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James Blankenship
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A.J. Shaka
Susan Shirk
Rick Wallace
Ashley Volkmar
Ross Williams
Amy F. Woolf
Yvonne Yew

About the Speakers



Michael Adler is currently a Public Policy Scholar at the Woodrow Wilson International Center for Scholars, focusing on the diplomacy in the Iranian nuclear crisis and other non-proliferation issues. He is a former correspondent for Agence France-Presse news agency with postings in Paris, Bangkok, Kuwait, Sarajevo, Bonn, Berlin and Vienna. Adler covered the uprising in Burma in 1988, the reconstruction of Kuwait after the first Gulf War, the war in Bosnia, the moving of the German capital from Bonn to Berlin and the fall of Mobutu in Zaire. He covered the Iranian nuclear crisis extensively while in Vienna from 2002-2007, where he reported on the International Atomic Energy Agency (IAEA), which has its headquarters in the Austrian capital. He also did reporting in Tehran, Geneva, Brussels, Berlin, New York, Tripoli and other key cities on the Iranian issue. Adler went to the University of Pennsylvania in Philadelphia and to the University of Paris (Sorbonne).



Kyle Beardsley is an associate professor in political science at Emory University. He received his Ph.D. from UCSD in 2006, and he has undergraduate degrees from the University of Maryland. His work focuses on international conflict resolution and nuclear proliferation. His book, *The Mediation Dilemma* was recently published by Cornell University Press, and his work also appears in a number of leading journals including *The American Journal of Political Science*, *The Journal of Politics*, *International Studies Quarterly* and *The Journal of Conflict Resolution*.



Adam Bernstein leads the Advanced Detectors Group in the Physics Division at Lawrence Livermore National Laboratory. He works on the development of radiation detectors for applications in nuclear nonproliferation and nuclear arms control, and on detector development for fundamental physics experiments. He received his B.A. in Physics from the University of California at Berkeley, and his Ph.D. in Experimental High Energy Physics from Columbia University. He has pioneered the use of cubic meter scale water and scintillator based detectors as a practical means for non-intrusive real-time measurement of changes in the plutonium content of operating reactors. Bernstein has also developed large-scale liquid scintillator detectors for improved passive and active detection of Plutonium and Highly Enriched Uranium. He is a member of the Large Underground Xenon (LUX) dark matter search experiment, an international collaboration which will soon directly measure or place the world's most stringent limit on the mass and coupling of a theoretically favored class of dark matter particle, known as the Weakly Interacting Massive Particle or WIMP.



Edward Blandford is a Stanton nuclear security postdoctoral fellow at CISAC and an adjunct research assistant professor in the Chemical and Nuclear Engineering Department at the University of New Mexico. He was previously a postdoctoral fellow at CISAC for 2010-2011.

His research focuses on nuclear reactor design at the system level as it impacts security issues for future nuclear infrastructure. In particular, his interests involve the design of advanced reactors with an emphasis on security, emergency preparedness, threat of theft of material, and international safeguards. This work also focuses on the utilization of risk analysis early in the reactor design process to ensure that safety, security, and structural functional requirements are met reliably. In addition to security applications, other research interests include nuclear reactor thermal-hydraulics in support of the safety of nuclear installations, probabilistic risk assessment, performance-based regulation, best-estimate code verification and validation, and material degradation management.

Before coming to CISAC, Edward was a graduate student researcher in the Nuclear Engineering

Department at the University of California at Berkeley. His Ph.D. dissertation focused on the design of reduced-scale experiments for advanced high temperature reactors and their role in validating computational models. He received his M.S. in nuclear engineering from UC Berkeley in 2008.

Prior to pursuing graduate work, he worked at the Electric Power Research Institute (EPRI) as a project manager in the Steam Generator Management Program where he managed all thermal-hydraulics related research activity. While at EPRI, Edward worked on a variety of industry-related activities related to material degradation issues and improving plant management.

Edward studied mechanical engineering at the University of California at Los Angeles where he earned a B.S. in 2002. During this period of time, he held Department of Energy research fellowships at both Brookhaven National Laboratory and Lawrence Berkeley National Laboratory working on nuclear and particle physics applications respectively.

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 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 at Los Alamos during the last three 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.



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, and an advisor to four 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 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.



Michael Carter is a member of the senior leadership staff in the National Ignition Facility (NIF) and Photon Science Principal Directorate at LLNL. He has 25 years of experience developing technology solutions for the National Security needs of the Department of Energy (DOE), Department of Defense (DoD), Department of Homeland Security (DHS), and the Intelligence Community.

Dr. Carter joined LLNL as a graduate student in 1981 working in the Magnetic Fusion program. During his career, Dr. Carter has worked as an experimentalist in the Nuclear Test Program, conducted pioneering research on x-ray lasers at the Nova laser facility, and developed innovative passive and laser-based remote sensing methods for DoD and the Intelligence Community. Dr. Carter also pioneered the development of large-area, persistent surveillance systems. In 2002, Dr. Carter was a technical advisor to the White House in the establishment of DHS. Dr. Carter served as the first Director for Radiological and Nuclear Countermeasures in DHS and the Deputy Director for the Domestic Nuclear Detection Office in DHS. He has served as the Deputy Principal Associate Director for the Global Security Directorate at LLNL and as the Program Director for Counterterrorism programs.

Dr. Carter has received a Bronze Medal for Meritorious Service and a Team Award from the National Reconnaissance Office, as well as a National Intelligence Meritorious Unit Citation from the National Imagery and Mapping Agency.

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, DC 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*.



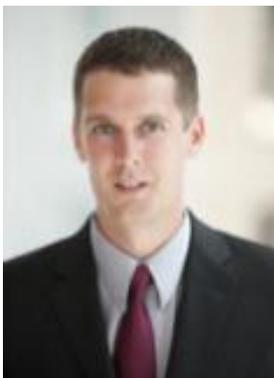
Thomas Countryman, a career member of the Senior Foreign Service, rank of Minister-Counselor, is currently serving as the Assistant Secretary for International Security and Nonproliferation. The ISN Bureau leads the U.S. effort to prevent the spread of nuclear, chemical, and biological weapons, their related materials, and their delivery systems.

Mr. Countryman began his State Department career in 1982, serving as a consular and political officer in Belgrade, Yugoslavia from 1983 to 1985. From 1985 to 1988, he worked in the Department's Office of Eastern European and Yugoslav Affairs. From 1988 to 1990, Mr. Countryman studied Arabic language and culture in the U.S. and Tunisia. During Operations Desert Shield and Desert Storm, he served as the Political-Military Officer at the American Embassy in Cairo, Egypt. From 1991 to 1993, he was the senior officer for reporting on political, security, and religious affairs within Egypt. In 1993 and 1994, Mr. Countryman worked in the State Department's Office of Counter-Terrorism. From 1994-97, he was responsible for advising Ambassador Albright on Middle East affairs at the U.S. Mission to the United Nations, and served as liaison with the UN Special Commission investigating Iraq's weapons programs. In this position, he dealt not only with Iraq, but also with Libya, Sudan and Arab-Israeli issues. From 1997 to 1998, Mr. Countryman served as Director for Near East and South Asian Affairs at the National Security Council, with responsibility for the region stretching from Morocco to Syria. As part of his position at the NSC, he served as the White House representative on Ambassador Dennis Ross' peace process team. In 1998-1999, he participated in the Senior Seminar, the federal government's most advanced professional development program for foreign affairs and national security officials. From 1999 to 2001, Mr. Countryman was Director of the Office of South Central European Affairs (EUR/SCE) in the Department of State, where he focused on working with the democratic opposition in Serbia. From 2001 to 2005, he was the Minister-Counselor for Political Affairs at the American Embassy in Rome, Italy. After a short assignment as Director of the Office of United Nations Political Affairs in the Department, he served as Deputy Chief of Mission at the US Embassy in Athens, Greece from 2005 to 2008. For a five-month period in 2007, he served as the Charge d'affaires of the Embassy. In 2008-9, he was the Foreign Policy Advisor to General James Conway, the Commandant of the US Marine Corps. He served as the Principal Deputy Assistant Secretary for Political-Military Affairs in 2009-10, and as Deputy Assistant Secretary for European Affairs (with responsibility for Balkan affairs) in 2010-11. The Department of State gave him 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. Mr. Countryman graduated from Washington University in St. Louis (summa cum laude) with a degree in economics and political science, and studied at the Kennedy School of Government at Harvard University. His foreign languages are Serbo-Croatian, Arabic, Italian, Greek and German. He is a native of Tacoma, Washington.



James E. Doyle has been a specialist in the Nuclear Nonproliferation Division at Los Alamos National Laboratory since 1997. His professional focus is on systems analysis, strategic planning and policy development. Dr. Doyle holds a PhD in International Security Studies from the University of Virginia. At Los Alamos he managed projects with Russia's nuclear weapons institutes on the joint development of technologies and procedures for verifying the dismantlement and storage of nuclear warheads and fissile materials. He has been focusing on this topic again, speaking and publishing on the prospects for another round of U.S.-Russian nuclear arms reductions following the New START Treaty.

Dr. Doyle has also focused on defining educational requirements for nuclear security specialists and developing university training courses in this area. He was the coordinator for Los Alamos activities related to the Human Capital Development project of NNSA's Next Generation Safeguards Initiative. His edited Textbook "*Nuclear Safeguards, Security and Nonproliferation: Achieving Security with Technology and Policy,*" is in use at many university departments focusing on the integration of technical and policy issues in the field of nuclear security. Dr. Doyle designed and directed introductory nuclear safeguards and security courses for students and technical staff at Los Alamos 2008-2010. Lectures from this series of courses have been selected by the IAEA to be featured on a safeguards knowledge platform available to all member states. Dr. Doyle's articles on nuclear security issues have appeared in *Defense News*, *Science and Global Security*, *Nonproliferation Review*, *Arms Control Today*, *Comparative Strategy*, *Strategic Review* and "*Abolishing Nuclear Weapons: A Debate,*" by James Acton and George Perkovich.



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.



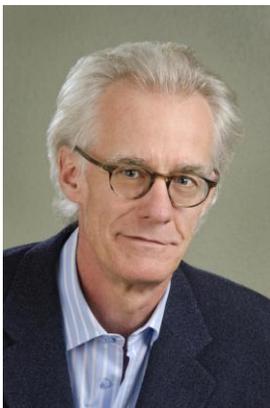
Matt Gardner is an experimental nuclear physicist at the UK Atomic Weapons Establishment (AWE). His work centres on improving understanding of nuclear weapon operation via experimentation in the field of materials properties under weapons conditions, using AWE's fusion-neutron source. This work forms 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.



Erik Gartzke has held faculty positions at the Pennsylvania State University, Columbia University, and the University of California, San Diego (currently). He received his PhD in Political Science from the University of Iowa in 1997. A recent report by Thompson ISI ("Web of Science") ranked him among the twenty most prolific and widely cited scholars in conflict studies (out of a pool of 5,311 authors). His work focuses on peace, war, and international institutions. He has written extensively on the liberal determinants of interstate peace, suggesting that the largely forgotten role of markets and economic development – a capitalist peace – is a more decisive factor than representative democracy

in making regions less war-prone. A second theme involves the impact of international institutions on warfare and conflict avoidance. These findings develop a middle ground between the contrasting optimism and pessimism of traditional approaches. Certain kinds of intergovernmental organizations have demonstrable, theoretically supportable effects on conflict, though these effects are limited. A final theme focuses more directly on the theoretical causes of war. Published and ongoing research examines how bargains succeed or fail. Rather than relying on human nature, norms, culture, or material forces (power, incentives, constraints), bargaining theory emphasizes actors' beliefs about such factors. His research appears in the *American Political Science Review*, the *American Journal of Political Science*, *International Organization*, *International Studies Quarterly*, the *Journal of Conflict Resolution*, the *Journal of Politics*, *World Politics*, and elsewhere. Professor Gartzke is currently working on a book manuscript tentatively titled *The Futility of War: Capitalism, Democracy, and Peace*.



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>



Anne I. Harrington is a Postdoctoral Fellow at the James Martin Center for Nonproliferation Studies at the Monterey Institute of International Studies (MIIS), where she conducts research on nuclear strategy and diplomacy.

Prior to joining CNS, Dr. Harrington held a Stanton Nuclear Security Postdoctoral Fellowship at the Center for International Security and Cooperation at Stanford University. In 2009, *The Nonproliferation Review* awarded her its \$10,000 grand prize in its Doreen and Jim McElvany Nonproliferation Essay Challenge for her article, "Nuclear Weapons as the Currency of Power: Deconstructing the Fetishism of Force." Most recently, the journal *Millennium* selected her essay, "The Strategy of Nonproliferation: Maintaining the Credibility of an Incredible Pledge to Disarm" as the winner of its 2011 Northedge Essay Contest.



Siegfried S. Hecker is a professor (research) in the Department of Management Science and Engineering, a senior fellow at FSI, and co-director of CISAC. He is also an emeritus director of Los Alamos National Laboratory.

Hecker's research interests include plutonium science, nuclear weapon policy and international security, nuclear security (including nonproliferation and counter terrorism), and cooperative nuclear threat reduction. Over the past 18 years, he has fostered cooperation with the Russian nuclear laboratories to secure and safeguard the vast stockpile of ex-Soviet fissile materials.

His current interests include the challenges of nuclear India, Pakistan, North Korea, and the nuclear aspirations of Iran. Hecker works closely with the Russian Academy of Sciences and is actively involved with the U.S. National Academies.

Hecker joined Los Alamos National Laboratory as graduate research assistant and postdoctoral fellow before returning as technical staff member following a tenure at General Motors Research. He led the laboratory's Materials Science and Technology Division and Center for Materials Science before serving as laboratory director from 1986 through 1997, and senior fellow until July 2005. Among his professional distinctions, Hecker is a member of the National Academy of Engineering; foreign member of the Russian Academy of Sciences; fellow of the TMS, or Minerals, Metallurgy and Materials Society; fellow of the American Society for Metals; fellow of the American Physical Society, honorary member of the American Ceramics Society; and fellow of the American Academy of Arts and Sciences.

His achievements have been recognized with the Presidential Enrico Fermi Award, the American Nuclear Society's Seaborg Medal, the Department of Energy's E.O. Lawrence Award, the Los Alamos National Laboratory Medal, among other awards including the Alumni Association Gold Medal and the Undergraduate Distinguished Alumni Award from Case Western Reserve University, where he earned his bachelor's, master's, and doctoral degrees in metallurgy.



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.



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.



Jeff Kaplow is a Ph.D. student in political science at UC San Diego, where his research interests include international conflict, nuclear nonproliferation, and conflict bargaining. Before coming to UC San Diego, Kaplow worked for the U.S. government on nuclear proliferation issues. He has also evaluated regional economic development efforts for a national policy research firm and analyzed international environmental negotiations for Cambridge Energy Research Associates. Kaplow earned his master's degree in international security policy from Harvard's Kennedy School and has a B.A. in political science from Yale.



Robert Kelley is a nuclear engineer from the United States who has worked in the US Department of Energy Complex for over 30 years. He currently consults on nuclear proliferation after working in defence nuclear programs at Livermore, Los Alamos and was Director of the Remote Sensing Laboratory in Las Vegas, Nevada. Bob was a Director at the IAEA in Vienna and has field experience as a Chief Inspector for IAEA in Iraq, in the evaluation of South Africa's nuclear weapons in 1993, and the inspections of the vestiges of Libya's nuclear weapons program in 2004. He recently published evidence of a nuclear program in Burma for the Democratic Voice of Burma. He has carried out IAEA inspections in Libya, Iraq, and South Africa, Egypt, Turkey, South Korea, Taiwan, Syria, Tanzania, Pakistan, India, and DR Congo. Bob's practical laboratory experience includes plutonium metallurgy, gas centrifuge design, weapons engineering, nuclear emergency response and remote sensing. He lives in the Vienna Woods suburb of Klosterneuburg, with his wife Kathy, who is a technical translator for the IAEA.



Duyeon Kim is the Deputy Director of Nuclear Non-Proliferation at the Center for Arms Control and Non-Proliferation where her policy work focuses on nuclear non-proliferation, North Korea and nuclear security.

Prior to joining the Center, Kim was a career Diplomatic and Security journalist having served as the Foreign Ministry Correspondent and Unification Ministry Correspondent for South Korea's Arirang TV based in Seoul. Her stories mainly covered North Korea's nuclear programs, the Six Party Talks, inter-Korean relations, the Korea-US alliance, South Korean diplomacy, U.S. foreign policy and the United Nations. Kim has sat down with world leaders on countless occasions interviewing dignitaries including UN Secretary-General Ban Ki-moon and UN agency chiefs, former Indonesian President Megawati Soekarnoputri and senior officials across the world. While working towards her master's degree, Kim continued to file reports for Arirang TV from Washington, DC while freelancing for South Korea's JoongAng SUNDAY and KBS' 50-minute TV news special "Ssam" covering U.S. reaction to North Korean provocations.

As Deputy Director, Kim has written for major publications including the Bulletin of the Atomic Scientists and the World Politics Review. Kim was also interviewed on TV including CBS, BBC, South Korea's KBS, South Korea's Arirang TV and China's Xinhua News Agency while quoted in the Asia Times.

Kim holds an M.S. in Foreign Service concentrating in International Relations and Security from the Georgetown University School of Foreign Service and a B.A. in English literature from Syracuse University.



Lance K. Kim is a Stanton Foundation Fellow at the RAND Corporation. He received his Ph.D. from the Department of Nuclear Engineering at the University of California, Berkeley, where he was a fellow of the National Science Foundation's Public Policy and Nuclear Threats program. His research focused on technical and policy aspects of long-term fuel cycle planning, proliferation resistance, and physical protection. He has previously worked at RAND, the Department of State, the International Atomic Energy Agency, the U.S. Nuclear Regulatory Commission, and the Lawrence Berkeley National Laboratory. Lance received his B.S. in nuclear and mechanical engineering, a M.S. in nuclear engineering, and a M.P.P. from the Goldman School of Public Policy, all at Berkeley.



Hans M. Kristensen is director of the Nuclear Information Project at the Federation of American Scientists where he provides the public with analysis and background information about the status of nuclear forces and the role of nuclear weapons. He specializes in using the Freedom of Information Act (FOIA) in his research and is a frequent consultant to and is widely referenced in the news media on the role and status of nuclear weapons. His collaboration with researchers at NRDC in 2010 resulted in an estimate of the size of the U.S. nuclear weapons stockpile that was only 13 weapons off the actual number declassified by the U.S. government.

Kristensen is co-author of the Nuclear Notebook column in the Bulletin of the Atomic Scientists and the World Nuclear Forces overview in the SIPRI Yearbook. The Nuclear Notebook is, according to the publisher, “widely regarded as the most accurate source of information on nuclear weapons and weapons facilities available to the public.” His publications are available at <http://www.nukestrat.com/pubs.htm>.

Between 2002 and 2005, Kristensen was a consultant to the nuclear program at the Natural Resources Defense Council in Washington, D.C, where he researched nuclear weapons issues and wrote the report “U.S. Nuclear Weapons In Europe” (February 2005) and co-authored numerous articles including “What’s Behind Bush’s Nuclear Cuts” (Arms Control Today, October 2004) and “The Protection Paradox” (Bulletin of the Atomic Scientists, March/April 2004). Between 1998 and 2002, Kristensen directed the Nuclear Strategy Project at the Nautilus Institute in Berkeley, CA, and he was a Special Advisor to the Danish Ministry of Defense in 1997-1998 as a member of the Danish Defense Commission. He was a Senior Researcher with the Nuclear Information Unit of Greenpeace International in Washington D.C from 1991 to 1996, prior to which he coordinated the Greenpeace Nuclear Free Seas Campaign in Denmark, Norway, Finland and Sweden.



Jeffrey Lewis was Director of the Nuclear Strategy and Nonproliferation Initiative at the New America Foundation until November of 2010, when he left to direct the East Asia Nonproliferation Program at the Monterey Institute of International Studies.

Dr. Lewis is the author of *Minimum Means of Reprisal: China's Search for Security in the Nuclear Age* (MIT Press, 2007), and is a research scholar at the Center for International and Security Studies at the University of Maryland School of Public Policy (CISSM) and a contributor to the *Bulletin of the Atomic Scientists*. Dr. Lewis also founded and maintains the leading blog on nuclear arms control and nonproliferation, ArmsControlWonk.com.

Before joining the New America Foundation, Dr. Lewis was Executive Director of the Managing the Atom Project at the Belfer Center for Science and International Affairs. Previously, he served as a Research Fellow at the Center for International and Security Studies at the University of Maryland School of Public Policy (CISSM), Executive Director of the Association of Professional Schools of International Affairs, a Visiting Fellow at the Center for Strategic and International Studies, and with the Office of the Undersecretary of Defense for Policy.

Dr. Lewis received his Ph.D. in Policy Studies (International Security and Economic Policy) from the University of Maryland and his B.A. in Philosophy and Political Science from Augustana College in Rock Island, Ill.



John Lewis was born and raised in Burlington, Vermont. In 1977 he relocated to Washington, D.C., and joined the FBI in a clerical capacity. He studied Accounting and Business Administration, received his Bachelor of Science degree in 1982, and was thereafter appointed to the position of Special Agent. Following graduation from the FBI's Training Academy in Quantico, Virginia, he saw his first investigative assignments in Dallas, Texas and from there to Newark, New Jersey.

In 1989 Mr. Lewis saw the first of several consecutive promotions into the FBI's management ranks with a second tour at FBI Headquarters in the Undercover and Sensitive Operations Unit. In 1992 Mr. Lewis was promoted to field supervisor in the New Haven, Connecticut field office, and next promoted to Assistant Special in Charge and reassigned to the San Antonio, Texas field office in 1996. In July of 2001 Mr. Lewis was promoted into the FBI's Senior Executive Service and appointed Inspector where he served his third tour at FBI Headquarters in Washington, D.C. In this capacity Mr. Lewis was responsible for on-site inspections of domestic and foreign FBI offices. This was followed in 2002 by a promotion to Special Agent in Charge of the Oklahoma City, Oklahoma field office. In 2004 Mr. Lewis was reassigned to FBI Headquarters for a fourth tour and promoted to Inspector-Deputy Assistant Director, Counterterrorism Division. In this role Mr. Lewis' responsibilities included shared oversight of the FBI's counterterrorism operations in the United States and abroad, with day-to-day oversight of the FBI's Domestic Terrorism Program, Terrorism Financing Operations Program, Communica-

tion Exploitation Program, and the Weapons of Mass Destruction Program. In this position Mr. Lewis had significant interaction with the White House, Congress, foreign law enforcement and intelligence services, and was the recipient of the Presidential Rank Award for outstanding performance. Mr. Lewis' last transfer and assignment in the FBI came in 2006 with his appointment to Special Agent in Charge of the Phoenix, Arizona field office.

Mr. Lewis retired from the FBI after more than 32 years in February of 2009 and joined the Lawrence Livermore National Laboratory as its Principal Deputy Director, Security and Safeguards Organization. In October of 2009, Mr. Lewis was appointed Director of this organization where he serves today. In this role Mr. Lewis has responsibility for the security of the Laboratory site and all of its assets, some of which are extraordinarily sensitive. He oversees a Protective Force Division which provides a physical security presence at the Laboratory; a Physical & Technical Security Division which is responsible for all locks, alarms, and access controls on site; a Personnel Security Division which cares for the U.S. Government security clearances for approximately 7,000 employees, as well as hundreds of foreign nationals, subcontractors, and other visiting officials; an Information Security Division with the responsibility to protect all information produced and transacted on site; Cyber Security, and an Assurance & Training Division which cares for the quality of security performance across the Laboratory.



Martin B. Malin is the Executive Director of the Project on Managing the Atom at the Belfer Center. His research focuses on arms control and non-proliferation in the Middle East, U.S. nonproliferation and counter-proliferation strategies, and the security consequences of the growth and spread of nuclear energy. His current work includes an examination of Israeli leaders' depiction of the threat of a nuclear-armed Iran, and an analysis of the regional conditions conducive to the creation of a WMD-free zone in the Middle East. He recently wrote "The Effectiveness and Legitimacy of Using Force to Prevent Nuclear Proliferation" and contributed to the report "Limiting Transfers of Enrichment and Reprocessing Technology: Issues, Constraints, Options." He also serves on the editorial board of the journal *Innovations*.

Prior to coming to the Kennedy School, Malin taught courses on international relations, American foreign policy, and Middle East politics at Columbia University, Barnard College, and Rutgers University. He also served as Director of the Program on Science and Global Security at the American Academy of Arts and Sciences. He co-edited (with John Steinbruner and Carl Kaysen) the American Academy Studies in Global Security book series (MIT Press). He holds a B.A. in Middle East Studies from the University of California at Santa Cruz, a Masters of International of Affairs from Columbia University's School of International and Public Affairs (where he served as editor-in-chief of the *Journal of International Affairs*), and has a Ph.D. in political science from Columbia University.



Isaac Maya, Ph.D., P.E., has over 26 years of progressively responsible experience in executive management and strategic planning, and high technology academic and industrial research and development. He has obtained practical experience in program and project management, product development and commercialization and fiscal responsibility. His work experience is divided 10 years in industrial/commercial environments and 16 years in academic environments. Dr. Maya has specialized in interdisciplinary programs and projects for the government, military and commercial sectors, ranging in

scope from information technologies and systems to nuclear power reactor systems to start-up business management and operations.

Dr. Maya is a Fellow in NASA's Center for Program/Project Management, and was an Astronaut Candidate Finalist in 1992. He has 10 inventions in the chemical engineering, electronics, medical, nuclear fields, and over 100 total publications, including over 50 refereed journal and conference publications.



Alexander H. Montgomery is an Assistant Professor in 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 at the Center for International Security and Cooperation, Stanford University.

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 currently a Postdoctoral Fellow at the Christopher H. Browne Center for International Politics at the University of Pennsylvania. He received his PhD in Political Science from the University of California, San Diego in 2011 and his BA in Molecular Cell Biology and Political Science from the University of California, Berkeley in 2004. Research interests include international relations, international security, civil war and post-conflict reconstruction.

Neil is currently working on two ongoing research projects related to international politics. The first project follows from his dissertation research, which examines the causes and consequences

of humanitarian assistance as a peacebuilding strategy in conflict and post-conflict states. The second project explores how international reputation matters in alliance politics.



Miles Pomper is a Senior Research Associate in the Washington D.C. office of CNS. His work focuses on nuclear energy, nuclear nonproliferation, nuclear security, and nuclear arms control. Before joining CNS he served as Editor-in-Chief of *Arms Control Today* from 2003-2009. Previously, he was the lead foreign policy reporter for *CQ Weekly* and *Legi-Slate News Service*, where he covered the full range of national security issues before Congress, and a Foreign Service Officer with the U.S. Information Agency. His career has also included the publication of book chapters, analytical articles, and reports for publications, such as *Foreign Service Journal*, *Survival*, *Bulletin of the Atomic Scientists*, *World Politics Review*, *Nuclear Engineering International*, and the *Centre for International Governance Innovation*. He holds a master's degree in international affairs from Columbia University and a master's degree in journalism from Northwestern University.



Daryl G. Press is Associate Professor in the Department of Government, Dartmouth College. He received a Ph.D. in Political Science from the Massachusetts Institute of Technology, and a B.A. from the University of Chicago. Professor Press is the author of *Calculating Credibility: How Leaders Assess Military Threats* [buy it now], a book on decision-making during crises (Cornell University Press, 2005). He has published scholarly articles in *International Security*, *Security Studies*, and *China Security*, as well as articles for a wider audience in *Foreign Affairs*, the *Atlantic Monthly*, and the *New York Times*. Professor Press has worked as a consultant for the RAND Corporation and the U.S. Department of Defense, and is a research affiliate at the Security Studies Program at MIT. He also serves as an Associate Editor at the journal *International Security*. Professor Press is currently writing a book (with Keir Lieber, Georgetown University) on nuclear deterrence - during the Cold War and the future - as well as a series of articles (with Eugene Gholz, UT Austin) on energy and security.



Bradley Roberts, Deputy Assistant Secretary of Defense (Nuclear and Missile Defense Policy) (DASD (NMD)), is responsible for providing policy advice and support to the Secretary of Defense and other senior Department of Defense (DOD) leaders by formulating, recommending, integrating, and implementing policies and strategies to improve United States strategic and conventional strike capabilities, defenses, arms control and related matters. This encompasses DoD policy relating to requirements, capability development, operations, declaratory policy, employment, and international cooperation or agreements (including arms control agreements) in the areas of missile defense, nuclear forces and global strike.

From 1995 until assuming his current responsibilities, Dr. Roberts served as a member of the research staff at the Institute for Defense Analyses in Alexandria, Virginia. Dr. Roberts also served from 2003 to 2009 as a member of DoD's Threat Reduction Advisory Committee and as chair of its panel on DoD implementation of the National Strategy to Combat WMD. He is an associate professorial lecturer at George Washington University, currently on leave from this responsibility. He has also served as special advisor to the STRATCOM Strategic Advisory Group, as vice chairman of the board of the U.S. Committee of the Council for Security Cooperation in The Asia-Pacific, as chairman of the research advisory council of the Chemical and Biological Arms Control Institute, and as member and founding chairman of the Threat Reduction Program Review Committee of Los Alamos National Laboratories. From 1986 to 1996 Dr. Roberts was editor of *The Washington Quarterly* and a research fellow at the Center for Strategic and International Studies (CSIS). His publications include articles in *Foreign Affairs*, *International Security*, and other leading journals. His most recent IDA publication is: *Asia's Major Powers and the Emerging Challenges to Nuclear Stability among Them*.

Dr. Roberts holds a bachelor's degree from Stanford University, a master's degree from the London School of Economics and Political Science, and a doctorate from Erasmus University, Rotterdam.



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 PhD 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.



Mansour Salsabili is a senior political expert at the Ministry of Foreign Affairs of Iran who participated in different aspects of the work of the United Nations (UN) in New York and also was a disarmament expert dealing with the Conference on Disarmament at the European office of the UN in Geneva. He followed disarmament and international security issues in cooperation with a range of research institutes such as the Stockholm International Peace Research Institute (SIPRI) and also the United Nations Institute for Disarmament Research (UNIDIR) and taught a limited number of courses on International Relations and Foreign Policy of Iran at the University of Tarbiat Moddarress, in Tehran.

Prior to that, Salsabili contributed to the *Hamshahri* newspaper on international and particularly Middle East events. He was director of research and also a member of the editorial board of the Middle East History Research Institute (MEHRI) in Tehran. There, he had scores of contributions to three volumes of the encyclopaedic work of the *Chronicle of the Middle East Contemporary History*, the first volume of which—covering events of 1800–1850—was published in 1991.

He received his Ph.D. in Middle East politics from the University of Exeter in 1999.



Simon Saradzhyan is a research fellow at Harvard Kennedy School's Belfer Center. His research interests include nuclear and conventional terrorism, arms control, U.S.-Russian relations, 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*. He has contributed scores of articles to other publications, ranging from the *Times of London* to *Space News*, earning certificate of merit from the commander of the Russian Strategic Missile Forces for his coverage of Russia's military affairs.

As an editor, he led coverage of such dramatic events in Russia, as the Dubrovka and Beslan-hostage taking crises. As a reporter, Simon has covered a number of milestone security events in Russia on the ground, including the October 1993 coup and the 1999 apartment bombings in Moscow.

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 Chechenia" (Forgotten War in Chechnya,) published in *La Vanguardia* Dossier Quarterly.

Saradzhyan has presented his research at numerous conferences, such as the European Union Institute for Security Studies' annual conference and the EastWest Institute's annual Worldwide Security Conference. In his capacity as an expert, Saradzhyan has appeared on *BBC*, *CBS*, *NPR*, *AP* and *Reuters* television as well as on Russian radio and television stations. Simon co-founded and served as the first president of Harvard Club of Russia in 2004-2006. Saradzhyan earned a Masters in Public Administration the John F. Kennedy School of Government in 2002.



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.



Susan Shirk is Ho Miu Lam professor of China and Pacific Relations at the UCSD School of International Relations and Pacific Studies. Shirk first traveled to China in 1971 and has been doing research there ever since. During 1997-2000, Shirk served as Deputy Assistant Secretary of State in the Bureau of East Asia and Pacific Affairs, with responsibility for China, Taiwan, Hong Kong and Mongolia.

She founded in 1993 and continues to lead the Northeast Asia Cooperation Dialogue (NEACD), an unofficial “track-two” forum for discussions of security issues among defense and foreign ministry officials and academics from the United States, Japan, China, Russia, and the Koreas. Shirk’s publications include her books, *China: Fragile Superpower*; *How China Opened Its Door: The Political Success of the PRC’s Foreign Trade and Investment Reforms*; *The Political Logic of Economic Reform in China*; and *Competitive Comrades: Career Incentives and Student Strategies in China*. Her edited book, *Changing Media, Changing China*, will be published by Oxford University Press in December 2010.

Shirk served as a member of the U.S. Defense Policy Board, the Board of Governors for the East-West Center (Hawaii), the Board of Trustees of the U.S.-Japan Foundation, and the Board of Directors of the National Committee on United States-China Relations. She is a member of the Trilateral Commission, China Council of the World Economic Forum, Council on Foreign Relations, and an emeritus member of the Aspen Strategy Group. As Senior Adviser to The Albright-Stonebridge Group, Shirk advises private sector clients on China and East Asia.

Rick Wallace has 28 years of experience in nuclear weapons analysis, nuclear materials use and protection, nuclear safeguards systems, and technical program management. Currently, he is Group Leader for the N-4 Safeguards Systems Group at LANL, overseeing a staff of experts in advanced safeguards systems development, nonproliferation policy analysis, international engagement activities related to the nuclear fuel cycle and safeguards, and IAEA activities related to developing potential proliferation indicators. In 2010-2011, Dr. Wallace spent 4 months on rotation as a senior policy advisor for the Administrator of the National Nuclear Security Agency. 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 open source and proprietary information on nuclear activities of various countries in order to identify and assess indicators of potential clandestine nuclear weapons activities. He shared in the 2005 Nobel Peace Prize that was awarded to the IAEA. 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 & radionuclide trafficking issues. From 1995-2001, he was a project leader for the US-Russian Nuclear Materials Protection, Control, and Accounting program at LANL and 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. in Astronomy from the University of California in 1978, and his Ph.D. in Nuclear Astrophysics from the University of California in 1981.

Ashley Volkmar is a program analyst at the U.S. Department of Homeland Security (DHS) Domestic Nuclear Detection Office National Technical Nuclear Forensics Center (NTNFC). She manages the Federal Expertise Development Program; maintains the interagency budget crosscut; and works closely with partners from the Departments of State, Justice, Defense, Homeland Security, Energy, the Office of the Director of National Intelligence, and the White House to coordinate nuclear forensics policy and planning. Prior to working at NTNFC, Volkmar served as a DHS Office of Policy Honors Fellow. During this period, she helped advance the Department's air cargo mission in the Office of Policy, assisted with strategic messaging in the Office of Cybersecurity and Communications, and worked to further interagency coordination at NTNFC. She holds a M.P.A. from Syracuse University's Maxwell School of Citizenship and Public Affairs as well as a B.S. in criminal justice and a B.S. in psychology from Marist College.

Ross W. Williams

PRESENT POSITION:

Chemist, Chemical Sciences Division, Physical and Life Sciences Directorate, Lawrence Livermore National Laboratory

Deputy Scientific Capability Leader, Environmental Radiochemistry and manager of the clean chemistry and ICPMS laboratories

Manager of the IAEA NWAL laboratory at LLNL

(The NWAL is the Network of Analytical Laboratories that make analyses of safeguards environmental monitoring samples for the IAEA)



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.



Yvonne Yew is a research fellow with the International Security Program and Project on Managing the Atom. A former Singapore diplomat, she has worked on regional and multilateral issues in Asia and in Europe. She was last posted in Austria, where she was responsible for establishing an office in Vienna and served as the Alternate Representative and Governor to the International Atomic Energy Agency during Singapore's term on the IAEA Board of Governors from 2004–2006. She was also consultant to the Comprehensive Nuclear Test-Ban Treaty Organization's International Scientific Studies Project.