

Kathleen Bailey

Dr. Kathleen Bailey is a Senior Associate at the National Institute for Public Policy in Washington DC. Previously, she held three positions with the US Government: Assistant Director of the Arms Control & Disarmament Agency, responsible for nuclear, chemical, biological, and missile nonproliferation; Deputy Assistant Secretary in the US Department of State's Bureau of Intelligence and Research; and, Deputy Director, Bureau for Research in the US Information Agency. Prior to Government service, she was a founding member of the proliferation intelligence program at Lawrence Livermore National Laboratory (LLNL). Following Government service, Dr. Bailey was a senior analyst at the National Institute for Public Policy, where she headed projects to assess the verifiability of the Chemical Weapons Convention and to examine the implications of de-alerting US nuclear forces. She also taught at George Mason University. Following Government service, Dr. Bailey returned to LLNL to serve on the Director's Staff. She established and edited the *Director's Series on Proliferation*. She testified before the US Congress on arms control issues, and was a lecturer at the NATO War College in Rome as well as universities throughout the United States. Dr. Bailey authored four books: *Death For Cause*, a novel; *The UN Inspections in Iraq: Lessons for On-Site Verification* (Westview, 1995); *Strengthening Nuclear Nonproliferation* (Westview, 1993); and, *Doomsday Weapons in the Hands of Many: The Arms Control Challenge of the 90s* (University of Illinois Press, 1991). She was contributing editor of two books: *Weapons of Mass Destruction: Costs Versus Benefits* (1994), and, *Proliferation and Export Controls* (1992). Dr. Bailey's PhD is from the University of Illinois (1976).

Paul Bernstein

Paul I. Bernstein is a Senior Research Fellow at the National Defense University Center for the Study of Weapons of Mass Destruction (WMD Center) in Washington, DC. He is engaged in a range of policy support, research, and professional military education activities related to WMD, nuclear policy, deterrence, arms control, and regional security. Prior to joining NDU, Mr. Bernstein was Vice President and Senior Program Manager with Science Applications International Corporation (SAIC) in McLean, VA, where he managed government-sponsored research programs and led strategic analysis projects. Mr. Bernstein has been an adviser to the Department of Defense Threat Reduction Advisory Committee (TRAC) since 2005, and has contributed to the development of key countering WMD strategy and concept documents. He is a regular guest instructor at senior war colleges and other professional military education venues, and has developed multiple curricula for nuclear and WMD instruction. He is author of the following WMD Center publications: "The Proliferation Risks of Civil Nuclear Power Programs," "The Origins of Nunn-Lugar and Cooperative Threat Reduction," "Countering Weapons of Mass Destruction: Looking Back, Looking Ahead," "International Partnerships to Combat Weapons of Mass Destruction," and "The Future Nuclear Landscape." Mr. Bernstein is a member of the International Institute for Strategic Studies. He holds a Master's Degree in International Affairs from Columbia University.

Barry Blechman

Dr. Barry M. Blechman is currently a distinguished fellow at the Stimson Center -- a non-partisan, non-profit think-tank in Washington, DC. He co-founded Stimson and was chairman of its Board from 1989 to 2007. Blechman also founded DFI International Inc., a research consultancy, in 1984, and served as its CEO until 2007. Blechman has nearly fifty years of distinguished service in national security, in both the public and private sectors. He is an expert on political and military policies, military strategy, and defense budgets and industries. Blechman has worked in the Departments of State and Defense, and at the Office of Management and Budget. At various times during his career, he has been associated with the Brookings Institution, the Carnegie Endowment for Peace, the Center for Naval Analyses, and the Center for Strategic and International Studies. Among other boards and commissions, Blechman served on the Commission to Assess the Ballistic Missile Threat to the United States (1998-99), the Defense Policy Board (2002-06), and the Department of State Advisory Committee on Transformational Diplomacy (2005-08). Blechman holds a PhD in international relations from Georgetown University, has taught at several universities, and has written extensively on national security issues. In 2012, he chaired the Defense Advisory Committee for the Peterson Foundation; the Group's report, published by Stimson, is called *A New US Defense Strategy for a New Era*.

John Browne

John C. Browne received his BS in physics from Drexel University in 1965 and his Ph.D. in nuclear physics from Duke University in 1969. He was a research scientist at Lawrence Livermore National Laboratory from 1970 to 1979 where he did research in basic and applied nuclear physics. He joined Los Alamos National Laboratory in 1979 where he continued his nuclear physics research as head of the neutron physics group in the Physics division. He held a series of technical management positions at Los Alamos, including Physics Division Leader (1981-84), Associate Director for Experimental Physics (1984-85), Associate Director for Research (1985), Associate Director for Defense Research and Applications (1986-91), Associate Director for Computational and Information Sciences (1991-93), LANSCE Director (1993-97), and Laboratory Director from 1997-2003. He retired from LANL in 2003. His scientific interests include nuclear physics, nuclear astrophysics, materials science, accelerator applications, nuclear weapons physics, non-proliferation and arms control. Since that time he has done consulting for a variety of companies, universities, and national laboratories on technical management, national security and energy issues. He is a Fellow of the American Physical Society and a Fellow of the American Association for the Advancement of Science. He serves on a number of non-profit boards including the Hertz Foundation, which provides graduate fellowships in science and engineering.

Christopher Chyba

Christopher Chyba is professor of astrophysical sciences and international affairs at Princeton University, where he directs the Program on Science and Global Security at the Woodrow Wilson School. Prior to coming to Princeton, Chyba co-directed Stanford University's Center for International Security and Cooperation (CISAC). He was also associate professor of geological and environmental sciences at Stanford, and held the Carl Sagan Chair at the SETI Institute. Chyba served on the White House staff from 1993-1995, entering as a White House Fellow, serving on the National Security Council staff, and then in the National Security Division of the Office of Science and Technology Policy. In 1996, Chyba received the Presidential Early Career Award for Scientists and Engineers. In 2001, he was named a MacArthur Fellow. Chyba has served on the National Academy of Sciences' Committee for International Security and Arms Control, is past chair of the National Research Council's Committee on Preventing the Forward Contamination of Mars, and past member of the National Academy's Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats. He served on the executive committee of NASA's Space Science Advisory Committee and, in summer 2009, the Review of U.S. Human Spaceflight Plans Committee. He is currently a member of President Obama's Council of Advisors on Science and Technology.

Jay Davis

Jay Davis is the President of the Hertz Foundation, which funds graduate education in the applied physical sciences and engineering. Jay is a nuclear physicist trained at the Universities of Texas and Wisconsin. In 1988 at the Lawrence Livermore National Laboratory, Davis founded the Center for Accelerator Mass Spectrometry (CAMS), the world's most versatile and productive AMS laboratory. At CAMS, he created tools and programs for research in the geosciences, toxicology, nutritional sciences, oncology, archaeology, and nuclear forensics. In national security activities, he was a senior member of the NEST program and served as an inspector in Iraq for UNSCOM after the First Gulf War participating in the discovery and assessment of the Iraqi nuclear weapons program. From 1998 to 2001, Davis left LLNL to serve as the founding Director of the Defense Threat Reduction Agency of the Department of Defense. At DTRA, he had responsibility for the execution of the US role in arms control inspections and for dealing with all technical aspects of weapons of mass destruction. Among his honors are Phi Beta Kappa, an Atomic Energy Commission Postdoctoral Fellowship, and being twice awarded the Distinguished Public Service Medal, DoD's highest civilian award. He is a Fellow of the American Physical Society and has served on its Panel on Public Affairs. He chairs the Nuclear and Radiation Studies Board of the National Academy of Sciences. Jay's current interests are in graduate education, nuclear forensics, and management of change in organizations.

Anatoly Diyakov

Anatoly Diyakov (Russia) is a Professor of Physics (PhD in 1975) of the Moscow Institute of Physics and Technology (Russia's MIT), and researcher at the Center for Arms Control, Energy and Environmental Studies. From 1991 to 2011 he was a Director of this Center which was the first independent research organization in Russia dedicated to analysis of technical issues related to arms control and disarmament. Diyakov is a member of the IPFM and CISAC working groups of the Russian Academy of Sciences and U.S. National Academy of Sciences. He has written papers on nuclear arms reductions, the history of Russia's plutonium production, disposition options for excess plutonium, and the feasibility of converting Russia's icebreaker reactors from highly enriched to low-enriched uranium as well as on many other topics relating to nuclear arms control and disarmament.

Amy Flatten

In February 2004, Amy Flatten began serving as the Director of International Affairs of the American Physical Society (APS). In her position with the American Physical Society, Flatten develops international exchanges and collaborations, with particular emphasis on developing countries. She also builds and maintains relationships with other national physical societies throughout the world, and manages APS Committees on International Scientific Affairs and International Freedom of Scientists. Her position requires her to advise the APS leadership on international issues of importance to the Society. Dr. Flatten served nearly five years (March 1999 – February 2004) with the White House Office of Science and Technology Policy (OSTP), where she managed a breadth of international S&T initiatives involving government, academia, and industry on behalf of the U.S. President's Science Advisor. Prior to joining the Federal government, she held private sector positions with high-tech corporations in Washington, DC, including Booz-Allen & Hamilton (June 1993-November 1995) and AT&T Solutions (November 1995-October 1997). In January 1998, she joined the Office of International Affairs at the National Telecommunications and Information Administration, which operates under the auspices of the U.S. Department of Commerce. There, she collaborated with government and industry for telecom policy development in multinational settings such as the International Telecommunications Union (ITU) of the United Nations. Along with her full-time positions, Dr. Flatten has also held a faculty position with the Johns Hopkins Part-Time Engineering and Applied Sciences Program from 1995-2005, where she received the 2000 Excellence in Teaching Award. She received her Ph.D. and M.S. degrees in Engineering Science and Mechanics from the Georgia Institute of Technology.

John Hamre

John Hamre was elected president and CEO of CSIS in January 2000. Before joining CSIS, he served as the 26th U.S. deputy secretary of defense. Prior to holding that post, he was the under secretary of defense (comptroller) from 1993 to 1997. As comptroller, Dr. Hamre was the principal assistant to the secretary of defense for the preparation, presentation, and execution of the defense budget and management improvement programs. In 2007, Secretary of Defense Robert Gates appointed Dr. Hamre to serve as chairman of the Defense Policy Board. Before serving in the Department of Defense, Dr. Hamre worked for 10 years as a professional staff member of the Senate Armed Services Committee. During that time, he was primarily responsible for the oversight and evaluation of procurement, research, and development programs, defense budget issues, and relations with the Senate Appropriations Committee. From 1978 to 1984, Dr. Hamre served in the Congressional Budget Office, where he became its deputy assistant director for national security and international affairs. In that position, he oversaw analysis and other support for committees in both the House of Representatives and the Senate. Dr. Hamre received his Ph.D., with distinction, in 1978 from the School of Advanced International Studies at Johns Hopkins University in Washington, D.C., where his studies focused on international politics and economics and U.S. foreign policy.

Mustafa Kibaroglu

Dr. Mustafa Kibaroglu is the Chair of the International Relations Department at Okan University in Istanbul since September 2011. He used to teach courses on “Arms Control & Disarmament” and “Turkish Foreign Policy” in the Department of International Relations at Bilkent University in Ankara from 1997 to 2011. Prof. Kibaroglu was a Research Fellow at the United Nations Institute for Disarmament Research in Geneva (1995); International Atomic Energy Agency Fellow at the University of Southampton (1996); Post-doctoral Fellow at the Monterey Institute in California (1996/97); and Sabbatical Fellow at the Belfer Center of Harvard University (2004/05). He is the co-author of *Global Security Watch – Turkey* (2009) by Praegers in the United States, and the co-editor of *Defence Against Weapons of Mass Destruction Terrorism* (2010), *Bioterrorism: Threats and Deterrents* (2010), *Responses to Nuclear and Radiological Terrorism* (2011), *Defence Against Terrorism* (2011), and *Analysis and Strategies to Counter the Terrorism Threat* (2011) by IOS Press in Netherlands. He is also the author of numerous articles in journals, such as *Security Dialogue*, *Nonproliferation Review*, *Bulletin of the Atomic Scientists*, *Middle East Quarterly*, *Middle East Journal*, *Brown Journal of World Affairs*, *Middle Eastern Studies*, *Korean Journal of Defense Analysis*, and *Middle East Policy*. Prof. Kibaroglu used to be the Academic Advisor of the NATO Centre of Excellence Defence Against Terrorism in Ankara (Jan. 2006 – Jan. 2013). He is a Council Member of the 1995 Nobel Peace Prize winner Pugwash Conferences on Science and World Affairs. His research interests are proliferation of weapons of mass destruction, Middle Eastern politics, and Turkish foreign policy. Prof. Kibaroglu speaks French and English and he is married to Prof. Dr. Aysegul Kibaroglu (Okan University, International Relations Department) and has one son.

Burgess Laird

Mr. Laird is a Research Staff Member with the Institute for Defense Analyses, where he leads studies on defense strategy and capability planning as well as issues of nuclear deterrence, arms control and nonproliferation. Over the past three years, he has led a program of research and analysis focused on the challenges of verification of nuclear weapons reductions accounted at the warhead level. He also serves as an Adjunct Professor at The Johns Hopkins University, Masters Program in Global Security Studies. Previously, Mr. Laird served as Vice President with Hicks & Associates. Mr. Laird has also held positions with DFI International, the Office of the Under Secretary of Defense for Policy, the U.S. Mission to the United Nations, Los Alamos National Laboratory, and The White House Office of Science & Technology Policy. During 2011-12, Mr. Laird was a Fellow in MIT's "Seminar XXI on Foreign Politics, International Relations and The National Interest." In 2008-09, he served as an advisor to the U.S. Congressional Commission on the Strategic Posture of the United States. He holds a Masters degree in National Security Studies from Georgetown University, a Masters in Business Administration from Pepperdine University, and a Bachelor of Arts degree in Political Philosophy from the University of Dallas. Mr. Laird is a member of the International Institute for Strategic Studies, the American Academy for the Advancement of Science, and the World Future Society.

David Lee

David Lee is the Secretary General of the European Physical Society. After a BA in International Policy Studies at the Monterey Institute of International Studies, he received in LIB from the University of Ottawa, and his DEA from the Université de Strasbourg. After more than 10 years as a corporate lawyer, he joined EPS in 1987.

Ronald Lehman

Dr. Ronald F. Lehman is Director of the Center for Global Security Research at Lawrence Livermore National Laboratory. He is also Chairman of the Governing Board of the International Science and Technology Center and Vice Chair of the Defense Department's Threat Reduction Advisory Committee. Ron co-chaired the National Academy of Sciences' study on the future of Cooperative Threat Reduction. Ron was Director of the U.S. Arms Control and Disarmament Agency when START I, START II, the Chemical Weapons Convention, and other historic agreements were concluded. Previously, Ron served in the Defense Department as Assistant Secretary for International Security Policy, in the State Department as Ambassador and U.S. Chief Negotiator on Strategic Offensive Arms (START I), in the White House as Deputy Assistant to the President for National Security Affairs, on the National Security Council staff, in the Pentagon as Deputy Assistant Secretary and on the Senate Armed Services Committee staff. He was commissioned in the United States Army, was airborne qualified, and served in Vietnam. In past years, he chaired the NATO High Level Group and represented the United States at a number of senior United Nations meetings. Ron served on the Presidential Advisory Board on Proliferation Policy, on the State Department's International Security Advisory Board, and co-chaired the Policy Advisory Group on nonproliferation for the Senate Foreign Relations Committee.

Jodi Lieberman

Jodi Lieberman currently serves as the Senior Government Affairs Specialist at the American Physical Society. In this role, Ms. Lieberman works closely with members of Congress and the Administration on a range of issues that impact the APS membership, including funding for federal science agencies. Prior to her tenure at APS, Ms.

Lieberman served in various capacities in the arms control, nonproliferation, nuclear terrorism and nuclear safety arenas, having worked at the Departments of State, Energy and Nuclear Regulatory Commission. She has also served in an advisory capacity and as professional staff for several members of Congress in both the House and Senate as well as the Senate Homeland Security Committee. She is a graduate of Columbia University.

Vincent Manzo

Vincent Manzo is a fellow in the Defense and National Security Group of the CSIS International Security Program. His research portfolio includes U.S. defense strategy, nuclear weapons, missile defense, space, and cyber policy, with a focus on exploring deterrence, employment strategies, and escalation control in the emerging strategic environment. Mr. Manzo joined CSIS after working as a research analyst at the National Defense University's Institute for National Strategic Studies for three years. He is also a nonresident Sasakawa Peace Foundation fellow at the Pacific Forum CSIS. His publications include: "Deterrence and Escalation in Cross-domain Operations: Where Do Space and Cyber Fit?" *Joint Forces Quarterly* (July 2012); *Conventional Prompt Global Strike: Strategic Asset or Unusable Liability?* INSS Strategic Forum 263 (National Defense University Press, February 2011); and "The Threat that Leaves Something to Chance in U.S.-China Relations," *Nuclear Scholars Initiative: A Collection of Papers from the 2011 Nuclear Scholars Initiative* (CSIS, 2011). Mr. Manzo holds an M.A. degree in international relations from the School of Advanced International Studies at Johns Hopkins University and a B.A. from Kenyon College.

Jeff McCausland

Dr. Jeff McCausland is a Distinguished Professor of Research and the Minerva Chairholder at the Strategic Studies Institute, US Army War College. He is also a Visiting Professor of International Security Affairs at Dickinson College. Dr. McCausland is a retired Colonel, holds a PhD from the Fletcher School of Law and Diplomacy, and is a West Point graduate. His military assignments included: the Office of the Deputy Chief of Staff for Plans, Army Staff; command of an artillery battalion during the Gulf War; Dean of the Army War College; and Director for Defense Policy and Arms Control, National Security Council Staff, the White House. Since retiring from active duty he has served as a Chaired Professor of Leadership at the U.S. Naval Academy and subsequently a Visiting Professor at the Penn State Graduate School of International Affairs. Dr. McCausland is also a Senior Fellow at both the Carnegie Council for Ethics in International Affairs and the Stockdale Center for Ethical Leadership at the Naval Academy. He has published and lectured broadly both in the United States and in numerous foreign countries on national security affairs, NATO, the wars in Afghanistan/Iraq, and leadership development.

Eugene Miasnikov

Dr. Eugene Miasnikov was graduated from the Department of Aerophysics and Space Research of Moscow Institute of Physics and Technology (MIPT) in 1985. After finishing the graduate school at MIPT in 1988 and receiving Ph.D. degree in Physics he worked at “ELAS” and “OPTEx” Scientific Production Associations in Zelenograd (Moscow). Since 1992 Eugene Miasnikov has been with the Center for Arms Control, Energy and Environmental Studies, and an active participant of the Center's research projects. In 2011 Eugene was elected the Director of the Center. He is an author of numerous publications devoted to problems of nuclear arms reductions, survivability of strategic forces and its impact on strategic stability in the world, counterforce capabilities of conventional precision guided weapons, unmanned aerial vehicles and terrorism and other technical issues of arms control.

Clark Murdock

Clark Murdock is senior adviser for the Defense and National Security Group at CSIS and director of the Project on Nuclear Issues (PONI). Joining CSIS in January 2001, Murdock has completed studies on a wide range of defense and national security issues, including strategic planning, defense policy and governance, and U.S. nuclear weapons strategy and policy. He directed the four-phase study on Defense Department reform, *Beyond Goldwater-Nichols: USG and Defense Reform for a New Strategic Era*, which released reports in 2004, 2005, 2006, and 2008. Murdock is currently leading several “track two” dialogues on nuclear policy issues—one involving the United States, United Kingdom, and France, and the other involving the United States, South Korea, and Japan. He has also recently completed studies on methodological approaches to building force-planning constructs and on nuclear posture implications of U.S. extended deterrence and assurance. He is the principal author of *Improving the Practice of National Security Strategy: A New Approach for the Post–Cold War World* (CSIS, 2004) and *The Department of Defense and the Nuclear Mission in the 21st Century* (CSIS, 2008). He also coauthored *Revitalizing the U.S. Nuclear Deterrent* (CSIS, 2002) and *Nuclear Weapons in 21st Century U.S. National Security* (AAAS, 2008). Before joining CSIS, Murdock taught military strategy, the national security process, and military innovation at the National War College. Prior to that, from 1995 to 2000, he served in the Office of the Air Force Chief of Staff.

Götz Neuneck

Dr. Götz Neuneck is Deputy Direktor Institute for Peace Research and Security Policy IFSH at the University of Hamburg and Head of the Interdisciplinary Research Group Arms Control and Disarmament (IFAR²). Trained as a physicist at the University Düsseldorf, he was from 1984 to 1987 fellow at the Working Group Afheldt in the Max-Planck-Society“, a successor of the Max-Planck-Institute of C.F. von Weizsäcker in Starnberg near Munich. In 1995 he received his PhD. in mathematics on at the University of Hamburg and is since 2007 he is a Professor at the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg, directing the Masterprogram “Peace and Security Studies” (MPS). Since 2001 he is speaker of the Working Group „Physics and Disarmament“ of the German Physical Society and member of the Council of the „Pugwash Conferences on Science and World Affairs as well as Representative of the Union of German Academies of Sciences with the Amaldi Conferences. Current working areas are: Nuclear Arms Control and Disarmament, Ballistic Missile defense, Space/Cyber Security, Nonproliferation of Military Technology. He was 2005 and 2010 a member of the German delegation for the NPT Review Conference.

Nancy Jo Nicholas

Nancy Jo Nicholas has worked at the Los Alamos National Laboratory (LANL) since 1990 and currently holds the title of Principal Director of Strategic Outcomes. She has oversight of the Nonproliferation, Treaty Verification, Arms Control, and Nuclear Forensics programs at LANL. She is also the vice chair of the Board of Directors and founding board member of WINS – the Vienna-based World Institute for Nuclear Security or WINS. She is a Fellow of the Institute for Nuclear Materials Management (INMM), and recently served a two-year term as president of the INMM, the premiere international professional society for nonproliferation, arms control and international safeguards. She recently served on the NAS Committee on Improving the Assessment of the Proliferation Risk of Nuclear Fuel Cycles and the Defense Science Board (DSB) Task Force on the Assessment of Nuclear Treaty Monitoring and Verification Technologies. Her technical field of expertise is nondestructive assay measurements, and she earned a B.S. in Mathematics and Physics from Albright College and a Masters degree in Experimental Nuclear Physics from George Washington University.

Bernard Norlain

Général d’armée aérienne (ret) Bernard Norlain, a former fighter pilot, was Air Combat Commander of the French Air Force. As a young general he was the military adviser for two Prime Minister: J. Chirac then M. Rocard. He ended his military career as Director of the Institute for National Defense Studies. When he retired he became vice-president of Deloitte and Touche audit and consulting firm then Chairman and CEO of Sofema Group. He is now President d’Honneur of the Committee for National Defense Studies.

Andreas Persbo

Mr. Andreas Persbo is the Executive Director of the London-based Verification Research, Training and Information Centre. He has been working on a range of issues at the centre for the last nine years. His focus has been on on-site inspections, with a special emphasis on on-site inspections of warhead dismantlement, fissile material controls and monitoring, CTBT inspection methodology, as well as inspection arrangements for ballistic missiles. Mr. Persbo is a lawyer by training. He holds a juris kandidat from the Stockholm University, Sweden, as well as a diploma in Nuclear Law from the University of Montpellier I, France. He won the Sporrang-Lonnroth Moot Court Competition on Human Rights in 2000. He also studied economics and politics for two years at the University of Orebro, Sweden. Prior to VERTIC, Andreas has worked with the British American Security Information Council, as well as at a Swedish District Court. He has also done two tours of duty as a United Nations Peacekeeper. His latest major studies are "A reflection on the current state of nuclear non-proliferation and safeguards", Stockholm International Peace Research Institute, January 2012, and "Illicit Trafficking of Nuclear and other Radioactive Material: The Legislative Response". VERTIC, April 2012. He is contributing to two forthcoming volumes on arms control and disarmament.

Steven Pifer

Steven Pifer is a senior fellow at the Brookings Institution's Center on the United States and Europe and director of the Brookings Arms Control Initiative. He focuses on nuclear arms control, Ukraine and Russia. He has offered commentary on these issues on CNN, Fox News, BBC and NPR, and his articles have run in the *International Herald Tribune*, *New York Times*, *Washington Post*, *Financial Times* and *Los Angeles Times*, among others. Pifer is co-author of the recently-released Brookings focus book, *The Opportunity: Next Steps in Reducing Nuclear Arms*. A retired Foreign Service officer, his more than 25 years with the State Department included assignments as deputy assistant secretary of state with responsibilities for Russia and Ukraine (2001-2004), U.S. ambassador to Ukraine (1998-2000), special assistant to the president and senior director for Russia, Ukraine and Eurasia on the National Security Council (1996-1997), and earlier postings to Warsaw, Geneva, Moscow and London.

Pavel Podvig

Pavel Podvig is an independent analyst based in Geneva, where he runs his research project, "Russian Nuclear Forces." He also leads the WMD Program at the UN Institute for Disarmament Research. Pavel Podvig started his work on arms control at the Center for Arms Control Studies at the Moscow Institute of Physics and Technology (MIPT), which was the first independent research organization in Russia dedicated to analysis of technical issues of disarmament and nonproliferation. Pavel Podvig led the Center for Arms Control Studies project that produced the book, *Russian Strategic Nuclear Forces* (MIT Press, 2001). In recognition of his work in Russia, the American Physical Society awarded Podvig the Leo Szilard Lectureship Award of 2008 (with Anatoli Diakov). Podvig worked with the Program on Science and Global Security at Princeton University, the Security Studies Program at MIT, and the Center for International Security and Cooperation at Stanford University. His current research focuses on the Russian strategic forces and nuclear weapons complex, as well as technical and political aspects of nuclear nonproliferation, disarmament, missile defense, and U.S.-Russian arms control process. Pavel Podvig is a member of the International Panel on Fissile Materials. He has a physics degree from MIPT and PhD in political science from the Moscow Institute of World Economy and International Relations.

Dakota Rudesill

Professor Dakota Rudesill is a scholar, teacher, and practitioner of legislation and national security law, policy, and process. Since 2010 he has been a visiting professor at Georgetown Law. Professor Rudesill has advised senior leaders in all three branches of the federal government. He served the U.S. Congress for nine years, principally as Legislative Assistant for national security to Senator Kent Conrad and the senior professional staff member for the U.S. Senate Budget Committee responsible for national defense and international affairs spending. In the Executive Branch, as a member of the Obama-Biden Presidential Transition Team, Professor Rudesill advised Dennis C. Blair, the President's nominee to be Director of National Intelligence, and Leon Panetta, the President's nominee to be CIA Director, as they prepared for confirmation by the U.S. Senate. Thereafter, he served in the Office of the Director of National Intelligence (ODNI). Previously, in the judicial branch, Professor Rudesill was a law clerk to James B. Loken, Chief Judge of the U.S. Court of Appeals for the Eighth Circuit. Professor Rudesill's scholarship has appeared in the *Yale Journal of International Law*, the *Washington University Law Review*, and several edited volumes. His article "Regulating Tactical Nuclear Weapons" is forthcoming in the *Georgetown Law Journal*. Earlier in his career, Professor Rudesill was selected for the foreign policy field's premier fellowship, the CFR International Affairs Fellowship (IAF). He received his B.A. from St. Olaf College and J.D. from Yale Law School.

Jeanette Russo

Jeanette Russo currently serves as Office Manager for the American Physical Society's Office of Public Affairs. She is also the APS Panel on Public Affairs (POPA) Studies Administration Specialist and the APS Physics Policy Committee (PPC) Administrator. In these roles, she has been involved in the production of several APS studies and POPA reports on topics such as energy critical elements, nuclear arsenal downsizing, nuclear forensics, energy efficiency, and renewable energy resources. She received her B.S. in Biology from the University of Mary Washington in 1996.

Kori Schake

Kori Schake is a research fellow at the Hoover Institution and an associate professor of international security studies at the United States Military Academy. During the 2008 presidential election, she was senior policy adviser to the McCain-Palin campaign, responsible for policy development and outreach in the areas of foreign and defense policy. From 2007 to 2008 she was the deputy director for policy planning in the state department. In addition to staff management, she worked on resourcing and organizational effectiveness issues, including a study of what it would take to "transform" the state department so as to enable integrated political, economic, and military strategies. During President Bush's first term, she was the director for Defense Strategy and Requirements on the National Security Council. She was responsible for interagency coordination for long-term defense planning and coalition maintenance issues. Projects Schake contributed to include conceptualizing and budgeting for continued transformation of defense practices; the most significant realignment of US military forces and bases around the world since 1950; creating NATO's Allied Command Transformation and the NATO Response Force; and recruiting and retaining coalition partners for operations in Afghanistan and Iraq.

Francis Slakey

Francis Slakey is the Associate Director of Public Affairs for the American Physical Society where he oversees APS legislative activities, specializing in energy and security policy. He is also The Upjohn Lecturer on Physics and Public Policy at Georgetown University and author of the best-selling adventure memoir "To The Last Breath". Dr. Slakey received his PhD in Physics in 1992 from the University of Illinois, Urbana-Champaign. His technical publications have received more than 500 citations. He has also written widely on science policy issues, publishing more than fifty articles for the popular press including The New York Times, Washington Post, and Scientific American. He has served in advisory positions for a diverse set of organizations including the National Geographic, the Council on Foreign Relations and the Creative Coalition - the political advocacy organization of the entertainment industry. He is a Fellow of the APS, a Fellow of the AAAS, a MacArthur Scholar, and a Lemelson Research Associate of the Smithsonian Institution. Dr. Slakey became the 28th American to summit Mt. Everest in an unguided expedition that was the subject of the movie "Beyond the Summit". He is the first person in history to both summit the highest mountain on every continent and surf every ocean. In recognition of his adventures, as part of the 2002 Olympic Games, he carried the Olympic torch from the steps of the US Capitol.

Benn Tannenbaum

Benn Tannenbaum is a government relations manager and head of the Washington Program Office for Sandia National Laboratories. He is also a nonresident scholar at the American Association for the Advancement of Science and is a Professorial Lecturer at George Washington University. He has testified before the House Homeland Security Committee on radiation portal monitors and has authored or coauthored over 160 scientific or policy-related publications. Tannenbaum has served on the American Physical Society's Panel on Public Affairs and is currently the Secretary-Treasurer of APS's Forum on Physics and Society. Dr. Tannenbaum has been the Program Director at the Center for Science, Technology and Security Policy; a Senior Research Analyst for the Federation of American Scientists; and the 2002-2003 American Physical Society Congressional Science Fellow. He worked as a Postdoctoral Fellow at the University of California, Los Angeles. At UCLA, he was involved in the Compact Muon Solenoid experiment at CERN, in Geneva, Switzerland, and the Collider Detector Facility at the Fermi National Accelerator Laboratory outside Chicago, Illinois. He received his Ph.D. in particle physics from the University of New Mexico in 1997.

Jim Trebes

Jim Trebes is currently the Physics Division Leader at Lawrence Livermore National Laboratory. He received his B.Sc. degree in Physics from Georgia Tech and his Ph.D. in Physics from Yale University. He joined the Laser Program at LLNL in 1984 working on x-ray lasers, laser fusion, and weapons physics. While in the Laser Program he applied developed military and medical instrumentation solutions, served as Group Leader for Special Projects and as Associate Program Leader for the Medical Technology Program. In 2002 he joined the Physical and Advanced Technology Directorate and helped create the Medical Physics and Biophysics Division where he served as Division Leader from 2003-2007. He also served as Acting Deputy Program Leader for Chemical and Biological Non-proliferation Program in 2005. While Division Leader he developed and carried out instrumentation projects with academia and industry, developed inspection technology for US nuclear weapons, and carried out projects providing medical related research and production opportunities to both Russian and Libyan weapons scientists. In 2007 he merged the Imaging Science and the Medical Physics and Biophysics to form the Applied Physics Division. In 2008 he merged the Nuclear, Atomic, Applied Physics with the Fusion Energy Program at LLNL to create the Physics Division. He participated in the restructuring of the internal research process at LLNL and co-directed the redirection of the Cyber, Space, and Intelligence internal R&D efforts. Recently he has become involved in the development of space science and technology for national security applications. He is a member of the American Physical Society Panel on Public Affairs.

Elizabeth Turpen

Dr. Elizabeth (Libby) Turpen is currently an independent consultant. From 2009 to 2012 she worked at Booz Allen Hamilton where she provided policy and technical expertise to the nonproliferation programs at the Defense Threat Reduction Agency (DTRA), National Nuclear Security Administration (NNSA), and Department of Homeland Security's Domestic Nuclear Detection Office (DNDO). From 2001 - 2009, Libby was a Senior Associate at the Stimson Center where she co-directed the Cooperative Nonproliferation Program and directed the Security for New Century program. In 2008-2009, Dr. Turpen directed the Stimson Task Force and was primary author of the report *Leveraging Science for Security: A Strategy for the Nuclear Weapons Laboratories in the 21st Century*. Prior to joining Stimson, Dr. Turpen served in the Office of Senator Pete V. Domenici (R-NM) as a legislative assistant responsible for defense, nuclear and nonproliferation policy. Dr. Turpen has taught courses on Science and Public Policy at Georgetown University and New Proliferation Challenges at George Washington University's Elliott School of International Affairs. She has published several books, reports and articles on nonproliferation, arms control verification challenges, and stockpile stewardship. She holds a PhD from the Fletcher School of Law and Diplomacy at Tufts University.

John J. "Jay" Zucca

Dr. Jay Zucca is a physicist at the Lawrence Livermore National Laboratory in Livermore, California where he is currently the Principal Deputy for the Global Security Directorate. He is responsible for managing, developing and executing programs in global threat reduction, nuclear nonproliferation, and energy technology. Dr. Zucca came to Livermore in 1984 after completing post-doctoral positions at the U.S. Geological Survey in Menlo Park and the University of Karlsruhe in Germany. From December 2008 to December 2012, Dr. Zucca served as the Program Director for Nonproliferation in the Office of Strategic Outcomes, where he was responsible for the external interfaces and strategic direction of the Livermore program which supports the National Nuclear Security Administration's Office of Defense Nuclear Nonproliferation. His technical work was primarily on nuclear test monitoring. He was a member of the U.S. Delegation to the Nuclear Testing Talks (Threshold Test Ban Treaty), a member of the U.S. Delegation to the Conference on Disarmament for the Comprehensive Test Ban Treaty, and a member of the U.S. Delegation to the Preparatory Commission for the CTBT. In his early work at LLNL, he focused on the Geothermal Energy program where he developed techniques for geophysically detecting steam in geothermal reservoirs. Dr. Zucca received his Ph.D. in Geophysics from Stanford University in 1981. His thesis was on the crustal structure of Kilauea and Mauna Loa volcanoes, Hawaii, from seismic refraction and gravity data. He also earned an M.S. in Geophysics from Stanford University in 1977 and a B. A. in Geology and Mathematics from the University of California, Santa Barbara in 1976.