

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



Michael Albertson

Distinguished Fellow

Michael Albertson is deputy director of the Center for Global Security Research (CGSR) at Lawrence Livermore National Laboratory. Prior to his current position at CGSR, he served for 16 years in the federal government handling a wide variety of deterrence and arms control-related portfolios for various organizations. From November 2018 to September 2020 he was a senior policy advisor in the Office of the Secretary of Defense (OSD) in the Office of Nuclear and Missile Defense Policy, facilitating extended deterrence dialogues with NATO and Asian allies. Before OSD, Mr. Albertson worked as a team lead in the Department of State's Office of Strategic Stability and Deterrence Affairs from 2015 to 2018 on Russian strategic nuclear arms control issues including implementation and compliance of the INF Treaty and New START Treaties. He served from 2013 to 2014 on the National Security Council Staff as a director for Russia covering Russian military-security issues; from 2010 to 2012 as a policy advisor to the senior advisor for Arms Control and Strategic Stability to the Under Secretary of Defense (Policy) participating in the negotiation, ratification, and implementation of the New START Treaty; and from 2004 to 2010 as an intelligence analyst and then senior intelligence analyst in the Department of Defense studying Russian military capabilities and doctrine. He holds a B.A. in international relations and government from Claremont McKenna College, an M.S. in strategic intelligence from the National Defense Intelligence College, and an M.A. in security policy studies from George Washington University.



Paul Bernstein

Expert Consultant

Paul I. Bernstein is an Expert Consultant to the Center for the Study of Weapons of Mass Destruction at National Defense University in Washington, D.C. From 2011 to 2023 he was a Distinguished Fellow at the Center, leading its practice in strategic security analysis, which encompassed a range of advisory, policy support, research, and professional military education activities related to WMD, nuclear policy, deterrence, threat reduction, and regional security. He has worked in collaboration with the Office of the Secretary of Defense, Joint Staff, Services, combatant commands, defense agencies, and DoD interagency partners. From August 2021 through October 2022 he was detailed to the Office of the Secretary of Defense as Senior Advisor for Nuclear Deterrence Policy and was a lead writer for the 2022 Nuclear Posture Review. 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

Ms. 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.



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

Senior Fellow

Toby Dalton is senior fellow and co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace. His work covers nonproliferation, deterrence, and nuclear energy issues with a focus on East Asia and South Asia. Prior to joining Carnegie he served for 10 years at the U.S. National Nuclear Security Administration, including a posting as the Energy Attaché at the U.S. Embassy in

Islamabad, Pakistan. He also was a professional staff member on the Senate Foreign Relations Committee and a Luce Scholar in Seoul, Korea. He received a PhD in public policy from the George Washington University.



Michelle Dover
Executive Director

Ms. Dover is the Executive Director of the International Security Advisory Board and a Senior Advisor for Strategic Assessment at the U.S. Department of State. Prior to this, she was director of programs at Ploughshares Fund, where she led the grant-making team. In 2018, Ms. Dover and NTI's Ambassador Laura Holgate co-founded Gender Champions in Nuclear Policy. Before joining Ploughshares Fund in 2015, Ms. Dover conducted research at the James Martin Center for Nonproliferation Studies on nuclear, chemical, and biological cooperative threat reduction programs. She was previously a Nonproliferation Graduate Fellow at the National Nuclear Security Administration, where she worked on international nuclear safeguards policy. She is a Term Member of the Council on Foreign Relations. Ms. Dover graduated with honors from the University of Denver with a bachelor's degree in international studies and French and holds a master's degree in conflict resolution from American University.



Rebecca Gibbons
Associate Professor

Rebecca Davis Gibbons is an associate professor of political science at the University of Southern Maine. She previously served as a fellow and associate of the Project on Managing the Atom at Harvard Kennedy School's Belfer Center for Science and International Affairs after receiving her Ph.D. from Georgetown University in 2016. Her research focuses on the nuclear nonproliferation regime, arms control, disarmament, norms, public opinion, and global order. Her

academic writing has been published in journals including the *Journal of Politics*, *Contemporary Security Policy*, *Journal of Global Security Studies*, *Journal of Strategic Studies*, *Washington Quarterly*, and *Nonproliferation Review*. Her public affairs commentary has been featured in *Arms Control Today*, *The Hill*, *U.S. News & World Report*, *The Bulletin of Atomic Scientists*, *War on the Rocks*, and the *Washington Post's Monkey Cage*. Before becoming an academic, Dr. Gibbons taught elementary school within the Bikini community in the Republic of the Marshall Islands and served as a national security policy analyst at SAIC providing research and analytic support on arms control and nonproliferation issues to Headquarters Air Force Strategic Stability and Countering WMD Division (AF/A10-S). Her book *The Hegemon's Tool Kit: US Leadership and the Politics of the Nuclear Nonproliferation Regime* was published by Cornell University Press in 2022.



Bruce Goodwin

Visiting Scientific Professional

Bruce Goodwin is currently retired from, and a Visiting Scientific Professional at, the Lawrence Livermore National Laboratory. His BS is in Physics from the City College of New York. His PhD is from the University of Illinois at Urbana-Champaign and is in Aerospace Engineering & Astrophysics with a thesis on neutron star formation. He joined Los Alamos National Laboratory in 1981 as a nuclear weapon designer and came to Lawrence Livermore National Laboratory (LLNL) in 1985 as a weapon designer. He is an A-Bomb designer (i.e. the first stage of the H-Bomb) and specialized in Plutonium implosion dynamics. In this role, he designed five nuclear explosive tests and won the Secretary of Energy's Lawrence Gold Medal for his Plutonium research. He then became the Principal Associate Director for the LLNL nuclear weapons program and managed the Livermore weapons program for 12 years. He then became the Associate Director-at-Large for National Security Policy and Research and was responsible for LLNL policy research and liaison with the US military, US government and non-

governmental organizations. His current interests are in Additive Manufacturing and its impacts on nuclear weapons proliferation, the history of the Comprehensive Test Ban Treaty and its future, and the education of new nuclear weapons designers and engineers.



Peter Hays

Defense Contractor

Peter L. Hays is a retired Air Force Lt. Col. who works as a defense contractor in the Pentagon supporting the Policy, Strategy, and Plans Directorate (S5S) under the Chief Strategy and Resourcing Officer on the Space Staff. He has been directly involved in developing and implementing most of the major national security space policy and strategy initiatives since 2004. Professor Hays' research interests coincide with his current graduate seminars on "Space and National Security" and "Science, Technology, and National Security Policy" at the Space Policy Institute at George Washington University, service as the Space Chair at Marine Corps University (MCU), and teaching air- and spacepower seminars at the MCU School of Advanced Warfighting. He was a 1979 Honor Graduate of the USAF Academy and earned a Ph.D. from the Fletcher School. Hays' major publications include *Handbook of Space Security*, *Space and Security*, and *Toward a Theory of Spacepower*.



Siegfried S. Hecker

Professor Emeritus

Siegfried Hecker is the former director of the Los Alamos National Laboratory and Professor Emeritus of Stanford University. He is currently professor of practice at the Middlebury Institute of International Studies at Monterey and professor of practice in the Department of Nuclear Engineering at Texas A&M University. He was at the Los Alamos National Laboratory for 34 years, including serving as its fifth director from 1986 through 1997. He was at Stanford University for 17 years in the Department of Management

Science and Engineering and in the Center for International Security and Cooperation (CISAC), including serving as co-director from 2007 to 2012. Hecker has worked on nuclear matters for most of his career, including having visited all countries with declared nuclear weapons programs, including North Korea. Hecker is the editor of *Doomed to Cooperate* (2016), two volumes documenting the history of Russian-U.S. laboratory-to-laboratory cooperation and *Hinge Points: An Inside Look at North Korea's Nuclear Program* (2023) written with Elliot Serbin.



Newell Highsmith

Former State Department Official

Newell Highsmith 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 was detailed to the National Security Council from 1996 to 1998. He served as primary legal adviser to the U.S. negotiating teams for the 2015 Joint Comprehensive Plan of Action with Iran, the 1994 Agreed Framework with North Korea, and the 2008 agreement for peaceful nuclear cooperation with India. Mr. Highsmith also provided the legal guidance for the U.S. response to: Syria's use of chemical weapons and its construction of a clandestine nuclear reactor; Russia's violations of its arms control obligations; India and Pakistan's nuclear tests; Libya's renunciation of weapons of mass destruction; and Iraq's clandestine 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.



Sheryl Hingorani

Senior Advisor

Ms. Hingorani is currently on assignment with the U.S. Department of Energy's National Nuclear Security Administration, where she is fulfilling the role of Senior Advisor to the Deputy Administrator for Defense Programs. Ms. Hingorani is the Chief of Staff at Lawrence Livermore National Laboratory (LLNL), where she works closely with the Laboratory Director and the senior management team to enhance institutional planning and communications, as well as sponsor and partner relations. She coordinates Lab interactions on governance, strategic planning, new initiatives, and integrated priorities to meet the Laboratory missions. Ms. Hingorani joined LLNL following a 33-year career at Sandia National Laboratories, where she held a variety of key positions in the nuclear deterrence and homeland security programs, most recently leading the Systems Analysis and Engineering organization at the Sandia site in Livermore. Ms. Hingorani was the Executive Director of the Albuquerque Committee on Foreign Relations, a local affiliate of the American Committees on Foreign Relations where she also served as Secretary. She has been an advisor to the Defense Science Board and an affiliate to the California Council on Science and Technology, as well as an advisor to the US Council on Competitiveness. She has a B.S. degree in Mechanical Engineering from the University of Nebraska, and an M.S. degree in Mechanical Engineering from the University of New Mexico. Ms. Hingorani is an alumnus of the Seminar XXI Fellowship program at the Massachusetts Institute of Technology Center for International Studies.



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.



Stephen Kung
Office Director

Dr. Stephen Kung is the Office Director for Materials and Chemical Technologies in the Office of Nuclear Energy, U.S. Department of Energy. In this role, he is responsible for the development of fuel recycling technologies, including aqueous-processing, pyro-processing, vapor phase separations, off-gas and waste form developments and related safeguards and security technologies. Stephen received his Ph.D. and Master degrees for Cornell University and has over 30 years of experience working in the nuclear energy technologies developments. Before joining DOE-NE, Stephen was a Technical Staff Member at Los Alamos National Laboratory.



John Lauder

Independent Consultant

John A. Lauder was one of the founders of the James A. Garfield Center for Public Leadership at Hiram College and continues to serve as an adviser to the Center. He is currently an independent consultant on nonproliferation, arms control monitoring, and intelligence. He retired from the US government with over 33 years of managerial, analytical, and policy experience in the Central Intelligence Agency (CIA), National Reconnaissance Office (NRO), and as an arms control negotiator. Before joining CIA, he served in the United States Army and on the staff of a Congressional committee. His last three assignments in the government were as Deputy Director of National Support at the NRO, Director of CIA's Nonproliferation Center, and Chief of the Intelligence Community's Arms Control Intelligence Staff. Mr. Lauder served subsequently as a senior manager and corporate officer within Arete' Associates. He continues to be instrumental in shaping research and strategic planning in the public and private sectors, including as a member of government, academic, laboratory, and nonprofit advisory panels. He has helped lead influential studies to improve intelligence on weapons of mass destruction and to facilitate verification of international agreements. Mr. Lauder has a B.A. Summa Cum Laude from Hiram College and an M.A. in International Relations from Yale University.



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. Previously he was at the University of Toronto. 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 numerous publications in international relations, intelligence studies, and the sociology of technology. He is completing a book project entitled, *Age of Deception: Cybersecurity and Secret Statecraft*. He also has a book forthcoming with Erik Gartzke entitled, *Disintegrating Deterrence: Hard Political Choices about New Military Domains*. 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. He has also served in the U.S. Navy with assignments in Europe, Latin America, and the Middle East.



Frank Miller

Principal

The Honorable Franklin Miller is a principal at the Scowcroft Group in Washington, DC. He dealt extensively with nuclear policy and nuclear arms control issues during his 31-year government career, which included senior positions in the Defense Department and on the NSC staff. He was directly in charge of US nuclear deterrence and targeting policy from 1985 to 2001 and also chaired NATO's senior nuclear policy committee, the High-Level Group, from 1997 to 2001. He is a member of the Strategic Command Advisory Board and served on Defense Policy Board from 2008-2020. He served on the 2008 Secretary of Defense Task Force on DoD Nuclear Weapons Management (Schlesinger Task Force), on the 2013-2014 Congressional Advisory Panel on the Nuclear Security Enterprise (Mies-Augustine Panel), and is currently a member of the on-going Congressional Commission on Strategic Posture. He publishes frequently on deterrence and arms control issues.



Rolf Mowatt-Larssen

Senior Fellow

Rolf Mowatt-Larssen is a Senior Fellow at Harvard Belfer Center, having served until July 2019 as Director of the Center's Intelligence Project. Before coming to the Belfer Center, Mowatt-Larssen 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

Founder and Faculty Director

Dr. Andrew Reddie is the founder and faculty director for the Berkeley Risk and Security Lab and is an Assistant Research Professor 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. Andrew serves in faculty leadership roles at UC Berkeley's Center for Security in Politics, Center for Long-Term Cybersecurity, and the Berkeley APEC Study Center and is an affiliate at the University of California's Institute on Global Conflict and Cooperation. He also serves as the UC Berkeley campus lead for the University of California's Disaster Resilience Network.

He is a Bridging the Gap fellow, a non-resident fellow at the Brute Krulak Center at Marine Corps University, and a term member of the Council on Foreign Relations. Previously, Andrew has served in roles at Sandia National Laboratories, Lawrence Livermore National Laboratory's Center for Global Security Research, and the Council on Foreign Relations in Washington, DC. Andrew was also a Hans J. Morgenthau Fellow.



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.



Laura Rockwood

Senior Fellow

Laura Rockwood is a Senior Fellow at the Vienna Center for Disarmament and Non-Proliferation (VCDNP). Laura retired in 2013 from the International Atomic Energy Agency (IAEA), where she served for 28 years 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 returned to the VCDNP after serving as the inaugural Director of Open Nuclear Network (ONN), a program of One Earth Future. Laura came to ONN from her position as Executive Director of the VCDNP between 2015 and 2019. 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. 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.



Joan Rohlfing

President and Chief Operating Officer

Joan Rohlfing is President and Chief Operating Officer of the Nuclear Threat Initiative (NTI). Prior to joining NTI, Ms. Rohlfing held senior positions with the U.S. Department of Energy and worked in New Delhi as an advisor to the U.S. Ambassador to India, in the wake of nuclear tests in India and Pakistan. Earlier, she worked as a professional staff member of the House Armed Services Committee where she oversaw nuclear programs of the Department of Defense and the Department of Energy's national security programs. Ms.

Rohlfing began her career in the Office of the Secretary of Defense, where she was awarded a Presidential Management Internship, and later worked in the Office of Strategic Forces Policy. Ms. Rohlfing holds a master's degree in public management and a bachelor's degree in political science.



Brooke A. Samples

Director

Brooke Samples serves as the Director for Nuclear Threat Reduction and Counterterrorism within the Arms Control, Disarmament, and Nonproliferation directorate at the National Security Council (NSC). Within NSC, she leads a portfolio mitigating a range of national security threats, including countering nuclear proliferation and weapons of mass destruction terrorism. Before assuming her current role in July of 2022, Ms. Samples was the Acting Director for Tritium and Domestic Uranium Enrichment in the Department of Energy's National Nuclear Security Administration (DOE/NNSA). Ms. Samples previously served as the DOE/NNSA Senior Policy Advisor and Nuclear Weapons Council Executive Action Officer in the Office of Defense Programs, where she managed defense policy-related efforts. She also served as the Director of International Programs, leading international defense and nuclear security cooperation with the United Kingdom and France, and as the DOE/NNSA Liaison Officer to the United Kingdom's Ministry of Defence in London. While resident in the UK, she expanded joint defense exchanges and nuclear warhead collaboration under the 1958 Mutual Defense Agreement. Ms. Samples holds Master of Arts in National Security and Strategic Studies from the Naval War College, as well as in National Security Studies from American Military University, along with a Bachelor of Science in Political Science from Old Dominion University. She also holds a graduate certificate in Ethics and Emerging Military

Technologies from the Naval War College with a thesis focused on the ethical implications of space warfare and technological alternatives to space-based offensive weapon systems.



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 2022, Mark became President of the Institute of Nuclear Materials Management.



John Scott

Division Leader

John Scott is the Division Leader for X-Theoretical Design, the weapon physics design division at LANL. He 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 also 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.



Mike Singh

Managing Director and Senior Fellow

Michael Singh is managing director and senior fellow at the Washington Institute for Near East Policy, and interim director of the Institute's Glazer Program on Great Power Competition and the Middle East. Mr. Singh is also a Senate-confirmed member of the board of directors of the United States Institute of Peace. He was senior director for Middle East Affairs at the White House from 2007-2008, and a director on the NSC staff from 2005-2007. Earlier, he served as special assistant to Secretaries of State Powell and Rice, and at the US Embassy in Tel Aviv. Mr. Singh co-chaired the Congressionally-appointed Syria Study Group, and served on the Congressional Task Force on Extremism in Fragile States. In addition, he co-chaired Mitt Romney's State Department transition team in 2012, and served as Middle East advisor to the Romney campaign. Mr. Singh has been an adjunct fellow at the Belfer Center at Harvard's Kennedy School of

Government and an economics instructor at Harvard College. Mr. Singh also serves on the boards of the Vandenberg Coalition, a network of foreign policy practitioners advancing an internationalist US foreign policy, and of Welcome.US, a bipartisan organization dedicated to assisting refugees. He is a graduate of Princeton and Harvard universities, and lives in Virginia.



Ariane Tabatabai

Senior Advisor

Dr. Ariane M. Tabatabai currently serves as a Senior Advisor to the Assistant Secretary for International Security and Nonproliferation at the U.S. Department of State. Tabatabai was previously appointed as a Senior Advisor to the Under Secretary for Arms Control and International Security and Senior Policy Advisor in the Office of the Secretary of Defense, at the Department of Defense. Prior to joining the Administration, Tabatabai served on the Biden-Harris Transition and held a number of positions in academia and think tanks, including as the Alliance for Securing Democracy Middle East Fellow at the German Marshall Fund of the United States, adjunct senior research scholar at the Columbia University School of International and Public Affairs, associate political scientist at the RAND Corporation, the director of curriculum and visiting assistant professor of security studies at the Georgetown University Edmund A. Walsh School of Foreign Service, and an international civilian consultant for NATO. While completing her doctoral work at King's College London, she was awarded multiple grants and fellowships including a post-doctoral fellowship in the International Security Program at the Harvard Kennedy School's Belfer Center for Science and International Affairs, where she also received a Stanton nuclear security fellowship. Tabatabai is a U.S. Navy Reserve intelligence officer and a Council on Foreign Relations Term Member. She is the co-author of *Triple Axis: Iran's Relations With Russia*

and China (I.B.Tauris, 2018) and the author No Conquest, No Defeat — Iran's National Security Strategy (Oxford University Press, 2020).



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 a tenured Associate Professor of National Security Affairs at the Naval Postgraduate School, where he focuses on Chinese foreign policy and East Asian security issues. He authored *The Military Lens: Doctrinal Differences and Deterrence Failure in Sino-American Relations* (Cornell, 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" (Bolt and Smith, eds., *China's Strategic Arsenal: Worldview, Doctrine, and Systems* (Georgetown University Press, 2021)). He has consulted for the Office of the Secretary of Defense, the State Department, INDOPACOM, RAND, NBR, and others. He 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 MIT, 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.



Robert Wheeler

Senior Advisor

Major General Robert E. Wheeler (ret.) has spent the majority of his life serving the Nation and protecting what it stands for throughout the world. His experience encompasses all facets of combat flying operations, cyber, electronic warfare, nuclear operations, command and control (C2), communications as well as international negotiations. He also has broad leadership and budgeting experience at the Secretary of Defense staff level, interagency, Congress, White House, as well as with our international partners. Retired in March of 2016, after 32 years of service, Major General Wheeler continues serving his country by advising various senior advisory panels and advocating on issues of national importance. As the former DoD Deputy Chief Information Officer for Command, Control, Communications/Computers (C4) at the Office Secretary of Defense he was responsible for leading cyber security modernization and standardization in critical legacy National Security Systems while managing many of the Nation’s most sensitive communications programs. He also led and executed the DoD’s largest spectrum auction in U.S. history with industry, White House, and Congress. He served in multiple staff assignments including air campaign analyst for the Air Force Studies and Analysis Agency, and division chief for the Joint Chiefs of Staff for European security issues. In addition, he was the senior military adviser to the U.S.

Mission Vienna, Austria for the Organization for Security and Cooperation Europe (OSCE) and served as the senior US military representative to the NATO command & control, communications, and cyber board. Major General Wheeler graduated from the University of Wisconsin with a bachelor's degree in industrial engineering and has been awarded three separate master's degrees. He was commissioned in the United States Air Force in 1984.



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

Director

Heather Williams is the director of the Project on Nuclear Issues and a senior fellow in the International Security Program at the Center for Strategic and International Studies (CSIS). Prior to joining CSIS, she was a visiting fellow with the Project on Managing the Atom in the Belfer Center for Science and International Affairs at the Harvard Kennedy

School and a Stanton Nuclear Security fellow in the Security Studies Program at MIT. Until 2022, she was a senior lecturer (associate professor) in defense studies at King's College London and taught on arms control, deterrence, and disarmament. From 2018 to 2019, Dr. Williams served as a specialist adviser to the House of Lords International Relations Committee inquiry into the Nuclear Non-Proliferation Treaty and disarmament, and until 2015 she was a research fellow at Chatham House. She previously worked in the Strategy, Forces, and Resources Division at the Institute for Defense Analyses, where she remains an adjunct research staff member. She is an associate fellow at the Royal United Services Institute (RUSI), a senior associate fellow with the European Leadership Network, and a member of the Wilton Park Advisory Council. Dr. Williams has a PhD in war studies from King's College London, an MA in security policy studies from the George Washington University, and a BA in international relations and Russian studies from Boston University.