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TRAINING THE NEXT GENERATION

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About the Speakers

Organizers

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Speakers

Michael Cornwall
Zachary Davis
Richard Garwin
Charles Glaser
Sigfried S. Hecker
Corey Hinderstein
Michael D. Intriligator
Kent Johnson
Feroz Khan
Steve Koonin
James Larrimore
Ron Lehman
Steven A. Maaranen
Michael May
Kathleen McInnis
Patrick M. Morgan
Michael Nacht
Per Peterson
Joseph Pilat
Scott Sagan
Lawrence Scheinman
John Scott
Dean Wilkening
Herbert York

Kory Budlong-Sylvester is the IGCC Steering Committee representative from Los Alamos National Laboratory (LANL). Budlong-Sylvester is a technical staff member in the Nonproliferation and International Security Division at LANL. He works on a variety of nonproliferation and arms control topics. He is currently LANL's principal investigator for a multi-laboratory project that supports the International Atomic Energy Agency in the area of integrated safeguards. Budlong-Sylvester received his Ph.D. from the Nuclear Engineering Department at MIT in 1997.

John M. Cornwall is a professor of physics at UCLA, where he has been since 1965. He came to UCLA from the Institute for Advanced Study in Princeton, New Jersey. He is also a professor of Science and Technology Policy at the RAND Graduate School in Santa Monica. His current physics interests are elementary particle theory (quantum chromodynamics; early universe). He is a member of the Jason group, as well as of various U.S. government advisory committees. He has consulted and published

widely on ballistic missile defense, space-based radar, space physics, and many other subjects. He is a Fellow of the American Association for the Advancement of Science, and a former Alfred P. Sloan Foundation Fellow.

Zachary S. Davis is an analyst of foreign nuclear programs at the Z Division of Lawrence Livermore National Laboratory, with special knowledge of the nuclear programs of India, Pakistan, and North Korea. He was nonproliferation policy analyst for the Congressional Research Service for ten years, where he worked with key congressional committees to develop nonproliferation, arms control, export control, and sanctions legislation. He also served in the State Department, Office of the Deputy Secretary, implementing the U.S. response to Indian and Pakistani nuclear tests. At the Arms Control and Disarmament Agency, he worked on strengthening safeguards to improve IAEA inspections. He is the author of numerous government reports on foreign nuclear programs and government studies. He received M.A. and Ph.D. degrees in International Relations from the University of Virginia and a B.A. in politics from the University of California, Santa Cruz.

Richard L. Garwin, a physicist, is IBM Fellow Emeritus at the Thomas J. Watson Research Center. He joined the IBM Corporation in 1952, after three years on the faculty of the University of Chicago, and was until June 1993 IBM Fellow at the Thomas J. Watson Research Center.

He has also been professor of public policy in the Kennedy School of Government at Harvard University. From 1994 to 2004 he was Philip D. Reed Senior Fellow for Science and Technology at the Council on Foreign Relations. Dr. Garwin received his Ph.D. in physics from the University of Chicago in 1949. He is coauthor of many books, among them Nuclear Weapons and World Politics (1977), Nuclear Power Issues and Choices (1977), Energy: The Next Twenty Years (1979), Science Advice to the President (1980), Managing the Plutonium Surplus: Applications and Technical Options (1994), and Megawatts and Megatons: The Future of Nuclear Power and Nuclear Weapons.

Garwin is a fellow of the American Physical Society and of the American Academy of Arts and Sciences, and a member of the National Academy of Sciences. He is a long-time member of Pugwash and has served on the Pugwash Council. The U.S. Government awarded him the 1996 R. V. Jones Foreign Intelligence Award, the 1996 Enrico Fermi Award, and in 2003 the National Medal of Science. Many of his papers are to be found at www.fas.org/RLG.

Charles L. Glaser is deputy dean and professor at the Irving B. Harris Graduate School of Public Policy Studies and co-director of the Program on International Security Policy (PISP). From 1994 to 1996, Glaser served as acting dean of the Harris School, and the following year he was a fellow at the Center for International Security and Arms Control at Stanford University. After earning his Ph.D. at the John F. Kennedy School of Government at Harvard University, Glaser was a post-doctoral fellow at the Center for Science and International Affairs, Harvard University, and a research associate at the Center for

International Studies at the Massachusetts Institute of Technology. Before joining the University of Chicago, Glaser taught political science at the University of Michigan (1987–1991) and served on the Joint Staff in the Pentagon (1990–1991). He is the author of numerous articles and the book Analyzing Strategic Nuclear Policy (Princeton University Press, 1990).

Siegfried S. Hecker is currently a Senior Fellow at Los Alamos National Laboratory (LANL). Dr. Hecker was director of LANL from 1986–1997. He joined the laboratory as a technical staff member of the Physical Metallurgy Group in 1973. He served as chairman of the Center for Materials Science and division leader of the Materials Science and Technology Division before becoming director.

Hecker began his professional career as a senior research metallurgist with the General Motors Research Laboratories in 1970 after two years as a postdoctoral appointee at LANL. He was also a summer graduate student at LANL in 1965. Hecker received his B.S. in metallurgy in 1965 and M.S. in metallurgy in 1967 from Case Institute of Technology, and his Ph.D. in metallurgy in 1968 from Case Western Reserve University.

In addition to his current research activities, Hecker has been actively engaged in cooperative threat reduction efforts with the Russian nuclear complex and in counterterrorism efforts with the Russian Academy of Sciences. He serves on the Council of the National Academy of Engineering, is chair of the Joint U.S./Russian Academies Committee on Counterterrorism Challenges in Russia and the United States, and serves on the National Academies Nonproliferation Committee. He has also served as scientific advisor to the Nuclear Threat Initiative.

Corey Gay Hinderstein is deputy director and senior analyst at the Institute for Science and International Security (ISIS), a Washington D.C.-based research organization whose efforts focus on stopping the spread of nuclear weapons and bringing about greater transparency of nuclear activities worldwide. She has been with ISIS since 1996.

Hinderstein's work includes key research and analytical contributions to state-specific proliferation assessments and case studies. Her efforts have included assessments of nuclear activities in Iraq, Iran, Algeria, Taiwan, and North Korea. As part of her contribution to ISIS's state specific proliferation analyses, Hinderstein analyzes high-resolution satellite imagery in order to identify and assess potential nuclear weapon-related facilities. She also supports United Nations activities including negotiations of the Fissile Material Cutoff Treaty and the review process of the Nuclear Nonproliferation Treaty (NPT).

Her publication credits include the Bulletin of the Atomic Scientists, Earth Observation Magazine, Imaging Notes, Earth Observation Satellites: At the Leading Edge of Global Transparency, and numerous ISIS publications. Her analyses have been cited by news organization such as the New York Times, Washington Post, Associated Press, Reuters News Service, the Washington Times, Bloomberg News, Signal Magazine, New Scientist and CNN. She is a member of the U.S. Committee of the Council for

Security and Cooperation in the Asia Pacific, Women in International Security, and the American Society of Photogrammetry and Remote Sensing.

Hinderstein graduated cum laude from Clark University in Worcester, Massachusetts, where she was elected to Phi Beta Kappa.

Michael D. Intriligator is professor of economics at the University of California, Los Angeles. He is also a professor of political science, professor of policy studies in the School of Public Policy and Social Research, and co-director of the Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences, all at UCLA. He is also a Senior Fellow of the Milken Institute in Santa Monica. Intriligator received his undergraduate degree in Economics at the Massachusetts Institute of Technology in 1959; his M.A. at Yale University in 1960, where he was the recipient of the Woodrow Wilson Fellowship; and his Ph.D. in Economics at the Massachusetts Institute of Technology in 1963.

Intriligator is the author of more than 200 journal articles and other publications in the areas of economic theory and mathematical economics, econometrics, health economics, reform of the Russian economy, and strategy and arms control, his principal research fields. He is the author of Mathematical Optimization and Economic Theory (Prentice-Hall, 1971) and of Econometric Models, Techniques, and Applications (Prentice-Hall, 1978; 2d ed. with Ronald G. Bodkin and Cheng Hsiao, 1996) and co-author, with Donald E. Yett, Leonard Drabek, and Larry J. Kimbell, of A Forecasting and Policy Simulation Model of the Health Care Sector (Lexington Books, 1978). He is coeditor, with Kenneth J. Arrow, of the Handbook of Mathematical Economics (North-Holland, 1981, 1982, 1985); coeditor, with Zvi Griliches, of the Handbook of Econometrics (North-Holland, 1982, 1983, 1986); coeditor, with Bernard Brodie and Roman Kolkowicz, of National Security and International Stability (Oelgeschlager, Gunn, and Hain, 1983); coeditor, with Dagobert L. Brito and Adele E. Wick, of Strategies for Managing Nuclear Proliferation (Lexington Books, 1983); and coeditor, with Urs Luterbacher, of Cooperative Models in International Relations Research (Kluwer, 1994).

Dr. Intriligator is vice chairman and a member of the board of directors of Economists Allied for Arms Reductions and was president of the Peace Science Society (International) in 1993. He serves on the editorial boards of Economic Directions, Defense and Peace Economics, and Conflict Management and Peace Science. He is a fellow of the Econometric Society, a Senior Fellow of the Gorbachev Foundation of North America, an elected member of the Council on Foreign Relations and the International Institute for Strategic Studies. He was elected as a foreign member of the Russian Academy of Sciences in 1999 and inducted in 2000, and he was elected an AAAS Fellow of the American Association for the Advancement of Science in 2001.

Dr. Kent C. Johnson is Chief of Staff to the Associate Director for Defense and Nuclear Technologies at Lawrence Livermore National Laboratory, a position he assumed in 1991. He has had a long and distinguished career at LLNL, starting there in 1972 as a staff member in Nuclear Weapons Design. From 1991 to 1996 he was assistant associate director of advanced projects, Defense and Nuclear

Technologies. He has also served as a group leader in the Strategic Applications Group Evaluation and Planning Program; deputy division leader of the Evaluation and Planning Program; program manager of the MX Warhead Development Program; and program manager of the Military Requirements Office, all at LLNL. Johnson received a B.S. in engineering physics from Lehigh University in1966 and a Ph.D. in physics from Cornell University in 1972.

Brigadier General (retired) Feroz Khan has served with the Pakistani Army for 30 years. He served domestically and abroad, with numerous assignments in the United States, Europe, and South Asia. He has experienced combat action and command on active fronts on the line of control in Siachin Glacier and Kashmir. Most recently he held the post of Director, Arms Control and Disarmament Affairs, within the Strategic Plans Division, Joint Services Headquarters. Among his academic degrees, General Khan holds an M.A. from the Nitze School of Advanced International Studies. Since the mid-1990s General Khan has been making key contributions in formulating and advocating Pakistan's security policy on nuclear and conventional arms control and strategic stability in South Asia. He has produced recommendations for the Ministry of Foreign Affairs and represented Pakistan in several multilateral and bilateral arms control negotiations. He has written and participated in several security-related national and international conferences and seminars and has also been teaching as a visiting faculty member at the Department of the Defense and Strategic Studies, Quaid-e-Azam University, Islamabad. For the past two years, General Khan has held a series of visiting fellowships at Stanford University's Center for International Studies and Arms Control; the Woodrow Wilson International Center for Scholars; the Brookings Institution; the Center for Non-Proliferation Studies at the Monterey Institute of International Studies; and the Cooperative Monitoring Center, Sandia National Laboratory. General Khan is now a visiting professor of national security affairs at the Naval Postgraduate School.

Steven E. Koonin was born in Brooklyn, New York, and educated at the California Institute of Technology, receiving a B.S. in physics in 1972, and at MIT, where he received his Ph.D. in theoretical physics in 1975. He joined the Caltech faculty in 1975, becoming a professor of theoretical physics in 1981, and serving as chairman of the faculty from 1989–1991. Professor Koonin held the position of provost of the Institute from 1995 to 2004. He is currently on leave from Caltech serving as Chief Scientist for BP plc, based in London. Early in his career, he was a research fellow at the Niels Bohr Institute from 1976–77 and an Alfred P. Sloan Foundation Fellow from 1977–79. In 1975–76 he received the Caltech Associated Students Teaching Award and the Humboldt Senior Scientist Award in 1985. In 1999 he received the E. O. Lawrence Award in Physics from the Department of Energy.

Koonin is a member of the Council on Foreign Relations and has served on a number of advisory committees for the National Science Foundation, the Department of Energy, and the Department of Defense and its various national laboratories. He is a fellow of the American Physical Society, the American Association for the Advancement of Science, and the American Academy of Arts and Sciences. His research interests include theoretical nuclear, many-body, and computational physics, nuclear astrophysics, and global environmental science.

James Larrimore most recently serves as a consultant to the International Atomic Energy Agency (IAEA) and Los Alamos National Laboratory on international nuclear safeguards, including extended consultancies in Vienna, Austria. From 1985 to 1998 he worked for the IAEA Department of Safeguards in Vienna in various positions. He is the author of numerous scholarly papers on nuclear nonproliferation, containment, safeguards, and noncompliance issues. Larrimore received his Ph.D. in Nuclear Engineering from the Massachusetts Institute of Technology in 1963. In 1998 the International Atomic Energy Agency (IAEA) honored him with a Distinguished Service award.

Ronald F. Lehman, II is director of the Center for Global Security Research at the Department of Energy's Lawrence Livermore National Laboratory. He is also chair of the governing board of the International Science and Technology Center, an intergovernmental organization headquartered in Moscow and is a member of the Department of Defense Threat Reduction Advisory Committee. In 1995, he was appointed to the five-member President's Advisory Board on Arms Proliferation Policy. Ambassador Lehman served as the Director of the U.S. Arms Control and Disarmament Agency from 1989 to 1993. Earlier, he served in the Defense Department as Assistant Secretary of Defense for International Security Policy, in the State Department as U.S. Chief Negotiator on Strategic Offensive Arms, and in the White House as Deputy Assistant to the President for National Security Affairs. He has also served on the National Security Council staff as a senior director, on the professional staff of the U.S. Senate Armed Services Committee, and in Vietnam with the United States Army.

Steven A. Maaranen is senior policy advisor in the office of the Los Alamos Deputy Director for National Security. He provides advice and analysis on U.S. national security issues and strategic policy to the laboratory director, deputy director, and other senior managers. Dr. Maaranen recently returned to LANL from the Pentagon, where he served as the first director for Integration in the office of the Deputy Assistant Secretary of Defense for Forces Policy. The Integration directorate is responsible for developing policy guidance for the evolution and use of the New Triad of U.S. strategic forces—long-range conventional and nuclear strike, missile defenses, and a responsive strategic force infrastructure—which were established by the 2001 Nuclear Posture Review.

Dr. Maaranen received his Ph.D. in political science from the Claremont Graduate School in 1975. He has served in several positions at LANL dealing with nuclear weapons policy and strategy, strategic defense, arms control, and nonproliferation. From 1991–1994 he was director of the laboratory's Center for National Security Studies. In addition to his work at the laboratory, Dr. Maaranen has had several assignments in government. He was director for Defense and Space in the Arms Control and Disarmament Agency. He was a professional staff member for the Commission on the Ballistic Missile Threat to the United States (Rumsfeld Commission). He led the nuclear policy component of Secretary Rumsfeld's "top to bottom review" of U.S. defense policy, which wrote the terms of reference for the Nuclear Posture Review.

Michael May received his B.A. in physics and mathematics from Whitman College in 1944 and his Ph. D. in physics from UC Berkeley in 1952. He spent most of his career at the Lawrence Livermore National Laboratory (LLNL), serving as director of the laboratory from 1965 to 1971. His research work there centered on nuclear explosion theory; nuclear weapons design; radiation transfer; and astrophysics and general relativity. In addition, Professor May taught graduate science courses in the Department of Applied Science at Livermore, a part of the School of Engineering of the University of California at Davis. In the eighties, Professor May designed and managed an in-house advanced research program at the laboratory structured to provide opportunities for research into new areas of relevance in the Department of Energy's main areas of responsibility. He retired from LLNL in 1988.

Starting in 1972, Professor May became involved in strategic arms control. May served as a technical representative on the Threshold Test Ban Treaty negotiating team in Moscow in 1974, then as a member of the U.S. delegation to SALT, in Geneva from 1974 to 1976. He has continued to work on arms control through advisory committees to government and through his own academic publications.

May became associated with Stanford University in 1990, Since then his work has focused on two areas, nuclear weapons policy issues and the extent and impact of energy growth in East Asia, especially in China. For the past several years, May and collaborators have studied China's electricity sector at the provincial level. May served as co-director of the Center for International Security and Cooperation in Stanford's Institute of International Studies from 1993 through 1999, during which time he initiated or collaborated on a number of new projects bridging the science and security areas.

Professor May has been a member of the Defense Science Board and other government advisory groups, chairing studies on the deployment of strategic nuclear weapons systems, the utility of lasers in space, and other matters. He was a trustee of the Rand Corporation (1972–93) and a member of the National Academy of Sciences Committee on International Security and Arms Control (1985–95). Professor May received the Department of Defense's Distinguished Public Service Award in 1979; its Distinguished Civilian Service Award in 1975; the Atomic Energy Commission's Ernest Orlando Lawrence Memorial Award in 1970; and an honorary Doctor of Science degree from Whitman College. He is a Fellow of the American Physical Society and of the American Association for the Advancement of Science, and a member of the Council on Foreign Relations, the International Institute of Strategic Studies, and the Pacific Council on International Policy.

Kathleen McInnis is a research associate with the International Security Program at the Center for Strategic Studies in Washington, D.C.

Patrick M. Morgan is the Tierney Chair in Peace and Conflict in the Political Science Department at UC Irvine. A member of the UC Irvine faculty since 1991, Professor Morgan has concentrated his research primarily on national and international security matters: deterrence theory, strategic surprise attack, arms control, and related subjects. He has also had a long-standing interest in theoretical approaches to

the study of international politics. Currently he is involved in projects on the theory and practice of deterrence in the post-Cold War era, security strategies for global security management, and security in Northeast Asia. Professor Morgan has been a Fulbright scholar and a fellow of the Wilson Center in Washington, D.C. He was vice president of the International Studies Association from 1988 to 1989 and a fellow of the Rockefeller Center in Bellagio, Italy, in 1997. He has a Ph.D. from Yale University and a B.A. from Harpur College (now SUNY Binghamton).

Michael Nacht is Aaron Wildavsky Dean and Professor of Public Policy at the Goldman School of Public Policy at UC Berkeley. He teaches and writes in the fields of U.S. national security and foreign policy and on management strategies for public organizations.

From 1994 to 1997, after unanimous U.S. Senate confirmation, Nacht served as Assistant Director for Strategic and Eurasian Affairs of the U.S. Arms Control and Disarmament Agency. He directed the agency's work on nuclear arms reduction and missile defense negotiations with Russia and designed the first high-level nuclear arms dialogue with China. He participated in five summit meetings with President Clinton: four with Russian President Yeltsin and one with Chinese President Jiang Zemin. He was granted the Agency's Distinguished Honor Award, its highest form of recognition.

Nacht served previously for more than a decade each on the faculty of the School of Public Affairs in the University of Maryland at College Park and at Harvard University's Kennedy School of Government. He was a founding co-editor of the quarterly journal International Security. He began his career as a missile aerodynamicist at the NASA Lewis Research Center in Cleveland, Ohio, and then served as a systems and management consultant with Dunlap and Associates, Inc. in Darien, Connecticut.

Nacht holds a B.S. in aeronautics and astronautics from New York University and a Ph.D. in political science from Columbia University. He is the author of five books and numerous other publications, most recently National Missile Defense: An American Perspective. He chairs an advisory panel to the Office of the Secretary of Defense on combating terrorist use of weapons of mass destruction in the United States. He is a member of the Educator's Advisory Committee to the Comptroller General of the United States, an advisory committee to the Lawrence Livermore National Laboratory, the Board of Trustees of the World Affairs Council of Northern California, and the Board of the Japan Society of Northern California.

Per F. Peterson is professor and chair in the Department of Nuclear Engineering at UC Berkeley. His research focuses on problems in energy and environmental systems, including inertial confinement fusion, advanced light water reactors, high level nuclear waste processing, and nuclear materials management. Professor Peterson also manages the UC Berkeley Thermal Hydraulics Research Laboratory. Professor Peterson's publications focus on topics related to heat and mass transfer and fluid dynamics, with applications to nuclear systems.

Joseph Pilat is with the Nonproliferation and International Security Division of Los Alamos National Laboratory, Los Alamos, New Mexico. He was a special advisor to the Department of Energy's representative at the Third Review Conference of the Nuclear Non-Proliferation Treaty (NPT), and served as representative of the Secretary of Defense to the Fourth NPT Review Conference and as an adviser to the U.S. delegation at the 1995 NPT Review and Extension Conference. Dr. Pilat also served as representative of the Secretary of Defense to the Open Skies negotiations. He has been special assistant to the principal director and assistant for nonproliferation policy in the Office of the Deputy Assistant Secretary of Defense for Negotiations Policy, a senior research associate in the Congressional Research Service and a research associate at the International Institute for Strategic Studies in London.

Dr. Pilat has taught in the Department of Government of Cornell University and the College of William and Mary, and in the Department of History of Georgetown University. He has been a senior associate member of St. Antony's College, Oxford University, a visiting fellow at Cornell's Peace Studies Program and a Philip E. Mosely Fellow at the Center for Strategic and International Studies.

Dr. Pilat has lectured widely at academic and policy institutions. He has written numerous articles and opinion pieces for U.S. and European scholarly journals and newspapers, and is the author or editor of many books, including Beyond 1995: The Future of the NPT Regime (1990), and 1995: A New Beginning for the NPT? (1995).

Robert Powell is Robson Professor of Political Science at UC Berkeley. He is the author of numerous works on international relations, most recently In the Shadow of Power: States and Strategies in International Politics (Princeton U. Press, 1999). Powell's current research focuses on the study of continuing conflicts throughout the world. He is an expert on the application of game theory to nuclear deterrence.

Scott Sagan is a Professor of Political Science and Co-Director of Stanford's Center for International Security and Cooperation. Before joining the Stanford faculty, Dr. Sagan was a lecturer in the Department of Government at Harvard University and served as a special assistant to the Director of the Organization of the Joint Chiefs of Staff in the Pentagon. He has also served as a consultant to the office of the Secretary of Defense and at the Los Alamos National Laboratory.

Dr. Sagan is the author of *Moving Targets: Nuclear Strategy and National Security* (Princeton University Press, 1989), *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton University Press, 1993), and co-author with Kenneth N. Waltz of *The Spread of Nuclear Weapons: A Debate Renewed* (W. W. Norton, 2002). He is the co-editor of *Planning the Unthinkable* (Cornell University Press, 2000) with Peter R. Lavoy and James L. Wirtz. On top of these works Dr. Sagan is also finishing a collection of essays for a book tentatively entitled *A Fragile Peace: Understanding Our Nuclear History and Nuclear Future.*

Currently, Dr. Sagan's main research interests are nuclear proliferation in South Asia, ethics and international relations, and accidents in complex organizations. Dr. Sagan was the recipient of Stanford University's 1996 Hoagland Prize for Undergraduate Teaching and the 1998 Dean's Award for Distinguished Teaching. As part of CISAC's mission of training the next generation of security specialists he founded Stanford's Interschool Honors Program in International Security Studies in 2000.

Lawrence Scheinman is Distinguished Professor of International Policy at the Monterey Institute of International Studies, emeritus professor, Cornell University, and adjunct professor, Georgetown University. He also has been a member of the tenured faculties at the University of Michigan and UC Los Angeles. His government service includes appointment as assistant director of the U.S. Arms Control and Disarmament Agency, responsible for Non-Proliferation and Regional Arms Control during the Clinton Administration, and earlier appointments in the Department of Energy, Department of State and Energy Research and Development Administration. He also served for two years as special assistant to Director General Hans Blix at the International Atomic Energy Agency. Dr. Scheinman has published extensively on nuclear proliferation, arms control, safeguards, international relations and international organization. He is a member of the Council on Foreign Relations and of the State Department Arms Control and Non-Proliferation Advisory Board. He is admitted to practice before the Bar of the State of New York.

John Scott was educated at UC Berkeley, where he received both his B.S. and Ph.D. in Nuclear Engineering in 1993 and 1998, respectively. He joined Los Alamos National Laboratory at the end of 1998 as a post-doctoral research associate in the Thermonuclear Applications group and became a technical staff member in 2000. As a post-doc, the focus of his work was on hydrodynamic instabilities in cylindrical implosions for the inertial confinement fusion program. After becoming a staff member, his work has primarily been associated with nuclear weapons.

Susan L. Shirk is an Asia specialist, with an emphasis on Chinese politics, U.S.-China relations, and Pacific international affairs. Shirk is professor of political science at the Graduate School of International Relations and Pacific Studies (IR/PS) at UC San Diego. A former director of IGCC (1991–1997), Shirk accepted an assignment at the U.S. Department of State in 1997, where she served as deputy assistant secretary for China in the Bureau of East Asian and Pacific Affairs. Shirk is the author of How China Opened Its Door: The Political Success of the PRC's Foreign Trade and Investment Reforms and The Political Logic of Economic Reform in China, and editor of Power and Prosperity: Economic and Security Linkages in the Asia Pacific Shirk returned from her three-year term at the U.S. State Department in 2000 to become an IGCC research director.

Dean Wilkening has been the director of the Science Program at CISAC since 1995. After receiving his Ph.D. in physics from Harvard University in 1982, he spent two years studying defense policy on a Ford Foundation fellowship at the Center for Science and International Affairs, Kennedy School of

Government, Harvard University. In 1983 he joined the staff of the RAND Corporation, where he held several management positions as a senior researcher in the Engineering and Applied Sciences and International Policy departments.

From 1985–1994 Dr. Wilkening taught courses on nuclear weapons policy at the University of California, Los Angeles. His major research interests include nuclear strategy, ballistic missile defense, chemical and biological weapons proliferation, and arms control. His most recent publication is entitled "Ballistic Missile Defense and Strategic Stability" (Adelphi Paper 334, 2000).

Herbert F. York was tapped to work on the Manhattan Project the year he received his M.S. in Physics from the University of Rochester (1943). His illustrious career includes many distinctions, among them science advisor to President Eisenhower and first chief scientist and co-founder of the Advanced Research Projects Agency (ARPA/DoD). From 1979–81 York was an ambassador and chief negotiator at the trilateral Comprehensive Test Ban talks between the United States, Great Britain, and the Soviet Union, held in Geneva. His academic career included stints as the first chancellor of UC San Diego (1961–64), and founder and first director of IGCC (1983–88). He was also acting chancellor of UC San Diego from 1970–72. In 2000, he received three major awards recognizing his contributions to science. The first, the Enrico Fermi award, is a Presidential award—one of the oldest and most prestigious science and technology awards given by the U.S. Government. It recognizes scientists of international stature for a lifetime of exceptional achievement in the development, use, or production of energy (broadly defined to include the science and technology of nuclear, atomic, molecular, and particle interactions and effects). York also received the Vannevar Bush award from the National Science Foundation's National Science Board. Finally, York received the Clark Kerr Award for Distinguished Leadership in Higher Education, created in 1968 by UC Berkeley's Academic Senate to honor individuals who have made an extraordinary and distinguished contribution to the advancement of higher education.