom/Noble Eagle operations.



Will Tobey

Director

Will Tobey directs the Office of National Security and International Studies at the Los Alamos National Laboratory. He is also a Senior Fellow with the Avoiding Great Power Wars Project at Harvard Kennedy School's Belfer Center. From 2009–2021, Tobey was a Senior Fellow and Lecturer at the Harvard Kennedy School's Belfer Center for Science and International Affairs. Tobey served as Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration from 2006–2009. There, he managed the U.S. government's largest program to prevent nuclear proliferation and terrorism by detecting, securing, and disposing of dangerous nuclear material. He also served on the National Security Council Staff under three presidents, in defense policy, arms control, and counter-proliferation positions. He has participated in international negotiations ranging from the START talks with the Soviet Union to the Six-Party Talks with North Korea. Tobey also has a decade of experience in investment banking and venture capital. He currently chairs the Nuclear and Radiation Studies Board of the National Academies of Sciences Engineering and Medicine, and the board of the World Institute for Nuclear Security. He is also on the executive committee of the nonproliferation division of the American Nuclear Society.



Chris Twomey

Associate Professor

Christopher P. Twomey is an associate professor in the Department of National Security Affairs at the Naval Postgraduate School, where he focuses on Chinese foreign policy and East Asian security issues in his teaching and research. He authored *The Military Lens: Doctrinal Differences and Deterrence Failure in Sino-American Relations* (Cornell University Press, 2010) and articles in journals such as *Security Studies*, *Journal of Contemporary China*, *The Washington Quarterly*, and *Asian Survey*. He has

edited two books and published chapters in a dozen others, including most recently, “China’s Nuclear Doctrine and Deterrence Concept,” in Paul Bolt and James Smith, eds., *China’s Strategic Arsenal: Worldview, Doctrine, and Systems* (Washington, DC: Georgetown University Press, 2021). His work has supported the Office of the Secretary of Defense, the State Department, INDOPACOM, RAND, NBR, and others. He has led a track 2 diplomatic engagement with China centering on strategic issues since its inception in 2005. Dr. Twomey received his BA and Masters degrees from the University of California San Diego, his Ph.D. in Political Science from the Massachusetts Institute of Technology, and conducted postdoctoral research at Harvard.



John Warden

Researcher

John K. Warden is a U.S. defense policy and strategy analyst in the Strategy, Forces and Resources Division at the Institute for Defense Analyses, where he focuses on deterrence and escalation, nuclear weapons, US alliances, East Asian security, and related issues. He is author, coauthor, and editor of a number of studies, reports, and articles, including "The Least Bad Option: Damage Limitation and U.S. Deterrence Strategy toward North Korea" (with Vince Manzo, *Texas National Security Review*, February 7, 2018), "The Strategic Rationale for Maritime Tension Reduction in the Yellow Sea" (with Darcie Draudt, *Washington Quarterly*, winter 2018), and "North Korea’s Nuclear Posture: An Evolving Challenge for U.S. Deterrence" (*Proliferation Papers*, Ifri, March 2017). Warden previously worked at Science Applications International Corporation, the Center for Strategic and International Studies, and the Pacific Forum CSIS. He holds an MA in security studies from Georgetown University and a BA in political science and history from Northwestern University.



Dean Wilkening

Physicist

Dean Wilkening is a physicist at the Johns Hopkins University Applied Physics Laboratory. From 2011 to 2016, he worked at the Lawrence Livermore National Laboratory and before that, he was the director of the science program at the Center for International Security and Cooperation at Stanford University for 16 years. Wilkening's major research interests include nuclear strategy and policy, arms control, the proliferation of nuclear and biological weapons, bioterrorism, ballistic missile proliferation, ballistic missile defense and advanced conventional weapons. Wilkening has participated in several U.S. National Academy of Science committees on biological terrorism and ballistic missile defense, as well as several Defense Science Board task forces. He received his Ph.D. in physics from Harvard University.



Heather Williams

Visiting Fellow

Dr Heather Williams is currently a visiting fellow at the Harvard Kennedy School Project on Managing the Atom until summer 2022. From 2020–2021 she was a Stanton Nuclear Security Fellow at the Massachusetts Institute of Technology Security Studies Program. She is a Senior Lecturer in the Defence Studies Department and Centre for Science and Security Studies (CSSS). She is also an Associate Fellow at the Royal United Services Institute (RUSI), a Senior Associate Fellow at the European Leadership Network and serves on the Wilton Park Advisory Council. She serves on the boards of the Nonproliferation Review and the UK Project on Nuclear Issues (PONI). She has a Ph.D. from the Department of War Studies at King's College London, a B.A. in International Relations and Russian Studies from Boston University, and an M.A. in Security Policy Studies from The George Washington University.

