

PUBLIC POLICY AND NUCLEAR THREATS

BOOT CAMP 2016

LEADERSHIP & SPEAKERS



Ambassador Linton 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 and of the State Department's International Security Advisory Board, and an advisor to six of the Department of Energy national laboratories. He served from July 2002 to January 2007 as administrator of the United States Department of Energy's National Nuclear Security Administration, where he was responsible for the US 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 US 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.



LINTON BROOKS

DISTINGUISHED FELLOW IN RESIDENCE

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 US Naval War College. Since 2008, he has served as an expert in residence during the annual Public Policy and Nuclear Threats program.

Bethany L. Goldblum is the director of the 2016 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 Sciences and Security Consortium, a \$25 million grant established by the National Nuclear Security Administration to train the next generation of nuclear security experts.



BETHANY GOLDBLUM

PPNT DIRECTOR

Goldblum received a PhD in nuclear engineering from UC Berkeley in 2007. She served as a Clare Boothe Luce Chancellor's Postdoctoral Fellow at Berkeley College 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 to 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 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 more than 45 scientific publications and presentations.



JAMES BLANKENSHIP

James Blankenship is a forensic examiner with the Federal Bureau of Investigation at the FBI laboratory at Quantico, Virginia, where he directs the analysis of radioactive materials, nuclear weapons, weapons of mass destruction, and radioactive dispersal devices. Prior to the FBI, he was an officer in the United States Air Force where he was an executive officer in the Pentagon, supporting the assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs, and a program manager at the Defense Threat Reduction Agency, providing technical oversight to the Radiation Hardened Microelectronics Advanced Technology program. Blankenship received a PhD in chemistry from Texas A&M University.



JOE CIRINCIONE

Joe Cirincione is the president of Ploughshares Fund, a global security foundation. He is the author of *Nuclear Nightmare: Securing the World Before It Is Too Late*, *Bomb Scare: The History and Future of Nuclear Weapons*, and the author or editor of five other books on nuclear weapons and national security policy. He has also published hundreds of articles on these topics and is widely cited in the media. Cirincione serves on the Secretary of State's International Security Advisory Board and is a member of the Council on Foreign Relations. He worked for nine years in the United States House of Representatives on the professional staff of the Committee on Armed Services and the Committee on Government Operations.



THOMAS COUNTRYMAN

Thomas Countryman, a career member of the Senior Foreign Service, rank of Minister-Counselor, has been assistant secretary for international security and nonproliferation since September 2011. Countryman began his State Department career in 1982. Countryman worked in the State Department's Office of Counter-Terrorism. He was responsible for advising Ambassador Madeline Albright on Middle East affairs at the United States Mission to the United Nations. Countryman served as director for Near East and South Asian Affairs at the National Security Council. He has participated in the Senior Seminar, the federal government's most advanced professional development program for foreign affairs and national security officials. He was given the Superior Honor Award for each of his assignments at USUN, EUR/SCE, Rome, and Athens. He was awarded senior performance pay in 2006 and 2007, and received the Presidential Meritorious Service Citation for 2007. Countryman graduated from Washington University in St. Louis with a degree in economics and political science, and studied at the Kennedy School of Government at Harvard University.

LIZ DALLAS

Liz Dallas brings to NGFP a hybrid background of analytical chemistry partnered with international affairs. Dallas also worked with a board of radiochemists to produce the graduate textbook *Radioanalytical Chemistry*, co-authoring three chapters (*Laboratory Safety*, *Applied Radioanalytical Chemistry*, and *Quality Assurance*). She was also a science and technology consultant and training officer with the Comprehensive Test Ban Treaty Organization's On-site Inspections section. Dallas is a leader in science publications, having been the managing editor for *Advanced Radiation Protection* at the Georgia Institute of Technology, the editor for *Principles of Chemical Sensors*, the department head of Science Publications for the American Book Company, and the assistant editor for *Radioanalytical Chemistry*. Liz Dallas has a PhD in international affairs, minor in nuclear and radiological engineering (anticipated 2017), and master of science in analytical chemistry from Georgia Institute of Technology.



TOBY DALTON

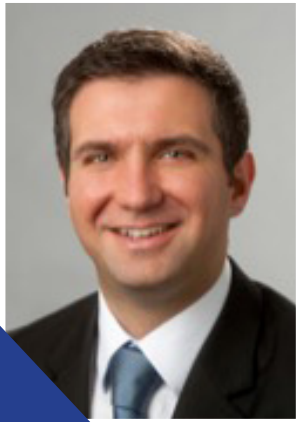
Toby Dalton is co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace. An expert on nonproliferation and nuclear energy, his research focuses on cooperative nuclear security initiatives and the management of nuclear challenges in South Asia and East Asia. He is co-author with George Perkovich of *Left of Boom: Motivating Pakistan to Prevent Cross-Border Terrorism* (Oxford University Press, forthcoming). Before joining Carnegie, he worked in a variety of policy positions at the United States National Nuclear Security Administration, including a posting at the United States Embassy in Islamabad, Pakistan. He holds a PhD in public policy from the George Washington University, MA from the University of Washington, and BA from Occidental College.



YANA FELDMAN

Yana Feldman is a nonproliferation and international safeguards analyst in the Global Security Directorate at Lawrence Livermore National Laboratory (LLNL), where she performs analysis to support the National Nuclear Security Administration in assessing international nuclear security problems, formulating policy options, and implementing nonproliferation initiatives. Prior to joining LLNL, Feldman worked for more than seven years as a safeguards information analyst in the Department of Safeguards at the International Atomic Energy Agency. Her work involved multilingual open-source research on nuclear material, facilities and activities, and the acquisition and production of dual-use items in the states of the former Soviet Union and of the Middle East, and integrating the open-source information with field activity results, nuclear material accountancy data, satellite imagery, and other information to draw credible conclusions about states' compliance with their safeguards obligations. Feldman holds a master of science in international relations from the London School of Economics and Political Science and a bachelor of science in chemistry from UC Berkeley.





MASSIMILIANO FRATONI

Massimiliano Fratoni is assistant professor in the Department of Nuclear Engineering at UC Berkeley. He received a Laurea in nuclear engineering from Università di Roma "La Sapienza" (Italy), and a MSc and a PhD from UC Berkeley. Prior to joining the Department of Nuclear Engineering, he held a research scientist position at Lawrence Livermore National Laboratory and a faculty position at Pennsylvania State University. Fratoni has a decades' worth of experience in reactor design and analysis spanning a large variety of reactor concepts, such as 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.



JOHN R. HARVEY

Dr. John R. Harvey retired from the Department of Defense as principal deputy assistant secretary for Nuclear, Chemical and Biological Defense Programs in 2013. He is a physicist with more than 35 years of experience working 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.



SIEGFRIED HECKER

Siegfried Hecker is a professor in the Department of Management Science and Engineering and a senior fellow at the Freeman Spogli Institute for International Studies (FSI) and the Center for International Security and Cooperation (CISAC) at Stanford University. Hecker was co-director of CISAC from 2007 to 2012. He served as the fifth director of the Los Alamos National Laboratory from 1986 to 1997. He is a fellow of the American Physical Society, the American Academy of Arts and Sciences, ASM International, the Metallurgical Society, and the American Association for the Advancement of Science. Among other awards, he received the Presidential Enrico Fermi Award, the Los Alamos National Laboratory Medal, and the Department of Energy's E.O. Lawrence Award. Hecker received his BS, MS, and PhD degrees in metallurgy from Case Western Reserve University.

OLLI HEINONEN

Olli Heinonen is a senior fellow at the Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University. Before joining the Belfer Center in 2010, Heinonen served for 27 years at the International Atomic Energy Agency (IAEA) in Vienna. He 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 an inspector, including at the IAEA's overseas office in Tokyo, Japan. Prior to joining the IAEA, Heinonen 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. Heinonen is co-author of several patents on radioactive waste solidification. He studied radiochemistry and completed his PhD dissertation in nuclear material analysis at the University of Helsinki.



REBECCA HERSMAN

Rebecca Hersman is director of the Project on Nuclear Issues and senior adviser for the International Security Program at the Center for Strategic and International Studies. Hersman joined CSIS in April 2015 from the Department of Defense (DoD), where she served as deputy assistant secretary of defense for countering weapons of mass destruction (WMD) since 2009. She served as DoD's principal policy advocate on issues pertaining to the Biological Weapons Convention, Chemical Weapons Convention, Nuclear Non-Proliferation Treaty and Cooperative Threat Reduction Program. Hersman was a senior research fellow with the Center for the Study of Weapons of Mass Destruction at the National Defense University from 1998 to 2009, where she also founded and directed the center's Program for Emerging Leaders. Hersman previously held positions as an international affairs fellow at the Council on Foreign Relations, a special assistant to the undersecretary of defense for policy, and a member of the House Armed Services Committee professional staff. She holds an MA in Arab studies from Georgetown University and a BA from Duke University.



RUTH KIPS

Ruth Kips is the deputy portfolio leader for international nuclear forensics at Lawrence Livermore National Laboratory (LLNL). She has a background in microanalysis and mass spectrometry with a focus on particle analysis for environmental sampling and nuclear nonproliferation control. She is currently involved in the management of LLNL's nuclear forensic engagements with foreign partners through the NNSA/DOE's Nuclear Detection and Deterrence Program. Her research interests lie in the application of micro-analytical techniques for nuclear forensics, nuclear safeguards, and the transport of actinides in the environment. In addition to these activities, she supports the Next Generation Safeguards Initiative Program at LLNL through training courses, global outreach, and policy papers. Before this assignment, she served as a nuclear safeguards inspector at the International Atomic Energy Agency. Kips started her research in the area of nuclear safeguards at the European Commission's Joint Research Centre in Belgium after obtaining her MS in nuclear engineering and PhD in chemistry from the University of Antwerp in Belgium.



KIM KNIGHT



Kim Knight is a staff scientist at Lawrence Livermore National Laboratory (LLNL), where her work focuses on nuclear forensic research through analysis of nuclear and associated materials for clues about material origins. A geochemist by training, she remains endlessly fascinated with radioactive materials. She is presently involved in the development of new techniques and methods that 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 International Atomic Energy Agency consultancies and workshops. Knight received her PhD from the UC Berkeley, in 2006 and worked as a post-doctoral researcher at the University of Chicago and Argonne National Laboratory prior to joining LLNL in 2008.

MATTHEW KROENIG



Matthew Kroenig is an associate professor 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 advisor in the Office of the Secretary of Defense on a Council on Foreign Relations international affairs fellowship. He is author or editor of several books, including *A Time to Attack: The Looming Iranian Nuclear Threat* (2014) and *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 the *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.

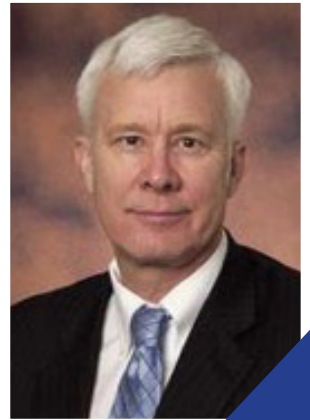
MICHAEL MAY



Michael May is professor emeritus in the School of Engineering and a senior fellow with the Freeman Spogli Institute for International Studies at Stanford University. He is the former co-director of Stanford University's Center for International Security and Cooperation. May is a director emeritus of the Lawrence Livermore National Laboratory. May was a technical adviser to the Threshold Test Ban Treaty negotiating team and later a US delegate to the Strategic Arms Limitations Talks 2 (SALT 2). He is a fellow of the American Physical Society and the American Association for the Advancement of Science. May received the Distinguished Public Service and Distinguished Civilian Service medals from the Department of Defense, and the E.O. Lawrence Award from the Atomic Energy Commission. In April 2007, May hosted a workshop on what would have to be done to be ready for a terrorist nuclear detonation. The report is available online at the Preventive Defense Project. A summary, titled, "*The Day After: Action Following a Nuclear Blast in a US City*," was published in the *Washington Quarterly*. Recent work also includes publications on possible game changers in the nuclear industry and on what nuclear power firms learn following accidents.

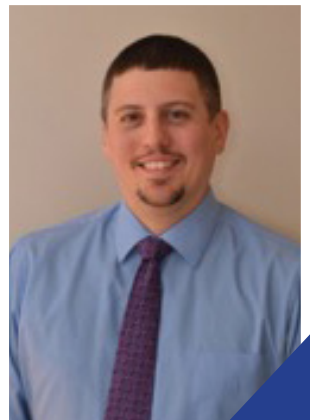
ROLF MOWATT-LARSEN

Rolf Mowatt-Larsen is a senior fellow at the Belfer Center at Harvard University. He served more than three years as the director of intelligence and counterintelligence at the US Department of Energy, and for 23 years as a Central Intelligence Agency 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. Mowatt-Larsen served as an officer in the US Army. He is a graduate of the US Military Academy, West Point, NY. Among his many honors are 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, the Secretary of Defense Civilian Distinguished Service Medal, and the National Intelligence Superior Performance Medal. Mowatt-Larsen recently returning to the United States after living the past five years in Jordan and Saudi Arabia.



RICHARD NEPHEW

Richard Nephew is a senior research scholar and director of the economic statecraft, sanctions, and energy markets program at the Center on Global Energy Policy at Columbia University. He joined the center, as well as the Brookings Institution as a non-resident senior fellow, from his role as principal deputy coordinator for sanctions policy at the Department of State. Nephew also served as the lead sanctions expert for the United States 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 US sanctions on that country. Earlier in his career, Nephew 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 master's degree in security policy studies and a bachelor's degree in international affairs, both from George Washington University.



JOSEPH F. PILAT

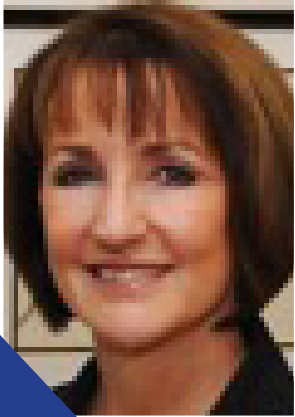
Joseph F. Pilat is a program manager in the National Security Office at Los Alamos National Laboratory and global fellow of international security studies at the Wilson Center. Pilat served as representative of the Secretary of Defense to the Fourth Review Conference of the Nuclear Non-Proliferation Treaty (NPT) and to the Open Skies negotiations, and as an advisor to the United States delegation at the 1995 NPT Review and Extension Conference. Previous positions include working in the Office of the Deputy Assistant Secretary of Defense for Negotiations Policy, the Congressional Research Service, and at the International Institute for Strategic Studies. Pilat has taught Cornell University College of William and Mary, and 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. He has written numerous articles for US and European scholarly journals and newspapers, and is the author or editor of several books.





BRAD ROBERTS

Brad Roberts is director of the Center for Global Security Research at Lawrence Livermore National Laboratory. 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, Roberts was a consulting professor and William Perry Fellow at the Center for International Security and Cooperation at Stanford University. Prior to joining the Obama administration, 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 *The Case for US Nuclear Weapons in the 21st Century* (2015), *Extended Deterrence and Strategic Stability in Northeast Asia* (2013), and *On the Strategic Value of Ballistic Missile Defense* (2014). Roberts has a BA from Stanford University, Msc from the London School of Economics and Political Science, and a PhD from Erasmus University, Rotterdam.



LAURA ROCKWOOD

Laura Rockwood was appointed the executive director of the Vienna Center for Disarmament and Nonproliferation in June 2015. Prior to that, she was a senior research fellow at Harvard University's Kennedy School Belfer Center Managing the Atom Project. Rockwood retired in November 2013 from the International Atomic Energy Agency (IAEA) as the section head for nonproliferation and policy-making in the Office of Legal Affairs, where she had served since 1985. She was involved in all aspects of the negotiation, interpretation, and implementation of IAEA safeguards for twenty-eight years. Prior to working for the IAEA, she was employed by the United States Department of Energy as a trial attorney in radiation injury cases, and as counsel in general legal matters.



SCOTT ROECKER

Scott Roecker serves as the director for nuclear threat reduction at the National Security Council. He is also the Sous-Sherpa for the 2016 Nuclear Security Summit. Prior to this, Roecker was the acting office director in the Office of Former Soviet Union and Asian Threat Reduction at the National Nuclear Security Administration (NNSA). Roecker has also served as the senior policy advisor for the Office of Defense Nuclear Nonproliferation. He has worked in the Office of the Second Line of Defense, where he managed border security engagement with Pakistan and Central Asia. Roecker began his career at NNSA working on nuclear material protection, control, and accounting in Russia and China. Prior to his tenure at the NNSA, Roecker worked for United States Congressman Bruce F. Vento as a legislative assistant. He holds a masters in international affairs from the George Washington University and a bachelor of science from the University of Minnesota. He is proficient in Russian.

SCOTT SAGAN

Scott Sagan is the Caroline SG 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* (1989), *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (1993), and, with co-author Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (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.



JOHN SCOTT

John Scott started working at Los Alamos National Laboratory (LANL) in 1998 as a postdoc in the Weapon Design Division after completing his PhD in nuclear engineering at UC Berkeley. After becoming a staff member in 2000, he joined the team responsible for the W88 thermonuclear warhead. He later served as a system point of contact for the W88 and as lead of the LANL secondary design team for Reliable Replacement Warhead project. In 2007, Scott served as a deputy group leader on the B61 program. Scott 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, Scott serves as the group leader for Integrated Design and Assessment group with the Theoretical Design Division.



WILLIAM TOBEY

William Tobey is a senior fellow at Belfer Center for Science and International Affairs at the Kennedy School of Government, Harvard University. He was most recently deputy administrator for defense nuclear nonproliferation at the National Nuclear Security Administration. There, he managed the United States government's largest program to prevent nuclear proliferation and terrorism by detecting, securing, and disposing of dangerous nuclear material. 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.





CHRIS TWOMEY

Dr. Chris 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. He works with the Departments of Defense and State on a range of strategic and Asian security issues. He authored *The Military Lens: Doctrinal Differences and Deterrence Failure in Sino-American Relations* (Cornell University Press, 2010), and his work has appeared in journals such as *Security Studies*, *Journal of Contemporary China*, *Washington Quarterly*, and *Asian Survey*. He is currently a member of the Institute of International Strategic Studies, a member of the adjunct staff at RAND, and has consulted for the National Bureau of Asia Research continually since 2009. He has previously taught or researched at Harvard, Boston College, RAND, CASS in Beijing, and IGCC. Twomey received his bachelor's and master's degrees from UC San Diego and his PhD in political science from the Massachusetts Institute of Technology.



DEAN WILKENING

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 prior to that he was the director of the science program at the Center for International Security and Cooperation at Stanford University for 16 years. From 1982 to 1995, he held several management positions at the RAND Corporation in Santa Monica, California. Wilkening's major research interests include nuclear strategy and policy, arms control, the proliferation of nuclear and biological weapons, bioterrorism, ballistic missile proliferation, and ballistic missile defense. Wilkening has participated in several United States National Academy of Science committees on biological terrorism. 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 more than 60 journal articles, book chapters, and monographs.



JOEL S. WIT

Joel Wit, senior fellow at the United States-Korea Institute at SAIS and adjunct senior fellow at Columbia University's Weatherhead Institute for East Asia, is the founder of "38 North." Wit has 20 years of experience in the US State Department and Washington think-tank arena. After writing the first National Intelligence Estimate on ballistic missile proliferation for the CIA, Wit was a member of US delegations to the Strategic Arms Limitations 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 US-North Korea Agreed Framework. From 1995 to 2000, Wit was the State Department Coordinator and played a key role in the formation of KEDO. 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, including "*US Strategy Towards North Korea: Rebuilding on Dialogue and Engagement*," and co-authored *Going Critical: The First North Korean Nuclear Crisis*.

STEPHEN YOUNG

Stephen Young lobbies administration officials, members of Congress, and journalists to advance the Union of Concerned Scientists' (UCS) security-related campaigns, largely focusing on arms control, nuclear weapons policy, missile defense, and nuclear threat reduction programs. Before joining UCS, Young was deputy director of the Coalition to Reduce Nuclear Dangers, a national alliance of 17 nuclear disarmament organizations. He previously served as a senior analyst at the British American Security Information Council, legislative and field director for 20/20 Vision, and senior information specialist at ACCESS, a security information clearinghouse. He was also a fellow in the State Department's Bureau of Human Rights. Young is the author of numerous articles and publications on nuclear weapons policy and arms control, including *"The Cart Before the Horse: DOE's Plan for the Future of the US Nuclear Weapons Complex."* He is frequently cited by CNN, NBC, *New York Times*, *Washington Post*, and other news organizations. Young has a master's degree in international affairs from Columbia University.



JOHN ZABKO

John Zabko currently serves as the assistant director of the Architecture and Plans Directorate (APD) in the Domestic Nuclear Detection Office (DNDO) within the Department of Homeland Security. 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. Zabko served from 2005 to 2008 as a staff architect within DNDO's Office of Systems Architecture and Engineering. In September 2001, Zabko was selected to serve as a health physicist for the Office of State and Tribal Programs within the US Nuclear Regulatory Commission. 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. Zabko was appointed to the Senior Executive Service in March of 2012 and has 21 years of federal and military service.



SHERYL HINGORANI

Sheryl Hingorani leads Sandia National Laboratory's Systems Analysis and Engineering organization. Hingorani started her career at Sandia in 1986, as a mechanical design engineer, and has spent most of her career working in a variety of positions in Sandia's nuclear weapons program, including as Sandia's nuclear weapons chief of staff, and as chair of the independent Red Team for the Annual Assessment of the state of health of the US nuclear stockpile. Hingorani received a special appointment to Distinguished Member of Technical Staff at Sandia, and moved into management. She completed studies as a fellow with the Massachusetts Institute of Technology Center for International Studies, and was the recipient of the Leadership Foundation Fellowship from the International Women's Forum. Hingorani was the executive director of the Albuquerque Committee on Foreign Relations; she also served as secretary for the American Committees on Foreign Relations for two years. Hingorani is a laboratory advisor to the Defense Science Board Special Task Force on Weapons of Mass Destruction, and is a laboratory affiliate to the California Council on Science and Technology. She is member of the Society of Women Engineers.



MAJOR GENERAL ROBERT WHEELER

Major General Robert Wheeler has spent the majority of his life serving the nation. His experience encompasses all facets of combat flying operations, cyber, electronic warfare, nuclear operations, command and control, and 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. He is a former DoD Deputy Chief Information Officer for Command, Control, Communications/Computers at the Office of the Secretary of Defense. He served as an air campaign analyst for the Air Force Studies and Analysis Agency, and division chief for the Joint Chiefs of Staff for European security issues. He was the senior military adviser to the US Mission Vienna, Austria, for the Organization for Security and Cooperation in Europe and served as the senior US military representative to the NATO command and control, communications and cyber board. Wheeler graduated from the University of Wisconsin with a degree in industrial engineering and was commissioned in the United States Air Force. Wheeler is now retired and continues advising various DoD senior advisory panels and advocating on issues of national importance.




THE HISTORY OF PUBLIC POLICY AND NUCLEAR THREATS BOOTCAMP

“Public Policy and Nuclear Threats: Training the Next Generation” started as a PhD training program for students throughout the UC system, funded through NSF’s competitive Integrative Graduate Education and Research Training program.

The program was designed by the UC Institute on Global Conflict and Cooperation (IGCC) to encourage UC PhD students to study public policy and technology issues related to nuclear weapons, re-engage UC departments in research on these issues, foster the interests of current students and enable the recruitment of additional top students, and promote cooperation between the campuses and the Lawrence Livermore (LLNL) and Los Alamos (LANL) National Laboratories. IGCC Director Susan Shirk served as principal investigator, and the program was housed at IGCC’s main office at UC San Diego.

The first summer workshop-in-residence at UC San Diego, known familiarly as the PPNT boot camp, was held in 2003. Nuclear physicist and IGCC founding director Herbert F. York was among the distinguished roster of speakers. Two cohorts of IGERT PPNT fellows and associates participated in the program, policy events, and an associated annual student-run conference, forming the nucleus of network of young nuclear policy experts from across the University of California.

After the initial NSF funding ended, IGCC leaders in 2007 opened the summer program to a wider audience, including junior faculty, technical staff from LLNL and LANL, and policy practitioners. IGCC drew on the expertise of its growing network by inviting past PPNT fellows to return as speakers and discussion leaders. PPNT alumnus Robert Brown (2003) served as leader for the 2009-2011 programs, and Neil Narang (2007) served in the same role in 2012 and 2013. Since 2014, PPNT alumna Bethany Goldblum (2004) has served as the program’s director.



In 2009 Ambassador Linton Brooks joined the team as consultant and expert in residence during the boot camp. He continues in this role today.

In 2011 IGCC became part of the Nuclear Science and Security Consortium housed in the Department of Nuclear Engineering at UC Berkeley under the leadership of Professor Jasmina Vujic. The consortium's mission to train undergraduate and graduate students in the fields of nuclear physics, nuclear and radiation chemistry, nuclear engineering, nuclear instrumentation, and public policy has been supported by IGCC through the summer boot camp and administration of a number of awards for nuclear policy-related faculty and student research.

Now in its twelfth summer, PPNT continues to bridge gaps in the knowledge and modes of thinking of social scientists, policy analysts, physical scientists, and engineers by bringing them under one roof to work together and forge long-term personal and professional ties.