

PUBLIC POLICY AND NUCLEAR THREATS
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ABOUT THE SPEAKERS

James Blankenship is a forensic examiner with the Federal Bureau of Investigation based at the FBI Laboratory at Quantico, Virginia, where he leads the forensic community in the analysis of weapons of mass destruction, specifically the threat of nuclear and radioactive dispersal devices. Among other positions, 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, supporting the Radiation Hardened Microelectronics Advanced Technology program by providing technical oversight and programmatic guidance. He received his Ph.D. in chemistry from Texas A&M University.



Brian D. Boyer is the Project Leader of International Safeguards in the Nuclear Engineering and Nonproliferation Division at Los Alamos National Laboratory in Los Alamos, NM. He has been employed at Los Alamos since 2006 in the field of nuclear nonproliferation specializing in international safeguards especially in the areas of enrichment safeguards, safeguards by design, and reactor safeguards. He has been active in supporting human capital development in the safeguards field by mentoring several students as Los Alamos during the last five years, lecturing at several safeguards courses put on in the DOE complex, and developing and teaching a graduate level course in nuclear fuel cycle and safeguards at the Pennsylvania State University through the distance learning program.

From 2002 to 2006 he worked at Brookhaven National Laboratory as a nonproliferation and safeguards specialist helping to create a safeguards approach with the International Atomic Energy Agency (IAEA) for the Chernobyl Shelter, and building a course for the IAEA at Brookhaven to train IAEA inspectors in the mechanics of doing complementary access activities for the Additional Protocol to the Nuclear Nonproliferation Treaty. He worked from 1997 to 2002 at the IAEA as a Nuclear Safeguard Inspector doing inspections in Europe and as a Nuclear Safeguards Analyst in the Section for System Studies. He holds a Ph.D. in Nuclear Engineering from the Pennsylvania State University.



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. Ambassador Brooks has over five decades of experience in national security, much of it associated with nuclear weapons. His government service includes service as Deputy

Administrator for Nuclear Nonproliferation at the National Nuclear Security Administration,

Assistant Director of the United States Arms Control and Disarmament Agency, Chief U.S. Negotiator for the Strategic Arms Reduction Treaty, Director of Defense Programs and Arms Control on the National Security Council staff and a number of Navy and Defense Department assignments as a 30-year career naval officer. Ambassador Brooks holds degrees in Physics from Duke University and in Government and Politics from the University of Maryland and is a Distinguished Graduate of the U.S. Naval War College. Since 2008 he has served as an Expert in Residence during the annual Public Policy and Nuclear Threats program.



Robert L. Brown is assistant professor of political science at Temple University, where he will teach courses on international relations theory and international security. He received his Ph.D. in political science from UC San Diego in June 2008 after completing his dissertation on why countries use international organizations to cooperate on nuclear and chemical weapons but not for biological weapons. His research interests more broadly include international relations theory, international organizations, international security issues, nuclear deterrence, and sovereignty issues. He has an M.A. in international affairs from the George Washington University's Elliott School, where his studies focused on security regimes in Northeast and Southeast Asia, and a B.A. in political science with a

minor in Japanese studies from the University of California, where his studies focused on Northeast Asian political economy and development. He has also interned at the Center for Strategic and International Studies (CSIS) in Washington, D.C., and worked previously at The Nautilus Institute on nuclear and Northeast Asian security issues.



William S. Charlton serves as the Director of the Nuclear Security Science & Policy Institute (NSSPI) at Texas A&M University. NSSPI is a multi-disciplinary research and education organization focused on combatting threats from the malicious uses of nuclear and radiological materials. He is an expert in the area of nuclear security research and education. Teaching courses on nuclear nonproliferation, nuclear security system design, nuclear forensics, consequence management, and nuclear materials measurements. Prior to his appointment at TAMU, he was an Assistant Professor in the Nuclear and Radiation Engineering Program at the University of Texas at Austin from 2000-2003. From 1997-2000, Dr. Charlton was a Technical Staff

Member in the Nonproliferation and International Security Division at Los Alamos National Laboratory (LANL). He remains heavily involved with many of the National Laboratories including: consultation on national security projects, providing human capital, collaborating with laboratory staff on funded research projects, and providing continuing education and training opportunities for laboratory employees. Dr. Charlton earned a Ph.D. in Nuclear Engineering from Texas A&M University. Among his many awards, Dr. Charlton was named the George Armistead Jr. '23 Faculty Fellow at TAMU in 2005, was awarded the Dwight Look College of Engineering Faculty Fellow in 2007, was recognized as the Advisor of the Year by the TAMU Division of Student Affairs in 2009, earned the Special Service Award from the Institute of Nuclear Materials Management in 2010, and was named the Barbara and Ralph Cox '53 Faculty Fellow for the TAMU College of Engineering in 2013. Dr. Charlton is recognized as one of the leaders in the technical area of nuclear nonproliferation education and research. He has over 200 technical publications in refereed journals and conference proceedings.

Michael S. Chase is an Associate Research Professor in the Warfare Analysis and Research Department at the U.S. Naval War College in Newport, RI. He is also Director of the Mahan Research Group, a student-faculty research group that focuses on strategic deterrence and escalation issues related to nuclear, space, cyber, and conventional strike capabilities. He previously served as a faculty member in the Strategy and Policy Department at the War College.

Prior to joining the faculty at the War College, Professor Chase served as a research analyst with Defense Group Inc. in Washington, D.C. and an associate international policy analyst with the RAND Corporation in Arlington, VA. Professor Chase earned a Ph.D. in international affairs from the Johns Hopkins University's School of Advanced International Studies (SAIS) in Washington, DC. He also holds an M.A. in China studies from SAIS and a B.A. in politics from Brandeis University. In addition, Professor Chase studied at the University of Bristol in England and the Hopkins-Nanjing Center in Nanjing, China. He has advanced proficiency in Chinese (Mandarin).

Professor Chase's current research includes work on Chinese nuclear and conventional missile force modernization, China's counter space capabilities, China's strategic threat perceptions, and Chinese naval developments. He is the author of the book *Taiwan's Security Policy: External Threats and Domestic Politics*, as well as numerous articles on Chinese military issues that have appeared in publications such as the *Journal of Strategic Studies*, *Survival*, *Joint Force Quarterly*, *Proceedings*, and *China Brief*.



Tai Ming Cheung is Director of the UC Institute on Global Conflict and Cooperation (IGCC). Cheung also manages IGCC's Northeast Asia Cooperation Dialogue (NEACD), a Track Two program that brings together senior foreign ministry and defense officials as well as academics from the United States, China, Japan, South Korea, North Korea, and Russia for informed discussions on regional security issues. He also oversees the Institute's Project on the Study of Innovation and Technology in China (SITC). Cheung serves as an associate professor in residence at the School of International Relations and Pacific Studies at UC San Diego and is a long-time analyst of Chinese and East Asian defense and national security affairs. Cheung was based in Asia from the mid-1980s to 2002 covering political, economic and

strategic developments in greater China. He was also a journalist and political and business risk consultant in northeast Asia. Cheung received his Ph.D. from the War Studies Department at King's College, London University in 2006. His latest book, *Fortifying China: The Struggle to Build a Modern Defense Economy*, was published by Cornell University Press in 2009.



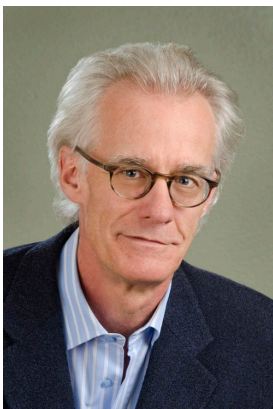
Matthew Fuhrmann is an assistant professor of political science at Texas A&M University. During the 2010-11 academic year, he was a Stanton Nuclear Security Fellow at the Council on Foreign Relations in Washington, D.C. He has previously been an assistant professor at the University of South Carolina and a research fellow at Harvard University. Fuhrmann's research focuses on international security, international institutions, and foreign policy. Much of his work examines the strategic implications of energy policy and the causes and consequences of nuclear proliferation. His research on these topics has

been published in *International Security*, *Journal of Conflict Resolution*, *Journal of Peace Research*, *Conflict Management and Peace Science*, and *Foreign Policy Analysis*, among other journals. It has also been funded by Harvard University and the Council on Foreign Relations.



Matt Gardner is an experimental nuclear physicist at the UK Atomic Weapons Establishment (AWE). His work centres on improving understanding of nuclear weapon operation via experimentation in the field of materials properties under weapons conditions, using AWE's fusion-neutron source. This work forms part of the larger programme to underwrite scientifically the UK's nuclear weapons in the CTBT era, and to further understand the wealth of underground test data collected in the pre-treaty years. Matt also worked on the design, testing and commissioning of AWE's Orion laser project, providing diagnostic facilities for the AGEX II: Plasma Physics programme.

In addition his work has spanned remote detection of special nuclear materials, laser-based ion acceleration methodologies and laser-driven radiography. Matt was educated at the University of Birmingham in England, where he obtained a first degree in biophysics and a Ph.D. in nuclear physics. His thesis reported on the nuclear structure of radioactive yttrium isotopes and isomers produced at the Jyväskylä radioactive ion beam facility in Finland.



Stephan Haggard is the Krause Professor at the Graduate School of International Relations and Pacific Studies, UCSD. He is the author, with Marcus Noland, of *Famine in North Korea: Markets, Aid and Reform* (2007); *Witness to Transformation: Refugee Insights into North Korea* (2011); and *Engaging North Korea: the Role of Economic Statecraft* (2011). The two run a blog on North Korea available online at <http://www.piie.com/blogs/nk>



Olli Heinonen, before joining the Belfer Center as a senior fellow in August 2010, spent 27 years at the International Atomic Energy Agency in Vienna. Heinonen spent the last five years as Deputy Director General of the IAEA, and head of its Department of Safeguards. He led the Agency's efforts to identify and dismantle nuclear proliferation networks, including the one led by Pakistani scientist A.Q. Khan, and he oversaw its efforts to monitor and contain Iran's nuclear program. Heinonen led teams of international investigators to examine nuclear programs of concern around the world. He inspected nuclear facilities in South Africa, Iraq, North Korea, Syria, Libya, and elsewhere, seeking to ensure that nuclear materials were not diverted for military purposes.

He is considered one of the world's leading experts on Iran's nuclear program. He led the Agency's efforts in recent years to implement an analytical culture to guide and complement traditional verification activities. A native of Finland, Heinonen studied radiochemistry and completed his Ph.D. dissertation in nuclear material analysis at the University of Helsinki. Before

joining the IAEA in 1983, 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. At the IAEA, from 1999 to 2002, he was Director of Operations A and from 2002-2005, he was the Director of Operations B in the Department of Safeguards.



Michael C. Horowitz is an associate professor of political science at the University of Pennsylvania. He is currently serving in the Department of Defense as an International Affairs Fellow, funded by the Council on Foreign Relations. His research focuses on international conflict issues, especially military innovation by state and non-state actors, the role of leaders in international politics, and the intersection of religion and international relations. His first book, *The Diffusion of Military Power: Causes and Consequences for International Politics*, won the Furniss Prize given by the Mershon Center and the Best Book award given by the International Security Studies Section of the International Studies Association. His work has been published in *International Organization*, *International Security*, the *Journal of Conflict Resolution*, the *Washington Quarterly*, *International Studies Quarterly*, and elsewhere. He has held fellowships at the Olin Institute for Strategic Studies, the Belfer Center for Science and International Affairs, and the Weatherhead Center for International Affairs at Harvard. Professor Horowitz received his Ph.D. in government from Harvard University and his BA in political science from Emory University.



Neil Joeck is a Senior Fellow at the Center for Global Security Research (CGSR) at the Lawrence Livermore National Laboratory (LLNL) and a Visiting Scholar at the Institute for International Studies at the University of California, Berkeley. For his contributions to U.S. national security, he was named a Distinguished Member of the Technical Staff at LLNL in 2012. Dr. Joeck worked on India and Pakistan as a political analyst and group leader in Z Division at LLNL from 1987-2001. Since 2001, Joeck has divided his time between government service in Washington D.C. and the Center for Global Security Research at LLNL. Joeck served as the National Intelligence Officer for South Asia in the Office of the Director for National Intelligence from 2009 to 2011, in which capacity he provided intelligence support to the White House primarily on Afghanistan and Pakistan. He also served from 2004 to 2005 as Director for Counter-proliferation Strategy at the National Security Council. From 2001-2003, he was a member of the Policy Planning Staff at the Department of State, where he was responsible for the India, Pakistan, Afghanistan and nuclear proliferation portfolios. Joeck received a Ph.D. and M.A. in political science from UCLA (1986), an M.A. (with Distinction) from the Paterson School of International Affairs at Carleton University in Canada (1976), and a BA in Politics (with Honors) from the University of California, Santa Cruz (1973). His publications include *Maintaining Nuclear Stability in South Asia*, Adelphi Paper #312 (Oxford University Press, 1997) and two edited books: *Arms Control and International Security* (with Roman Kolkowicz, Westview Press, 1984) and *Strategic Consequences of Nuclear Proliferation in South Asia* (Frank Cass, 1986). He has contributed articles to various journals and edited books and taught at UCLA (1985-86), the Chinese Academy of Social Science (1987), and UC Berkeley (2004, 2006-7).



Shirley Johnson established the Tucker Creek Consulting in September 2007, working in the area of nuclear nonproliferation and disarmament issues. She is currently working on issues concerned with the verification of an FMCT; safeguards by design; process monitoring; design verification; and SSAC guidelines. She is an invited guest lecturer at universities and does recruiting of U.S. candidates to the IAEA in the area of nuclear safeguards.

From 1982 until 2007 she was employed as a safeguards inspector for the International Atomic Energy Agency in Vienna, Austria, specializing in reprocessing safeguards, primarily in Germany and Japan, and design verification. In 1991-1992 she was a member of the fourth inspection team into Iraq with the mission to evaluate their plutonium separation capabilities. She served as Acting Section Head for reprocessing, and power and research reactors in Japan; Head of the JNFL Project Office with the mission to develop a safeguards approach for RRP; and as Section Head for SGOB1 responsible for Canada, Switzerland, India and Pakistan and SQP states in Africa.

She has authored and co-authored more than 30 scientific publications.

Johnson received a BS in Chemistry from Gonzaga University in Spokane, Washington, and did graduate studies in separations chemistry at the Hanford Graduate Center in Richland, Washington.



David C. Kang is Professor of International Relations and Business at the University of Southern California, with appointments in both the School of International Relations and the Marshall School of Business. At USC he is also director of the Korean Studies Institute. Kang's latest book is "East Asia Before the West: Five Centuries of Trade and Tribute" (Columbia University Press, 2010). He is also author of "China Rising: Peace, Power, and Order in East Asia" (Columbia University Press, 2007); "Crony Capitalism: Corruption and Development in South Korea and the Philippines" (Cambridge University Press, 2002), and "Nuclear North Korea: A Debate on Engagement Strategies" (co-authored with Victor Cha) (Columbia University Press, 2003). Kang has published numerous scholarly articles in journals such as International Organization and International Security, and his co-authored article "Testing Balance of Power Theory in World History" was awarded "Best article, 2007-2009," by the European Journal of International Relations. Kang has also written opinion pieces in the New York Times, the Financial Times, the Washington Post, and the Los Angeles Times, as well as writing a monthly column for the JoongAng Ilbo in Korean. He received an A.B. with honors from Stanford University and his Ph.D. from Berkeley.



Jeff Kaplow is a Ph.D. candidate in political science at the University of California, San Diego. He is an International Nuclear Security Dissertation Fellow with the University of California's Institute on Global Conflict and Cooperation, a Stanton Nuclear Security Fellow at the RAND Corporation, and a Research Scholar at the Laboratory on International Law and Regulation at UCSD. His research interests include the constraining power of international institutions, nuclear

nonproliferation, and international conflict. Before coming to UCSD, Kaplow analyzed foreign nuclear weapons programs for the U.S. government. He has spoken widely about nuclear proliferation risks, including briefing White House and cabinet-level officials, testifying before Congress, and addressing a panel of the National Academies of Science. He is the recipient of numerous awards for distinguished government service. Kaplow has also worked as a research consultant evaluating the effectiveness of federal government programs and has analyzed international environmental negotiations for Cambridge Energy Research Associates. He holds a master's degree in political science from the University of California, San Diego, a master's degree in international security policy from Harvard's Kennedy School, and a B.A. in political science from Yale.



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 the origins, locations or processes. 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 these types of materials, additionally leading 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. 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.



Matthew Kroenig is an Associate Professor and International Relations Field Chair in the Department of Government at Georgetown University. He is the author of [*Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons*](#) (Cornell University Press, 2010), which received the International Studies Association's Best Book Award, Honorable Mention. He is also the coauthor of [*The Handbook of National Legislatures: A Global Survey*](#) (Cambridge University Press, 2009) and coeditor of [*Causes and Consequences of Nuclear Proliferation*](#) (Routledge, 2011). His articles on international politics have appeared in such publications

as *American Political Science Review*, *Christian Science Monitor*, *Comparative Strategy*, *Foreign Affairs*, *Foreign Policy*, *International Organization*, *International Security*, *Journal of Conflict Resolution*, *Newsday*, *Perspectives on Politics*, *Security Studies*, *The American Interest*, *The New Republic*, *The Wall Street Journal*, *The Washington Post*, *The Washington Quarterly*, and *USA Today*. He has provided commentary on BBC, CNN, C-SPAN, NPR, and many other media outlets. From July 2010 to July 2011, Dr. Kroenig was a Special Advisor in the Office of the Secretary of Defense on a Council on Foreign Relations International Affairs Fellowship, where he worked on the development and implementation of U.S. defense policy and strategy in the Middle East. Previously, in 2005, he worked as a strategist in the Office of the Secretary of Defense where he authored the first-ever, U.S. government strategy for deterring terrorist networks. For his work, he was awarded the Office of the Secretary of Defense's Award for Outstanding Achievement. He is a term member of the Council on Foreign Relations and Co-Chair of the Council's Term Member Advisory Committee. Dr. Kroenig has held fellowships

from the Council on Foreign Relations, the National Science Foundation, the Belfer Center for Science and International Affairs at Harvard University, the Center for International Security and Cooperation at Stanford University, and the Institute on Global Conflict and Cooperation at the University of California.

Anne McQuaid is a project manager in the National Security Directorate of Pacific Northwest National Laboratory (PNNL). She has worked on several of the Department of Energy's international nonproliferation efforts since 2001 including the Material Protection, Control, and Accounting Program, the Global Threat Reduction Initiative, and currently, the Second Line of Defense Program. She holds a B.S. in mechanical engineering from MIT and a Master's in Public Policy from Harvard's Kennedy School.



Rupal N. Mehta is a Ph.D. candidate in the Department of Political Science at University of California San Diego whose research focuses on nuclear proliferation and conflict. She is an International Nuclear Security Dissertation Fellow at the University of California's Institute on Global Conflict and Cooperation. Her dissertation examines the role of international inducements to incentivize nuclear reversal. Before coming to UC San Diego, she worked on nuclear weapons proliferation at the Center for International Security and Cooperation (CISAC) at Stanford University. She received a B.A. in Political Science at UC Berkeley.



Alexander H. Montgomery is an associate professor of Political Science at Reed College. He has a B.A. in Physics from the University of Chicago, an M.A. in Energy and Resources from the University of California, Berkeley, and an M.A. in Sociology and a Ph.D. in Political Science from Stanford University. While at Stanford, his work was supported by a National Science Foundation Graduate Fellowship. He has been a joint International Security Program/Managing the Atom Project Research Fellow at the Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, and a post-doctoral fellow and a visiting assistant professor at the Center for International Security and Cooperation, Stanford University. During 2012–3, he is a Council on Foreign Relations International Affairs Fellow in Nuclear Security with a placement in the Office of the Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction. He has published articles on nuclear proliferation and on the effects of social networks of international organizations on interstate conflict, most recently in *International Organization* and the *Journal of Conflict Resolution*. His research interests include political organizations, social networks, weapons of mass disruption and destruction, social studies of technology, and interstate social relations.



Neil Narang is an assistant professor in the Department of Political Science at UC Santa Barbara and project director for IGCC's Public Policy and Nuclear Threats (PPNT) program. He is an alumnus of the PPNT program and has been an active participant in its annual

winter conference. From 2011-2012 Narang was a postdoctoral fellow at the Christopher H. Browne Center for International Politics at the University of Pennsylvania. He received his Ph.D. in Political Science from UC San Diego in 2011 and was an IGCC Dissertation Fellow.



Dr. Brad Roberts was deputy assistant secretary of defense for nuclear and missile defense policy from April 2009 to March 2013. In this capacity, he was policy director of the 2010 Nuclear Posture Review. From May until July 2013 he was a visiting fellow at the think tank of the Japanese Ministry of Defense, the National Institute for Defense Studies, where he authored a paper on extended deterrence and strategic stability in Northeast Asia. In September 2013 he will join the Center for International Security and Cooperation at Stanford University as a William Perry fellow in Nuclear Strategy, a one-year appointment. Prior to entry into government service, Dr. Roberts was a member of the research staff at the Institute for Defense Analyses in Alexandria, Virginia and an adjunct professor at George Washington University.



Laura Rockwood is the Section Head for Non-Proliferation and Policy Making in the Office of Legal Affairs of the IAEA, where she has served since 1985. She has been involved in all aspects of the negotiation, interpretation and implementation of IAEA safeguards agreements for over 20 years (notably, those of Iraq, Iran, DPRK, South Africa, Argentina/Brazil), and was the principal author of the document that became the Model Additional Protocol. She has participated, inter alia, in: the Director General's Expert Group on Multilateral Approaches to the Nuclear Fuel Cycle; three NPT Review Conferences; trilateral negotiations between the IAEA, Russia and the United States on an agreement for the verification of materials released from weapons programmes (the Trilateral Initiative).

Prior to working for the IAEA, Ms. Rockwood was employed by the U.S. Department of Energy as a trial attorney principally in radiation injury cases, and as counsel in general legal matters.

Ms. Rockwood received her Bachelor of Arts degree from the University of California, Berkeley, in 1973, and her Juris Doctor degree from the University of California's Hastings College of the Law in San Francisco in 1976. She is a member of the State Bar of California and of the Washington, D.C., Bar Association.



Lawrence Rubin is Assistant Professor in the Sam Nunn School of International Affairs. His research interests include comparative Middle East politics and international security with a specific focus on Islam and politics, Arab foreign policies, and nuclear proliferation. He holds a Ph.D. in Political Science from UCLA and has earned degrees from UC Berkeley, the London School of Economics, and the University of Oxford. Rubin has been a Research Fellow at the Belfer Center for Science and International Affairs with the Dubai Initiative in the Harvard Kennedy School of Government (2009-2010) and has served as a lecturer on the Robert and Myra Kraft chair in Arab

politics at the Crown Center for Middle East Studies, Brandeis University (2008-2009). Rubin is currently the Associate Editor for the journal *Terrorism and Political Violence*. Outside of Academia, Rubin has held positions at the National Defense University's Near East South Asia Center for Strategic Studies and the RAND Corporation. Rubin has conducted research in Morocco, Egypt, Israel, the UAE, and Yemen.



Scott D. Sagan is the Caroline S.G. Munro Professor of Political Science at Stanford University, and a Senior Fellow at the Center for International Security and Cooperation and the Freeman Spogli Institute. He also serves as the co-chair of the American Academy of Arts and Science's Global Nuclear Future Initiative. Before joining the Stanford faculty, Sagan was a lecturer in the Department of Government at Harvard University and served as a special assistant to the director of the Organization of the Joint Chiefs of Staff in the Pentagon. He has served as a consultant to the office of the Secretary of Defense and at the Sandia National Laboratory and the Los Alamos National Laboratory.

Sagan 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). He is the co-editor with Peter R. Lavoy and James L. Wirtz of *Planning the Unthinkable* (Cornell University Press, 2000), the editor of *Inside Nuclear South Asia* (Stanford University Press, 2009), and co-editor with Steven E. Miller of a two-volume special issue of *Daedalus*, *On the Global Nuclear Future* (Fall 2009 and Winter 2010). His recent publications include, with Daryl G. Press and Benjamin A. Valentino, "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons" in the *American Political Science Review* (February 2013), and "A Call for Global Nuclear Disarmament" in *Nature* (July 2012). In addition, he co-edited with Jane Vaynman a special issue of *The Nonproliferation Review* (March 2011) on the international impact of the 2010 U.S. Nuclear Posture Review, also co-authoring the introduction and conclusion articles. Sagan has also won five teaching awards: the International Studies Association's Distinguished Scholar in International Security Studies in 2013; the Monterey Institute for International Studies' Nonproliferation Education Award in 2009; the International Studies Association's 2008 Innovative Teaching Award; Stanford University's 1998-99 Dean's Award for Distinguished Teaching; and Stanford's 1996 Hoagland Prize for Undergraduate Teaching.



Simon Saradzhyan is a research fellow at Harvard Kennedy School's Belfer Center and assistant director of the U.S.-Russia Initiative to Prevent Nuclear Terrorism. His research interests include arms control, U.S.-Russian relations, nuclear and conventional terrorism, defense, security and space affairs in Russia and other newly-independent states. Prior to joining the Belfer Center, Saradzhyan worked as a researcher for East West Institute and as a consultant for the United Nations and World Bank. Simon has also worked as deputy editor of the *Moscow Times* and as Moscow correspondent for *Defense News* and *Space news*. Simon has earned a certificate of merit from the commander of the Russian Strategic Missile Forces for his coverage of

Russia's military affairs.

Saradzhyan is the author of a number of papers on arms control and security, including "Russia's Non-strategic Nuclear Weapons in Their Current Configuration and Posture: A Strategic Asset or Liability?" and "Russia's Support for Zero: Tactical Move or Long-term Commitment?" and published by the Belfer Center; "Russia: Grasping Reality of Nuclear Terror," published in the Annals of the American Academy of Political and Social Science; "Russia's System to Combat Terrorism and Its Application in Chechnya" published in the "National Counter-Terrorism Strategies" of NATO Security through Science Series; and "La Guerra Olvidada de Chechnia" (Forgotten War in Chechnya,) published in La Vanguardia Dossier Quarterly. He is currently writing on a chapter on Russian-Chinese relations for a book to be published by Britain's Royal Military Academy Sandhurst. Saradzhyan earned a Masters in Public Administration the John F. Kennedy School of Government in 2002. He is currently a Ph.D. candidate at the Institute for U.S. and Canadian Studies of the Russian Academy of Sciences.



Karthika Sasikumar began her education in Hyderabad, India. She obtained her undergraduate degree from St. Francis College for Women. From 1995 to 1999, she was a student at Jawaharlal Nehru University in New Delhi, where she earned Master's and M. Phil degrees from the School of International Studies. Dr. Sasikumar received her Ph.D. from the Government Department at Cornell University in 2006. Her dissertation explores the interaction between India and the international nuclear nonproliferation order. Before coming to SJSU, Dr. Sasikumar was a Program Associate at the American Academy of Arts and Sciences, and an Associate in the International Security Program at Harvard University's Kennedy School of Government, both in Cambridge, Massachusetts. She has also been a Postdoctoral Fellow at the University of British Columbia's Liu Institute for Global Issues in Vancouver, and a Predoctoral Fellow at the Center for International Security and Cooperation, Stanford University. In 2010-11, she spent a year at the Belfer Center as the first Stanton Nuclear Security Junior Faculty Fellow. Her research and teaching interests are in International Relations theory, international regimes, global security, migration, and national identity.



Mark Schanfein joined Idaho National Laboratory in September 2008, as their Senior Nonproliferation Advisor, after 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 spent ten years as the team leader for all non-destructive assay measurements at the LANL plutonium facility and at the Chemistry and Material Research Facility, running more than 100 instruments. 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 leveraging INL technology, facilities, and nuclear material to build an international safeguards program. His highest priority is conducting R&D to develop the foundation for

effective international safeguards on pyro-processing. This includes the acquisition and installation of authorized IAEA UMS in the INL pyro-facility. Another recent project is the establishment of a training course for U.S. nationals on a suite of IAEA UMS and attended systems, to encourage them to apply for IAEA nuclear safeguards positions.



William Tobey is a Senior Fellow at Belfer Center for Science and International Affairs at Harvard University. He 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.

Rick Wallace has 30 years of experience in nuclear weapons analysis, nuclear materials use and protection, nuclear safeguards systems, and technical program management. He is currently a Guest Scientist at Los Alamos National Laboratory and a Senior Consultant for Aquila Technologies. He is a former Group Leader for Safeguards Systems Group at LANL, involved in advanced safeguards systems development, nonproliferation policy analysis, international engagement related to the nuclear fuel cycle and safeguards, and IAEA activities related to developing potential proliferation indicators. He has been a senior policy advisor for the Administrator of the National Nuclear Security Agency and from 2002-2005, Dr. Wallace was a Senior Analyst with the International Atomic Energy Agency (IAEA) in Vienna, Austria, working to collect, evaluate and analyze information on nuclear activities of various countries in order to identify and assess indicators of potential clandestine nuclear weapons activities. He also acted as a technical expert and resource on nuclear physics, various processes in the nuclear fuel cycle, weaponization processes, export controls, and nuclear material trafficking issues. From 1995-2001, he was a project leader for the U.S.-Russian Nuclear Materials Protection, Control, and Accounting program at LANL and served as Acting Program Manager for Russian Nonproliferation Programs. In 1995, he provided technical advice to DOE during negotiations of the Comprehensive Test Ban Treaty. From 1981-1994, he was involved in nuclear weapons physics simulation modeling. He received his B.S. in Physics and Astronomy from Louisiana State University in 1975, his M.S. and Ph.D. (1981) in Nuclear Astrophysics from the University of California.



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Amy F. Woolf is a Specialist in Nuclear Weapons Policy in the Foreign Affairs, Defense, and Trade Division of the Congressional Research Service at the Library of Congress. She provides Congress with information, analysis, and support on issues related to U.S. and Russian nuclear forces and arms control. She has authored many studies and participated in numerous seminars on these issues, addressing such topics as nuclear weapons strategy and doctrine, nuclear force structure, strategic arms control and the U.S-Russian arms control agenda, ballistic missile defense policy, and issues related to nuclear weapons and threat reduction in the former Soviet Union. Ms. Woolf has spoken at numerous conferences and workshops, discussing issues such as Congressional views on arms control and ballistic missile defenses, cooperative threat reduction with Russia, and U.S. nuclear weapons policy. Before joining CRS, Ms. Woolf was a member of the Research Staff at the Institute for Defense Analyses (IDA) in Alexandria, Virginia. She also spent a year at the Department of Defense, working on the 1994 Nuclear Posture Review. Ms. Woolf received a Masters in Public Policy from the Kennedy School of Government at Harvard University in 1983 and a BA in Political Science from Stanford University in 1981.