# PUBLIC POLICY AND NUCLEAR THREATS BOOT CAMP 2015

## LEADERSHIP SPEAKERS + STAFF

Bethany L. Goldblum is the Director of the 2015 Public Policy and Nuclear Threats Bootcamp and Founder and Director of the Nuclear Policy Working Group at UC Berkeley, an interdisciplinary team of undergraduate and graduate students focused on developing policy solutions to strengthen global nuclear security. She also serves as the Director of Education for Nuclear Science and Security Consortium, a \$25M grant established by the National Nuclear Security Administration to train the next generation of nuclear security experts.



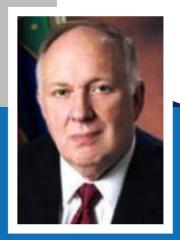
## BETHANY GOLDBLUM PPNT DIRECTOR

Goldblum received a Ph.D. in Nuclear Engineering from the University of California, Berkeley in 2007. She served as a Clare Boothe Luce Chancellor's Postdoctoral Fellow at Berkeley before joining the nuclear engineering faculty at the University of Tennessee, Knoxville in August 2010. In January 2012, she returned to Berkeley as a member of the research faculty. Her research interests are in the areas of fundamental nuclear physics for nuclear security applications, nuclear-plasma interactions, scintillator characterization, and nuclear energy and weapons policy. From 2004-2006, she held the National Science Foundation Public Policy and Nuclear Threats Fellowship. She was a Project on Nuclear Issues Scholar at the Center for Strategic a and International Studies and a member of the United States delegation to the 2008 China-India-United States Workshop on Science, Technology and Innovation Policy in Bangalore, India. She is author or co-author of over 45 scientific publications and presentations.

Ambassador Linton Brooks is an independent consultant on national security issues, a 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 and an advisor to six of the Department of Energy national laboratories. 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.

## LINTON BROOKS DISTINGUISED FELLOW IN RESIDENCE



#### BRUCE **BLAIR**

Bruce Blair is a member of the Princeton University research faculty in the Program on Science and Global Security. He is the co-founder of Global Zero, the international movement for the elimination of nuclear weapons. Bruce serves on the Secretary of State's International Security Advisory Board and is frequently called upon to testify before Congress as an expert on nuclear weapons. Bruce was a longtime senior fellow at the Brookings Institution before founding the World Security Institute. He was awarded a MacArthur Fellowship Prize for his work and leadership on de-alerting nuclear forces in 1999. In previous positions, he served as a project director at the Congressional Office of Technology Assessment, as a Minuteman missile launch control officer, and as a support officer for the "Looking Glass" airborne command post of the Strategic Command. Bruce has taught at Yale and Princeton universities and produced the PBS television series "Foreign Exchange with Fareed Zakaria" as well as numerous documentary films including "Countdown to Zero", a feature film about nuclear danger. He holds a Ph.D. in Operations Research from Yale University.





#### MICHAEL CHASE

Michael Chase is a senior political scientist at RAND, a professor at the Pardee RAND Graduate School, and an adjunct professor in the China Studies and Strategic Studies Departments at Johns Hopkins University's School of Advanced International Studies (SAIS) in Washington, D.C.. A specialist in China and Asia-Pacific security issues, he was previously an associate professor at the U.S. Naval War College (NWC) in Newport, Rhode Island, where he served as director of the strategic deterrence group in the Warfare Analysis and Research Department and taught in the Strategy and Policy Department. Prior to joining the faculty at NWC, he was a research analyst at Defense Group Inc. and an associate international policy analyst at RAND. He is the author of the book Taiwan's Security Policy and numerous chapters and articles on China and Asia-Pacific security issues. His work has appeared in journals such as Asia Policy, Asian Security, China Brief, Survival, and the Journal of Strategic Studies. His current research focuses on Chinese military modernization, China's nuclear policy and strategy and nuclear force modernization, Taiwan's defense policy, and Asia-Pacific security issues. Chase holds a Ph.D. in international affairs and M.A. in China Studies from SAIS and a B.A. in politics from Brandeis University. In addition, he studied Chinese at the Hopkins-Nanjing Center in Nanjing, China.



#### JOE CIRINCIONE

Joe Cirincione is president of Ploughshares Fund, a global security foundation. He previously served as Vice President for National Security and International Policy at the Center for American Progress and Director for Non-Proliferation at the Carnegie Endowment for International Peace. He is the author of the books Nuclear Nightmares: Securing the World Before It Is Too Late, Bomb Scare: The History and Future of Nuclear Weapons and is the author or editor of five other books on nuclear weapons and national security policy. Cirincione serves on the Secretary of State's International Security Advisory Board, is a member of the Council on Foreign Relations, and teaches at the graduate School of Foreign Service at Georgetown University. Cirincione worked for nine years in the U.S. House of Representatives on the professional staff of the Committee on Armed Services and the Committee on Government Operations.



#### MASSIMII IANO **FRATON**I

Massimiliano Fratoni is Assistant Professor in the Department of Nuclear Engineering at the University of California, Berkeley (UCB). He received a Laurea in Nuclear Engineering from Università di Roma "La Sapienza" (Italy), and a MSc and a PhD from the University of California, Berkeley. Prior to joining the Nuclear Engineering Department at UCB, he held a Research Scientist position at the Lawrence Livermore National Laboratory and a faculty position at The Pennsylvania State University. Dr. Fratoni has a decennial experience in reactor design and analysis, spanning a large variety of reactor concepts, like advanced high temperature reactors, small modular fast reactors, liquid fuel reactors, advanced light water reactors, and molten salt reactors. His main research interests lie in advanced fuel cycles for maximizing natural resource utilization and minimize nuclear waste.

#### BRUCE **GOODWIN**

Bruce Goodwin is the Associate Director-at-Large for National Security Policy and Research. He is responsible for Lawrence Livermore National Laboratory's (LLNL) policy research and liaison with the US military, US government and non-governmental organizations. He was the Principal Associate Director for the nuclear weapons program at LLNL from 2001 until 2013. In this role, he led the certification of LLNL nuclear weapons and had responsibility for establishing priorities, for developing strategies, and for the design and maintenance of LLNL nuclear weapons. In leading the Stockpile Stewardship Program, he was instrumental in developing the Quantification of Margins and Uncertainties methodology that sustains the US deterrent without nuclear testing. He began his nuclear weapons research at Los Alamos in 1981 and moved to LLNL in 1985 where he specialized in the impact of plutonium behavior on performance. Goodwin received his PhD and MS in Aerospace Engineering from the University of Illinois at Urbana-Champaign, and his BS in Physics from City College of New York.



#### ROSE GOTTEMOELLER

Rose Gottemoeller is the Under Secretary for Arms Control and International Security in the U.S. Department of State. She was the chief U.S. negotiator of the New Strategic Arms Reduction Treaty with the Russian Federation, in 2011. In 2000, she became a senior associate with the Carnegie Endowment for International Peace. Previously, she served as Deputy Undersecretary of Energy for Defense Nuclear Nonproliferation, on the National Security Council staff as Director for Russia, Ukraine, and Eurasia Affairs, and as a social scientist at RAND. She has taught on Soviet military policy and Russian security at Georgetown University.



#### TIM HANLEY

Tim Hanley has served with the Department of Energy's National Nuclear Security Administration (DOE/NNSA) since 2002 and in a series of roles with DOE/NNSA's Material Protection, Control and Accounting (MPC&A) Program. The MPC&A Program supports U.S. national security by working with partner countries to enhance the security of nuclear weapons and weapons-usable nuclear materials. Hanley is currently serving as Director of the newly formed NA-21 Office of International Nuclear Security (INS). INS oversees all DOE/NNSA's work with partner countries to secure attractive nuclear material from terrorists or would-be proliferant states. He holds a Master of Science in Foreign Service from Georgetown University and a Bachelor of Business Administration from James Madison University.





#### JOHN HARVEY

In 2013, Dr. John R. Harvey retired from the Department of Defense as Principal Deputy Assistant Secretary for Nuclear, Chemical and Biological Defense Programs. He is a physicist with over 35 years experience working with nuclear weapons and national security issues, first at Lawrence Livermore National Laboratory, then at Stanford University's Center for International Security and Arms Control and, prior to his last assignment, in other senior government positions in the Departments of Defense and Energy. Currently, he is a consultant with the Institute for Defense Analysis, the Los Alamos National Laboratory, the National Institute for Public Policy, the Center for Strategic and International Studies, and, among others, Strategic Command's Strategic Advisory Group where he advises on nuclear command and control issues.



#### OLL HEINONEN

Olli Heinonen is a Senior Fellow at the Harvard Kennedy School of Government's Belfer Center for Science and International Affairs. His research and teachings include: nuclear non-proliferation and disarmament, verification of treaty compliance, enhancement of the verification work of international organizations, and transfer and control of peaceful uses of nuclear energy. Before joining the Belfer Center in September 2010, Olli Heinonen served 27 years at the International Atomic Energy Agency in Vienna. Heinonen was the Deputy Director General of the IAEA, and head of its Department of Safeguards. Prior to that, he was Director at the Agency's various Operational Divisions, and as inspector including at the IAEA's overseas office in Tokyo, Japan. Prior to joining IAEA, he was a Senior Research Officer at the Technical Research Centre of Finland Reactor Laboratory in charge of research and development related to nuclear waste solidification and disposal. He is co-author of several patents on radioactive waste solidification. Olli Heinonen studied radiochemistry and completed his PhD dissertation in nuclear material analysis at the University of Helskini.



#### KIM KNIGHT

Kim Knight is a staff scientist at Lawrence Livermore National Laboratory focused on nuclear forensic research through analysis of nuclear and associated materials for clues about material origins. A geochemist by training, she was and remains endlessly fascinated with radioactive materials. She is presently involved in the development of new techniques and methods which can be applied to improve interpretation of nuclear materials, including several international collaborative technical efforts. She has been involved in the design and delivery of numerous training courses in technical nuclear forensics, as well as the development and revision of international guidelines as a participant in IAEA consultancies and workshops. Dr. Knight received her Ph.D. from the University of California, Berkeley in 2006, working as a post-doctoral researcher at The University of Chicago and Argonne National Laboratory, prior to joining LLNL in 2008.

#### MICHAEL KREPON

Michael Krepon served as the founding President and CEO of the Stimson Center from 1989 to 2000. After stepping down, he taught for ten years as a Diplomat Scholar at the University of Virginia while continuing to direct Stimson's programming to reduce nuclear dangers in South Asia and to avoid military conflict in space. He worked previously at the Carnegie Endowment, the State Department, and on Capitol Hill. He has written over 400 articles and is the author or editor of twenty-one books, including Better Safe than Sorry: The Ironies of Living with the Bomb and Deterrence Instability and Nuclear Weapons in South Asia. Krepon was given the Thérèse Delpeche Memorial Award for lifetime achievement in non-governmental work to reduce nuclear dangers by the Carnegie Endowment for International Peace in 2015.



#### MATTHEW KROENIG

Matthew Kroenig is an Associate Professor and International Relations Field Chair in the Department of Government and School of Foreign Service at Georgetown University and a Senior Fellow in the Brent Scowcroft Center on International Security at The Atlantic Council. From May 2010 to May 2011, he served as a special adviser in the Office of the Secretary of Defense on a Council on Foreign Relations International Affairs Fellowship, where he worked on defense policy and strategy for Iran. His most recent book, A Time to Attack: The Looming Iranian Nuclear Threat (2014), examines all aspects of the Iranian nuclear challenge, including the rationale behind the U.S. policy of ruling out containment as an option if diplomacy fails. He is author or editor of several other books, including Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons (2010), which received Honorable Mention for the International Studies Association Best Book Award. His articles on international politics have appeared in such publications as American Political Science Review, Foreign Affairs, Foreign Policy, International Organization, The New York Times, The Wall Street Journal, and The Washington Post. He was a fellow in the first ever Public Policy and Nuclear Threats boot camp in the summer of 2003.



#### BRYAN LEE

Bryan Lee is a former career Army officer and Eurasian affairs specialist with more than 20 years of experience in a variety of national security assignments. Most recently, he was the Director of the International Counterproliferation Program at the Defense Threat Reduction Agency, a \$12 million program created by Congress to train foreign nations how to address the threat of smuggling of weapons of mass destruction (WMD). Prior to working at the Defense Threat Reduction Agency, Bryan was a Senior Intelligence Officer at the Defense Intelligence Agency, where he led the teams responsible for Russian and Central Asian military affairs. He is a recipient of the Distinguished Analyst award from the Office of the Director of National Intelligence, and has served as the principal intelligence briefer to the Assistant Secretaries of Defense for Global Security Affairs and International Security Affairs, and the Deputy Assistant Secretary of Defense for Eurasia.





#### **ROLF MOWATT-LARSSEN**

Prior to his appointment as a senior fellow at the Belfer Center, Mr. Rolf 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. His overseas assignments include Stockholm (1984-1987), Moscow (1988-1990, 1992-1994), Athens (1990-1992), Yerevan (1992), Zurich (1994-1996) and Oslo (1998-2000). Prior to his career in intelligence, Mr. Mowatt-Larssen served as an officer in the U.S. Army. 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.



#### GAUKHAR MUKHATZAHANOVA

Gaukhar Mukhatzhanova is the Director of the International Organizations and Nonproliferation Program at the James Martin Center for Nonproliferation Studies (CNS), Middlebury Institute of International Studies at Monterey. She is currently based in the Washington, DC office of CNS. Her research includes international nonproliferation organizations and regimes, nuclear-weaponfree zones, the Non-Aligned Movement, and proliferation theory. She served as an advisor on the delegation of Kazakhstan to the 2010 NPT Review Conference and several Preparatory Committee sessions. She is co-author of an Adelphi Book Nuclear Politics and the Non-Aligned Movement: Principles versus Pragmatism (Routledge, 2012) and co-editor of the two-volume collection Forecasting Nuclear Proliferation in the 21st Century (Stanford University Press, 2010). She has published in International Security, Bulletin of the Atomic Scientists, Arms Control Today, and the International Herald Tribune.



#### MICHAEL **NACHT**

Michael Nacht is Thomas and Alison Schneider Professor of Public Policy at the University of California, Berkeley where he is the Policy Focus Leader for the Nuclear Science and Security Consortium. He is also a Principal Investigator for the UCSD Minerva Project on Cross Domain Deterrence and a faculty affiliate of Berkeley's new Center for Long Term Cyber Security. From 2009-2010 he served as Assistant Secretary of Defense for Global Strategic Affairs for which he received the Distinguished Public Service Medal, the Department's highest civilian honor.

#### RICHARD **NEPHEW**

Richard Nephew is a Research Scholar and Director of the Economic Statecraft, Sanctions and Energy Market's program at the Center on Global Energy Policy at Columbia University. He joined the Center from his role as Principal Deputy Coordinator for Sanctions Policy at the Department of State, a position he held since February 2013. Nephew also served as the lead sanctions expert for the U.S. team negotiating with Iran. From May 2011 to January 2013 Nephew served as the Director for Iran on the National Security Staff where he was responsible for managing a period of intense expansion of U.S. sanctions on Iran. Earlier in his career he served in the Bureau of International Security and Nonproliferation at the State Department and in the Office of Nonproliferation and International Security at the Department of Energy. Nephew holds a Masters in Security Policy Studies and a Bachelors in International Affairs, both from The George Washington University.



#### VAYL OXFORD

Vayl Oxford is the National security executive Policy Advisor at Pacific Northwest National Laboratory where he works with PNNL leadership to guide the strategic direction and vision for national security issues and helps align PNNL initiatives with national priorities. Prior to joining PNNL, he was appointed by President George W. Bush to be the first Director of the Domestic Nuclear Detection Office with responsibilities to develop and coordinate global strategies and capabilities to counter nuclear terrorism. From 2002-2003, he served as the Director for Counterproliferation at the National Security Council where he supported the development of the National Strategy to combat WMD, the policy and strategy for WMD Interdiction and for developing the initial concept for WMD exploitation and elimination in Iraq. From 1987 to 2002, he served in various positions at DTRA and its predecessor organizations to include the position of Director for Counterproliferation, responsible for directing the DoD CP Counterforce efforts including SOCOM capabilities to exploit and defeat WMD and advanced conventional weapons to hold WMD facilities at risk. Among his numerous awards, Oxford received the Presidential Meritorious Rank Award and the Distinguished Public Service Award for his contributions to Homeland Security.



#### JOE PILAT

Joseph Pilat is a Program Manager in the National Security Office at Los Alamos National Laboratory and Global Fellow of International Security Studies at the Wilson Center. Dr. Pilat served as representative of the Secretary of Defense to the Fourth Review Conference of the Nuclear Non-Proliferation Treaty (NPT), and as an adviser to the US Delegation at the 1995 NPT Review and Extension Conference. Dr. Pilat also served as representative of the Secretary of Defense to the Open Skies negotiations. He has been Special Assistant and Assistant for Nonproliferation Policy in the Office of the Deputy Assistant Secretary of Defense for Negotiations Policy, a Senior Research Associate in the Congressional Research Service and a Research Associate at the International Institute for Strategic Studies. Dr. Pilat has taught in the Department of Government at Cornell University and the College of William and Mary, and in the Department of History at Georgetown University. He has been a Senior Associate Member of St. Antony's College, University of Oxford, a Visiting Fellow at Cornell's Peace Studies Program and a Philip E. Mosely Fellow at the Center for Strategic and International Studies. Dr. Pilat has lectured widely at academic and policy institutions; he has written numerous articles and opinion pieces for US and European scholarly journals and newspapers, and is the author or editor of many books.





#### ROBERT **POWELL**

Robert Powell is Robson Professor of Political Science at UC Berkeley and previously taught at the University of Michigan and Harvard. He specializes in the use of game theory to study international conflict and political conflict more generally. He is the author of Nuclear Deterrence Theory: The Search for Credibility (Cambridge University Press, 1990); In the Shadow of Power: States and Strategies in International Politics (Princeton University Press, 1999); "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense" (International Security, 2003); "Monopolizing Violence and Consolidating Power" (Quarterly Journal of Economics 2013); and "Nuclear Brinkmanship, Limited War, and Military Power" (forthcoming, International Organization). He holds a B.S. in mathematics from Harvey Mudd College; an M.Phil in international relations from Cambridge University; and a PhD in economics from Berkeley. He has been a Fulbright Scholar to the United Kingdom and is a member of the American Academy of Arts and Sciences. In 2012, he won the National Academy of Science's prize for behavior research relevant to the prevention of nuclear war.



#### BRAD ROBERTS

Brad Roberts is director of the Center for Global Security Research at Lawrence Livermore National Laboratory in California. From April 2009 to March 2013 he served as 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. From September 2013 through December 2014, Dr. Roberts was a consulting professor and William Perry Fellow at the Center for International Security and Cooperation at Stanford University, where he authored a forthcoming book entitled The Case for U.S. Nuclear Weapons in the 21st Century (Stanford University Press, forthcoming). Prior to joining the Obama administration, Dr. Roberts was a member of the research staff at the Institute for Defense Analyses and an adjunct professor at George Washington University. His most recent publications are Extended Deterrence and Strategic Stability in Northeast Asia (Tokyo: National Institute for Defense Studies, 2013) and On the Strategic Value of Ballistic Missile Defense (Paris, Institut Français des Relations Internationale, 2014).



#### LORRAINE **SADLER**

Lorraine Sadler is a physicist and nuclear security analyst at Sandia National Laboratories in Livermore, California. She received her Ph.D. at UC Berkeley where she studied magnetic interactions in Bose Einstein Condensates. After graduation, she worked as a post-doctoral researcher at Sandia National Laboratories in nuclear physics with an applied emphasis in developing technologies for homeland security. Dr. Sadler is currently a Principal Member of the Technical Staff focusing on improving nuclear security through a wide range of projects from experimental physics to systems analysis. Along with the technical work that she does at Sandia National Laboratories, she takes a personal interest in championing efforts to increase the diversity and inclusion of non-traditional scientists and engineers.

#### SCOTT SAGAN

Scott 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 Project Chair for the American Academy of Arts and Sciences' Initiative on New Dilemmas in Ethics, Technology, and War. He is the author of Moving Targets: Nuclear Strategy and National Security (Princeton University Press, 1989); The Limits of Safety: Organizations, Accidents, and Nuclear Weapons (Princeton University Press, 1993); and, with co-author Kenneth N. Waltz, The Spread of Nuclear Weapons: An Enduring Debate (W.W. Norton, 2012). Sagan was the recipient of the National Academy of Sciences William and Katherine Estes Award in 2015 and the International Studies Association's International Security Studies Section Distinguished Scholar Award in 2013.



#### SIMON SARADZHYAN

Simon Saradzhyan is assistant director of the U.S.-Russia Initiative to Prevent Nuclear Terrorism at Harvard Kennedy School's Belfer Center. His research interests include arms control, counterterrorism, foreign, defense, and security policies of Russia and other post-Soviet states and their relations with great powers. Prior to joining the Belfer Center in 2008, Saradzhyan worked in Russia for 15 years. While in Russia, he worked as deputy editor of The Moscow Times, Moscow correspondent for Defense News and Space News. Saradzhyan has served as a senior fellow at the East West Institute and worked as a consultant for the United Nations and World Bank. In his capacity as an expert at the Belfer Center on post-Soviet space, Saradzhyan has published op-eds in Financial Times, Washington Post, Boston Globe, and The National Interest and presented his research at various international conferences.



#### MARK **SCHANFEIN**

Mark Schanfein joined Pacific Northwest National Laboratory (PNNL) in August 2015, as a Senior Nonproliferation Advisor, after a 6-year career at Idaho National Laboratory where he focused on pyrosafeguards and other safeguards related research. Prior to INL, he had a 20-year career at Los Alamos National Laboratory where, in his last role, he served as Program Manager for Nonproliferation and Security Technology. He served as a technical expert on the ground in the DPRK during the disablement activities resulting from the 6-Party Talks. Mark has eight years of experience working at the International Atomic Energy Agency in Vienna, Austria, in the Department of Safeguards where he served four years as a safeguards inspector and as Inspection Group Leader in Operations C, and four years as the Unit Head for Unattended Monitoring Systems (UMS) in Technical Support. In this position he was responsible for the installation of all IAEA unattended systems in nuclear fuel cycle facilities worldwide. With over 30 years of experience in international and domestic safeguards, his current focus is on conducting R&D to develop the foundation for effective international safeguards and arms control treaties.





#### ADAM **SCHEINMAN**

On July 18, 2013 President Obama announced his nomination of Adam M. Scheinman as Special Representative of the President for Nuclear Nonproliferation, with the rank of Ambassador. Mr. Scheinman was sworn in on September 22, 2014. Prior to this assignment, Ambassador Scheinman served as Senior Advisor to Assistant Secretary for International Security and Nonproliferation at the U.S. Department of State. From 2009 to 2013, he served as Director for Nonproliferation on the White House National Security Staff, where he oversaw all aspects of U.S. multilateral nuclear policy. From 1999 to 2009, he held a number of positions in the Department of Energy's National Nuclear Security Administration, including Assistant Deputy Administrator in the Office of Nonproliferation and International Security; Director in the Office of Export Control Policy and Cooperation in the Office of Arms Control and Nonproliferation; and Senior Advisor to the Assistant Secretary for Nonproliferation and National Security.



#### JOHN SCOTT

John Scott started at Los Alamos National Laboratory (LANL) in 1998 as a postdoc in the weapon design division after completing his Ph.D. in nuclear engineering at U.C. Berkeley. After becoming a staff member in 2000, he joined the team responsible for the W88. He later served as a system point of contact for the W88, and lead of the LANL secondary design team for Reliable Replacement Warhead project. In 2007, John served as a deputy group leader leading the B61. John served as a member of the ASC Predictive Science Panel from 2009 to 2013 and has been the project leader for weapons performance metrics in the Advanced Certification program since 2009. Currently, John serves as the Laboratory program lead to develop the capability to certify a primary with a re-use pit, the leader for Integrated Design and Assessment group with the Theoretical Design Division and the program manager for Secondary Design and Assessment at LANL.



#### WALTER SLOCOMBE

Walter Slocombe is an officer and director of the Atlantic Council. He is also a Senior Counsel at the Washington, DC, law firm of Caplin & Drysdale, Chartered. His work in the US Department of Defense included service as Under Secretary of Defense for Policy (1994 to 2001), and, from May to November 2003, as Senior Advisor for National Security and Defense in the Coalition Provisional Authority for Iraq. Prior to becoming Under Secretary of Defense for Policy, he had served in the Defense Department as Principal Deputy Under Secretary (1993-94), Deputy Under Secretary for Policy Planning (1979-81), and Principal Deputy Assistant Secretary for International Security Affairs (1977-79), and, in the last two positions, concurrently as Director of the DOD Task Force on the Strategic Arms Limitation Talks (SALT). He was on the staff of the National Security Council in 1969-70. He is currently a member of the State Department International Security Advisory Board and of the international advisory committee of the Geneva Center for Democratic Control of Armed Forces; he has previously been a member of the presidential Commission on Intelligence Capabilities Regarding Weapons of Mass Destruction, of the Defense Policy Board, and of National Academies of Sciences committees that conducted studies of prompt global strike, legal and ethical considerations in information operations, and ballistic missile defense. He received his education at Princeton University, as a Rhodes Scholar at Oxford University, and at Harvard Law School.

#### WILLIAM TOBEY

William Tobey was most recently Deputy Administrator for Defense Nuclear Nonproliferation at the National Nuclear Security Administration. 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. Mr. Tobey also served on the National Security Council Staff in three administrations, 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. He also has extensive experience in investment banking and venture capital.



#### DEAN WILKENING

Dean Wilkening is a physicist at the Lawrence Livermore National Laboratory (LLNL) working on ballistic missile defense. He worked at the Center for International Security and Cooperation at Stanford University for 16 years as a senior scientist and at the RAND Corporation where he held several management positions. His interests include nuclear strategy and policy, arms control, the proliferation of nuclear and biological weapons, bioterrorism, ballistic missile proliferation and ballistic missile defense. His most recent research focuses on the technical viability of ballistic missile defense and its strategic impact in Northeast Asia and Europe, including the potential impact of US missile defense on Russian and Chinese strategic nuclear forces. Prior work focused on the technical feasibility of airborne boost-phase ballistic missile defense. He has participated in several US National Academy of Science committees on biological terrorism and recently was a member of the National Academy of Sciences study entitled "An Assessment of Concepts and Systems for U.S. Boost-Phase Missile Defense in Comparison to Other Alternatives." He is currently a member of a Defense Science Board task force on advanced ballistic and cruise missile threats. He received his PhD in physics from Harvard University, is a fellow of the American Physical Society and has published over 60 journal articles, book chapters and monographs.



#### JOEL WIT

Joel Wit, concurrently Senior Fellow at the U.S.-Korea Institute at SAIS and Adjunct Senior Fellow at Columbia University's Weatherhead Institute for East Asia, is the founder of "38 North" and the project lead. An internationally recognized expert on Northeast Asian security issues and nonproliferation, Mr. Wit has 20 years of experience in the U.S. State Department and the Washington think-tank arena. After a short stint on detail to the Central Intelligence Agency writing the first National Intelligence Estimate on ballistic missile proliferation, Mr. Wit was a member of U.S. delegations to the Strategic Arms Limitation and Intermediate Nuclear Force Talks with the Soviet Union. In 1993, he joined the staff of Ambassador Robert L. Gallucci and was an important player in reaching the 1994 U.S.-North Korea Agreed Framework. From 1995-2000, Mr. Wit was the State Department Coordinator for implementation of that agreement, playing a key role in the formation of KEDO and its operations as well as working with North Korea on other aspects of the Agreed Framework. Mr. Wit has been an International Affairs Fellow at the Council on Foreign Relations, a Senior Associate at the Henry L. Stimson Center, a Guest Scholar at the Brookings Institution and a Senior Fellow at the Center for Strategic and International Studies. He has written numerous articles on North Korea and non-proliferation. Wit is also the co-author of the book Going Critical: The First North Korean Nuclear Crisis.





#### JOHN ZABKO

John Zabko currently serves as the Assistant Director of the Architecture and Plans Directorate (APD) within the Domestic Nuclear Detection Office (DNDO) within the Department of Homeland Security (DHS) where he leads a staff of 70+ civilian and contractor personnel responsible for reducing the risk of nuclear terrorism to the nation by developing and enhancing the Global Nuclear Detection Architecture (GNDA) in coordination with federal, state, local, territorial, and tribal partners. Before assuming his current duties as Assistant Director of APD, Mr. Zabko served from 2005 to 2008 as a Staff Architect within DNDO's Office of Systems Architecture and Engineering where he was responsible for threat and risk assessments for the GNDA as well as other duties. In September 2001, Mr. Zabko was selected to serve as a Health Physicist for the Office of State and Tribal Programs within the U.S. Nuclear Regulatory Commission where he managed the Agency's Radioactive Materials Evaluation Program. In this capacity, he managed the Integrated Materials Performance Evaluation Program (IMPEP) which is a review process for Agreement State and NRC radioactive materials programs to verify that Agreement State programs are compatible with NRC's program. Prior to government service, Mr. Zabko worked in private industry, as an environmental chemist at Green Mountain Laboratories of Vermont, and as an instructor of Laboratory Neurobiology at the University of Vermont. Mr. Zabko was appointed to the Senior Executive Service in March of 2012 and has 21 years of Federal and Military Service.