2019 BOOT CAMP
July 28–August 7
SPEAKERS

UC INSTITUTE ON GLOBAL
CONFLICT & COOPERATION
PUBLIC POLICY &
NUCLEAR THREATS
LEADERSHIP

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, 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.

He is the author of a number of articles and book chapters on national and nuclear strategy and speaks frequently on these and related issues. Since 2008, he has served as an expert in residence during the annual IGCC Public Policy and Nuclear Threats program.
Bethany L. GOLDBLUM is an associate research engineer in the Department of Nuclear Engineering at UC Berkeley and executive director of the Nuclear Science and Security Consortium, a multi-institution initiative established by the National Nuclear Security Administration to conduct research and development supporting the nation’s nonproliferation mission while expanding the talent pipeline.

Her research explores fundamental and applied nuclear physics, scintillator characterization, multi-source analytics, experimental wargaming and nuclear security policy. 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 IGCC’s Public Policy and Nuclear Threats Boot Camp nearly since its inception, and acted as director of the program since 2014. Goldblum maintains active collaborations with the U.S. DOE National Laboratories, and is an affiliate at Lawrence Berkeley, Lawrence Livermore and Sandia National Laboratories. She is author or co-author of more than 60 scientific publications. Goldblum received a Ph.D. in nuclear engineering from UC Berkeley.
Marv Adams

Marv Adams is associate director at the Institute for National Security and Cybersecurity Education and Research at Texas A&M University. His research interests include computational transport theory, efficient algorithms for massively parallel scientific and engineering calculations and quantification of uncertainties in predictive science and engineering groups. He received his Ph.D. in nuclear engineering from the University of Michigan.

M. Elaine Bunn

M. Elaine Bunn is a consultant on strategic issues, with 40 years’ experience in the U.S. government working on defense policy. She is based in Washington, D.C. 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 and preemption. She mentors university students and mid-career professionals, and serves on the Board of Advisors for the CSIS Project on Nuclear Issues (PONI) and as a senior mentor for the Project for Emerging Leaders at the Center for the Study of Weapons of Mass Destruction. Bunn served as Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy from 2013 to early 2017. Responsibilities included defining requirements for future capabilities, reviewing and adjusting operational planning and leading extended deterrence discussions with allies. Bunn, a graduate of the National War College, received an M.A. from Johns Hopkins School of Advanced International Studies and a B.A. from the University of Georgia. She was a Fulbright Scholar at the Université de Neuchâtel, Switzerland.

Joseph Cirincione

Joseph Cirincione is president of Ploughshares Fund, a global security foundation. He is also the host of the Ploughshares Fund podcast, Press the Button. He has worked on nuclear weapons policy in Washington for over 35 years. He is one of the top experts in the field, having authored or edited six books, published hundreds of articles and dozens of reports and is widely quoted in the media. He is a national security expert for MSNBC and teaches at the Georgetown University Graduate School of Foreign Service. His books include "Nuclear Nightmares: Securing the World Before It Is Too Late," "Bomb Scare: The History and Future of Nuclear Weapons" and "Deadly Arsenals: Nuclear, Biological and Chemical Threats." He worked for nine years as professional staff on the U.S. House of Representatives Committees on Armed Services and Government Operations. Prior to joining Ploughshares Fund eleven years ago, he served as vice president for national security at the Center for American Progress, director for nonproliferation at the Carnegie Endowment for International Peace and as a senior associate at the Stimson Center. He is a member of the Council on Foreign Relations and a former member of the International Security Advisory Board for Secretaries of State John Kerry and Hillary Clinton.

Toby Dalton

Toby Dalton is co-director of the Nuclear Policy Program at the Carnegie Endowment. An expert on nonproliferation and nuclear energy, his work addresses regional security challenges and the evolution of the global nuclear order. Dalton’s research and writing focuses in particular on South Asia and East Asia. From 2002 to 2010, Dalton served in a variety of high-level positions at the U.S. Department of Energy, including acting director for the Office of Nuclear Safeguards and Security and senior policy adviser to the Office of Nonproliferation and International Security. He also established and led the department’s office at the U.S. embassy in Pakistan from 2008-2009. Dalton previously served as professional staff member to the Senate Foreign Relations Committee, a Luce Scholar at the Institute for Far Eastern Studies in Seoul, a research associate at the National Bureau of Asian Research and a project associate for the Carnegie Nuclear Policy Program.
Massimiliano FRATONI is an assistant professor in the Department of Nuclear Engineering at UC Berkeley. Prior to joining the department, he held a research scientist position at Lawrence Livermore National Laboratory and a faculty position at Pennsylvania State University. Fratoni’s research interests are in advanced fuel cycles that maximize natural resource utilization and minimize nuclear waste enabling sustainable nuclear energy. His focus is on the design and analysis of advanced reactors such as molten salt reactors, fast spectrum reactors, reduced-moderation boiling water reactors and fluoride-cooled high-temperature reactors. Fratoni’s group also develops computational methods to support reactor analysis, and in particular multi-physics modeling and uncertainty quantification. Additional research areas include accident tolerant fuel, nuclear fuel cycle analysis, geological repository/far-field criticality and fusion blanket design. He received a Laurea in nuclear engineering from Università di Roma “La Sapienza” (Italy), and an MSc and Ph.D. from UC Berkeley. He received an Early Career Reactor Physicist Award from the American Nuclear Society in 2018.

Siegfried S. HECKER is a professor emeritus (research) in the Department of Management Science and Engineering and a senior fellow emeritus at the Freeman Spogli Institute for International Studies 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. Hecker received his B.S., M.S. and Ph.D. in metallurgy from Case Western Reserve University. His current professional interests include nuclear weapons policy, plutonium research, global nuclear risk reduction with Russia, China, Pakistan, India, North Korea and Iran, the safety and security implications of the global expansion of nuclear energy, and threats of nuclear terrorism. In 2016, Hecker published two edited volumes documenting the history of Russian-U.S. laboratory-to-laboratory nuclear cooperation since 1992.

Olli HEINONEN is a senior advisor on science and nonproliferation at FDD. He is the former deputy director general of the International Atomic Energy Agency (IAEA) and head of its Department of Safeguards. He is also a member of the non-partisan Iran Task Force. Heinonen is currently a senior fellow at the Harvard Kennedy School of Government's Belfer Center for Science and International Affairs. His research and teachings include nuclear nonproliferation 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, Heinonen served 27 years at the IAEA in Vienna. His posts at the IAEA included director at the Agency’s various Operational Divisions, and as inspector, including at the IAEA’s overseas office in Tokyo, Japan. Prior to joining the IAEA, he was a senior research officer at the Technical Research Centre of Finland Reactor Laboratory, where he was in charge of research and development related to nuclear waste solidification and disposal.
Rebecca HERSMAN is director of the Project on Nuclear Issues and senior adviser for the International Security Program. She 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. In this capacity, she led DOD’s policy and strategy to prevent WMD proliferation and use, reduce and eliminate WMD risks and respond to WMD dangers. Hersman was a key leader on issues ranging from the nuclear security summit to the elimination of Syria’s chemical weapons to the global health security agenda. She served as DOD's principal policy advocate on issues pertaining to the Biological Weapons Convention, Chemical Weapons Convention, Nuclear Nonproliferation Treaty and Cooperative Threat Reduction Program. Prior to joining DOD, Hersman was a senior research fellow with the Center for the Study of Weapons of Mass Destruction at the National Defense University (1998-2009). Her primary projects focused on the role of DOD in mitigating the effects of chemical and biological weapons attack, concepts and strategies for eliminating an adversary's WMD programs, as well as proliferation issues facing the U.S. Hersman also founded and directed the WMD Center’s Program for Emerging Leaders, an initiative designed to shape and support the next generation of leaders from across the U.S. government with interest in countering weapons of mass destruction. She 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 M.A. in Arab studies from Georgetown University and a B.A. from Duke University.

Newell HIGHSMITH served for 30 years as an attorney at the U.S. Department of State, with primary responsibility for legal issues related to arms control and the nonproliferation of weapons of mass destruction and missiles. He headed the legal office responsible for such issues from 2002 to 2013 before taking on broader responsibilities as a deputy legal adviser from 2013 to 2017. He served as primary or sole legal adviser on the U.S. delegations that negotiated the 1994 Agreed Framework with North Korea, the 2008 Agreement for Nuclear Cooperation with India and the 2015 Joint Comprehensive Plan of Action with Iran. In addition, he was directly involved in negotiating the New START treaty with Russia, analyzing the legal issues raised by Syria’s use of chemical weapons and its construction of a clandestine nuclear reactor, establishing dual-use export controls in the Nuclear Suppliers Group, responding to Indian and Pakistani nuclear testing, facilitating Libya’s renunciation of weapons of mass destruction, and responding to the revelations regarding Iraq’s nuclear weapons program. He was responsible for the legal interpretation of numerous arms control and nonproliferation statutes and treaties, including the Nuclear Nonproliferation Treaty, the Statute of the IAEA, the Atomic Energy Act, relevant UN Security Council resolutions and various U.S. sanctions laws. Prior to joining the State Department, Highsmith worked in private practice and was a teaching fellow at George Washington University Law School. He received a B.A. in English from the University of North Carolina at Chapel Hill, a J.D. from Harvard Law School and an LLM in international law from the George Washington University Law School.
**SHERYL HINGORANI**

Sheryl HINGORANI leads Sandia’s Systems Analysis and Engineering organization in Livermore, California. She 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 in 1998 and moved into management in 2004. 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. Between 2000 and 2005, 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 a member of the Society of Women Engineers.

**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 primarily involved with the analysis of nuclear and associated materials to understand clues about origins, locations or processes. She has also been instrumental in the renaissance of historical fallout research to understand better fallout formation and interpretation in near surface nuclear events. In addition to her own research, Knight leads several collaborative technical efforts in the area of nuclear forensics, including with colleagues in the former Soviet Union. She has been involved in the design and delivery of many training courses in technical nuclear forensics, as well as the development and revision of international guidelines as a participant in IAEA consultancies and workshops. Knight received her Ph.D. from UC Berkeley and worked as a post-doctoral researcher at the University of Chicago and Argonne National Laboratory before joining LLNL in 2008.

**MATTHEW KROENING**

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

John A. LAUDER is an independent consultant on Weapons of Mass Destruction, Nonproliferation, Arms Control and intelligence analysis and collection. He retired from the U.S. government in the fall of 2004 with over 33 years of managerial, analytical and policy experience, principally in the Central Intelligence Agency, National Reconnaissance Office, and as an arms control negotiator. As deputy director of the National Reconnaissance Office for National Support, he translated the most pressing security challenges of the nation into requirements for the acquisition and operation of satellite reconnaissance systems. Previously as director of the DCI Nonproliferation Center and Chief of the DCI Arms Control Intelligence Staff, he oversaw the nonproliferation and arms control monitoring efforts of the Intelligence Community during a time of sweeping international and organizational change. He served subsequently for nine years as a senior manager and corporate officer within Arete' Associates, a research and development company. Lauder has been awarded the Distinguished Career Intelligence Medal, the Distinguished Intelligence Medal, the NRO Gold Medal, and the Director of Central Intelligence's Award for his leadership and innovation in collection systems, analytical approaches and vital national security initiatives and decisions. He has a B.A. Summa Cum Laude from Hiram College and an M.A. in international relations from Yale University.

HERB LIN

Herb LIN is senior research scholar for cyber policy and security at the Center for International Security and Cooperation and Hank J. Holland Fellow in Cyber Policy and Security at the Hoover Institution, both at Stanford University. His research interests relate broadly to policy-related dimensions of cybersecurity and cyberspace, and he is particularly interested in the use of offensive operations in cyberspace as instruments of national policy and in the security dimensions of information warfare and influence operations on national security. In addition to his positions at Stanford University, he is Chief Scientist, Emeritus for the Computer Science and Telecommunications Board, National Research Council (NRC) of the National Academies, where he served from 1990 through 2014 as study director of major projects on public policy and information technology, and Adjunct Senior Research Scholar and Senior Fellow in Cybersecurity (not in residence) at the Saltzman Institute for War and Peace Studies in the School for International and Public Affairs at Columbia University; and a member of the Science and Security Board of the Bulletin of Atomic Scientists. In 2016, he served on President Obama’s Commission on Enhancing National Cybersecurity. Prior to his NRC service, he was a professional staff member and staff scientist for the House Armed Services Committee (1986–1990), where his portfolio included defense policy and strategic arms control issues. He received his doctorate in physics from MIT.

ROLF MOWATT-LARSSSEN

Rolf MOWATT-LARSSSEN is director of the Intelligence Project for Belfer Center for Science and International Affairs at Harvard University. Prior to his appointment as a senior fellow for Harvard in 2009, Mowatt-Larssen served more than three years as the director of intelligence and counterintelligence at the U.S. Department of Energy, and for 23 years as a Central Intelligence Agency intelligence officer in numerous domestic and international posts, to include chief of the Europe division in the Directorate of Operations; chief of the Weapons of Mass Destruction Department, Counterterrorism Center; and deputy associate director of central intelligence for military support. Mowatt-Larssen served as an officer in the U.S. Army. He is a graduate of the U.S. Military Academy at West Point. He returned to the U.S. in 2016 after living for five years in Jordan and Saudi Arabia.
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Richard NEPHEW is a senior research scholar at the Center on Global Energy Policy at Columbia University’s School for International and Public Affairs. He is also a nonresident senior fellow at the Brookings Institution. He assumed both of those roles in February 2015. He served as principal deputy coordinator for sanctions policy at the U.S. Department of State (2013-2015). Nephew also served as the lead sanctions expert for the U.S. team negotiating with Iran, starting with the private-channel talks in August 2013. From May 2011 to January 2013, Nephew served as the director for Iran on the National Security Council staff at the White House. Earlier in his career, he served in the Bureau of International Security and Nonproliferation at the Department of State and in the Office of Nonproliferation and International Security at the Department of Energy. Nephew holds a master’s in security policy studies and a bachelor’s in international affairs, both from the George Washington University. He is the author of “The Art of Sanctions,” published by Columbia University Press in 2018.
SCOTT D. SAGAN

Scott D. SAGAN is the Caroline S.G. Munro Professor of Political Science, the Mimi and Peter Haas University Fellow in Undergraduate Education and senior fellow at the Center for International Security and Cooperation and the Freeman Spogli Institute at Stanford University. He also serves as chairman of the American Academy of Arts and Sciences’ Committee on International Security Studies. Before joining the Stanford faculty, Sagan was a lecturer in the Department of Government at Harvard University and served as special assistant to the director of the Organization of the Joint Chiefs of Staff in the Pentagon. Sagan has also served as a consultant to the office of the Secretary of Defense and at the Sandia National Laboratory and the Los Alamos National Laboratory. In 2018, Sagan received the Andrew Carnegie Fellowship from the Carnegie Corporation of New York. In 2017, he received the International Studies Association’s Susan Strange Award which recognizes the scholar whose “singular intellect, assertiveness, and insight most challenge conventional wisdom and intellectual and organizational complacency” in the international studies community. Sagan was also the recipient of the National Academy of Sciences William and Katherine Estes Award in 2015, for his work addressing the risks of nuclear weapons and the causes of nuclear proliferation. The award, which is granted triennially, recognizes “research in any field of cognitive or behavioral science that advances understanding of issues relating to the risk of nuclear war.” In 2013, Sagan received the International Studies Association’s International Security Studies Section Distinguished Scholar Award.

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 UC Berkeley. He became a staff member in 2000. During his career, Scott 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. Previously, Scott led the secondary design group at LANL. Currently, he is the X-Theoretical Design Deputy Division Leader managing LANL’s physics assessments of stockpile performance.

LAURA ROCKWOOD

Laura ROCKWOOD is the executive director of the Vienna Center for Disarmament and Non-Proliferation. Before assuming that position in 2015, she was a senior research fellow with the Managing the Atom Project at the Belfer Center at Harvard University. Rockwood retired in 2013 from the International Atomic Energy Agency (IAEA) as the section head for nonproliferation and policymaking in the Office of Legal Affairs, where she had served since 1985. At the IAEA, she was responsible for all legal aspects of the negotiation, interpretation and implementation of the IAEA safeguards, and was the principal author of the document that became the Model Additional Protocol. Prior to working for the IAEA, she was employed by the U.S. Department of Energy as a trial attorney in radiation injury cases, and as counsel in general legal matters. Rockwood received a J.D. from UC San Francisco Hastings College of Law and a B.A. from UC Berkeley. She is a member of the State Bar of California and of the Washington, D.C. Bar Association.
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CHRISTOPHER P. TWOMEY

Christopher P. TWOMEY is an associate professor with tenure in the Department of National Security Affairs at the Naval Postgraduate School. His research interests center on security studies, Chinese foreign policy, modern nuclear affairs, strategic culture, statecraft and East Asian security in theory and practice. He is the author of “The Military Lens: Doctrinal Differences and Deterrence Failure in Sino-American Relations” and editor of “Perspectives on Sino-American Strategic Nuclear Issues.” Twomey manages a track II diplomatic exchange on Sino-American nuclear issues involving several PLA flag officers, academics and civilian policymakers. This project is in its second decade. He works on a range of diplomatic projects in Asia for the Office of the Secretary of Defense (in coordination with the State Department) and has consulted for the Office of Net Assessment on the future of security competition in Asia. Before joining NPS, he taught on the faculty at Boston College and was a fellow at Harvard University. He received his Ph.D. in political science from MIT.
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JOHN K. WARDEN

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, U.S. 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,” “The Strategic Rationale for Maritime Tension Reduction in the Yellow Sea” and “North Korea’s Nuclear Posture: An Evolving Challenge for US Deterrence.” Warden previously worked at Science Applications International Corporation, the Center for Strategic and International Studies and the Pacific Forum CSIS. He holds an M.A. in security studies from Georgetown University and a B.A. in political science and history from Northwestern University.

MAJOR GENERAL ROBERT E. WHEELER

Major General Robert E. WHEELER is currently serving on the staff of the Secretary of Defense as the Deputy Chief Information Officer for Command, Control, Communications and Computers (C4) and Information Infrastructure Capabilities (DCIO for C4IIC). General Wheeler was commissioned through the Reserve Officer Training Corps. A command pilot with more than 5,000 hours in multiple aircrafts. His staff assignments include air campaign analyst for the Air Force Studies and Analysis Agency, member of the Chief of Staff of the Air Force’s Operations Group (CX), Headquarters U.S. Air Force and division chief for the Joint Chiefs of Staff regarding European security issues. He has also been the senior military adviser to the U.S. Mission for the Organization for Security and Cooperation in Europe. The general was previously the Deputy Director for Nuclear Operations, U.S. Strategic Command, Offutt Air Force Base, Neb. In this capacity, he is the principal adviser to the commander on issues pertaining to strategic deterrence and nuclear operations. He served as the command’s principal flag officer responsible for management and oversight of the nuclear enterprise. He has previously commanded the 325th Bomb Squadron and 509th Operations Group at Whiteman AFB, Mo. He commanded the 2nd Bomb Wing at Barksdale AFB, La., where he was responsible for providing B-52 aircraft, aircrews and associated support personnel and resources to conduct global bomber operational taskings. He also commanded the 509th Bomb Wing, Whiteman AFB, Mo., where he was responsible for the combat readiness of the Air Force’s only B-2 wing and provided logistics support for the Air Force Reserve 442nd Fighter Wing Missouri Air National Guard 131st Bomb Wing; Missouri Army National Guard 1st Battalion, 135th Aviation Unit; and the Navy Reserve Maritime Expeditionary Security Division 13. He received his B.S. in engineering from the University of Wisconsin-Madison.
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. 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, 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. He is a fellow of the American Physical Society and has published more than 60 journal articles, book chapters and monographs.

Heather WILLIAMS is a lecturer in the Defence Studies Department Centre for Science and Security Studies at King’s College London and an associate fellow at the Royal United Services Institute. From 2018 to 2019, she served as a specialist advisor to the House of Lords International Relations Committee inquiry into the Nuclear Nonproliferation Treaty and Disarmament. She is also an adjunct Research Staff Member in the Strategy, Forces, and Resources Division of the Institute for Defense Analyses in Alexandria, Virginia, where she has worked since 2008 on U.S. nuclear policy for the U.S. Department of Defense. She currently leads projects on the impact of emerging technology on deterrence, the future of arms control, risks of social media to conflict escalation and the Nuclear Nonproliferation Treaty. Her research is supported by the MacArthur Foundation, Carnegie Corporation of New York, U.S. Department of Defense and U.S. Department of Energy. Williams has a Ph.D. from the Department of War Studies at King’s College London, an M.A. in security policy studies from the George Washington University and a B.A. in international relations and Russian studies from Boston University. Her most recent publications include “Strategic Stability, Uncertainty, and the Future of Arms Control” in Survival (March 2018) and “Asymmetric Arms Control: Scenarios for Hypersonic Glide Vehicles” in Journal of Strategic Studies (autumn 2019).

Gregory WEAVER, a career member of the Senior Executive Service, is the Deputy Director for Strategic Stability within the Directorate for Strategy, Plans, and Policy, Joint Staff (J-5). In this role, he is responsible for the formulation of Joint Staff positions and recommendations regarding strategic deterrence, nuclear policy, Department of Defense efforts to counter weapons of mass destruction, strategic arms reduction negotiations and agreements, as well as other international negotiations and agreements. Prior to joining the Joint Staff, Weaver served as principal director for Nuclear and Missile Defense Policy in the Office of the Under Secretary of Defense for Policy (OSD/Policy). In that position he was responsible for all policy matters involving U.S. nuclear and missile defense forces, strategy, plans and requirements. Before joining OSD/Policy, Weaver was the Deputy Director of Plans and Policy (J-5), U.S. Strategic Command, located in Offutt Air Force Base, Nebraska. He was the Senior Technical Adviser for Policy, Strategy, and Plans to the Commander, U.S. Strategic Command, and to the Director, Plans and Policy (J-5). In that capacity he was responsible for shaping and implementing national security policies, strategies and plans in accordance with the execution of the command's assigned missions. He also assisted in formulating and implementing strategy for U.S. Strategic Command’s Unified Command Plan assigned missions, which includes strategic deterrence, global strike, space operations, cyberspace operations, countering weapons of mass destruction, missile defense, and intelligence, surveillance and reconnaissance (ISR). Weaver earned a bachelor’s degree at Georgetown University School of Foreign Service and a master's degree at the University of Pennsylvania. He was a legislative assistant for Foreign and Defense Policy for Congressmen Pete Stark and Charles Bennett, and a legislative assistant for Defense Policy under Senator Carl Levin. He worked at Science Applications International Corporation (SAIC) for 18 years as a senior analyst, project manager, division manager and assistant vice president.
“Public Policy and Nuclear Threats: Training the Next Generation” started as a training program for Ph.D. 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 Ph.D. 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 Emeritus Susan Shirk served as principal investigator and the program was launched at the UC San Diego campus.

The first summer workshop-in-residence, 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 UC.

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 2008 Ambassador Linton Brooks joined the team as consultant and expert in residence during the boot camp. He continues in this role today.
From 2011 through 2016, IGCC was 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 fourteenth 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.