

Dr. John B. Alexander

Dr. John B. Alexander is a senior fellow with the Joint Special Operations University. For more than a decade, Dr. Alexander has been a leading advocate for the development of non-lethal weapons. At Los Alamos National Laboratory, he organized and chaired six major conferences on non-lethal weapons, served as a U.S. delegate to four NATO studies on the topic, and was a member of the first Council on Foreign Relations study that led to creation of the Joint Non-Lethal Weapons Directorate. He wrote many of the seminal articles on non-lethal weapons and was a member of the National Research Council Committee for Assessment of Non-Lethal Weapons Science and Technology.

Dr. Alexander entered the U.S. Army as a private in 1956 and rose through the ranks to sergeant first class. He later attended Officer Candidate School and retired as a colonel of Infantry in 1988. During his varied career, he held many key positions in special operations, intelligence, and research and development. Academically, he holds an M.A. from Pepperdine University, and a Ph.D. from Walden University. He has also attended the Anderson School of Management at UCLA, the Sloan School of Management at MIT, and the Kennedy School of Government general officer program “National and International Security for Senior Executives” at Harvard University.

Mr. Matthew Armstrong

Mr. Armstrong writes on public diplomacy, irregular warfare and terrorism, civil-military relations, and private military companies at <http://mountainrunner.us>, which he publishes. At the request of the Department of Homeland Security, Science and Technology Directorate, he organized and moderated two panels for the May 2007 Homeland Security Science and Technology Stakeholders Conference. He has published journal articles as well book chapters on private military companies and public diplomacy in the age of information warfare.

Mr. Armstrong earned a B.A. in International Relations from the University of Southern California (USC). He has done postgraduate work at the University of Wales, Aberystwyth, where he studied U.S. Intelligence, Contemporary European Security, and the Middle East. He will be awarded his M.A. in International Relations from USC this December.

Professor Cynthia E. Ayers

Professor Cynthia Ayers is the National Security Agency’s (NSA) Visiting Professor of Information Superiority at the Center for Strategic Leadership, U.S. Army War College, where she teaches senior officers of all U.S. military services (reserve and active duty) as well as officers from allied foreign military units. She is currently assisting Dr. Gheorghe Tecuci, Director of the Learning Agents Center at George Mason University, in an effort to develop a cognitive assistant for intelligence analysts. Dr. Tecuci and Professor Ayers co-teach a course entitled Military Applications of Artificial

Intelligence: Intelligence Analysis. She also participates in the Army War College's annual Strategic Decision Making Exercise as a counterterrorism subject matter expert. Professor Ayers has had over thirty years of experience in federal service, all within the field of intelligence and mostly overseas, but her most recent assignment prior to her arrival at the U.S. Army War College was that of NSA Representative to the Director of Central Intelligence's Counterterrorism Center (2000-2002).

Ms. Ayers has a B.S. in Applied Science and an M.A. in Public Administration from Troy State University. She is currently completing her doctoral studies at Walden University in Homeland Security Policy Analysis, focusing on counterterrorism.

Mr. Brian Bruh

Mr. Bruh served twenty-eight years in federal law enforcement, where he held the most senior of positions. He was the first Director of the Defense Criminal Investigative Service, a worldwide agency responsible for preventing, detecting, and rooting out fraud and corruption in the Department of Defense, and was also the first Director of the Financial Crimes Enforcement Network (FinCen). After his retirement from the federal government, he served for two years on an Advisory Board of the Central Intelligence Agency. He is a senior advisor for law enforcement matters to the U.S. Treasury Department and to the US Department of Defense for anti-terrorism, money laundering, and other matters. On behalf of the U.S. Treasury Department as well as certain private international organizations, he provides guidance to foreign law enforcement and tax agencies.

Mr. Bruh earned a B.S. from New York University in Economics Statistics. He did post graduate work in Accounting at the New York University Graduate School of Business.

Mr. Jason E. Bruzdinski

Mr. Jason E. Bruzdinski, a Senior Professional Staff Member of the National Intelligence Division at The MITRE Corporation, supports the U.S. Government on defense policy, military strategy, and intelligence matters by providing consultative and technical support on a variety of national security challenges. His expertise draws upon more than fifteen years of experience working with senior officials in the U.S. Government, the U.S. Military, the private-sector and academia. Mr. Bruzdinski is also regarded as a leading authority on Chinese military affairs.

Concurrent with his civilian career, Mr. Bruzdinski serves at the rank of Lieutenant Commander as a Special Duty Officer in the U.S. Navy Reserve. He earned an A.B. in Government from St. Lawrence University in New York State and holds an M.A in National Security Studies from Georgetown University's Edmund A. Walsh School of Foreign Service.

Dr. Marvin J. Cetron

Dr. Marvin Cetron is the founder and president of Forecasting International and has been identified as one of the foremost forecaster-futurists in the world. As a pioneer in corporate, industry, demographic, and lifestyle forecasting, he has structured Forecasting International to provide industry and government with the benefits and insights of an international group of experts in the fields of management techniques, technological forecasting, corporate strategic planning, technology assessment, R & D planning, project selections, resource allocation, economics, marketing, and the behavioral sciences. He has written numerous articles, papers, and publications and three dozen books. During his twenty year career in research and development, planning, and forecasting with the U.S. Navy, Dr. Cetron was in charge of the design, development, and implementation of the most comprehensive technological forecast in the United States. He has extensive experience with government agencies, foreign governments, and industry.

Dr. Cetron has a B.S. in Industrial Engineering from Pennsylvania State University, an M.S. in Production Management from Columbia University, and a Ph.D. in Research and Development Management from American University.

Mr. David E. Coffman

David E. Coffman is a sole proprietor specializing in small business valuation services and business planning consulting services. His varied career includes public accounting, economic development, corporate accounting, small business ownership, and teaching.

Mr. Coffman holds a B.S. in Business Administration with Honors from Bloomsburg University, Pennsylvania. Additionally, he holds certifications as a Certified Public Accountant and a Certified Valuation Analyst, and he is accredited in Business Valuation.

Dr. Steven R. Corman

Dr. Steven R. Corman is a professor at the Hugh Downs School of Human Communication at Arizona State University. He is also the Chief Technology Officer, Crawdad Technologies, LLC (an ASU Technology spin-out). He has also been a Visiting Professor, Fakultät für Informatik, Universität Karlsruhe, Germany

Dr. Corman earned a B.S. in Communication from Illinois State University. His graduate degrees are from the University of Illinois at Urbana-Champaign and include an M. A. in Communication and a Ph.D. in Communication Theory; his dissertation was *The Reticulation Of Communication Networks*.

Dr. Jonathan E. Czarnecki

Dr. Jon Czarnecki, currently Professor for Joint Maritime Operations, Naval War College, Monterey Programs Office, is a retired colonel of the United States Army and Army National Guard. He has worked in politics, with the private sector, and in the Department of Defense. Dr. Czarnecki worked extensively in manpower management, resource management and force planning, and long-range strategic planning for the Department of the Army and the National Guard Bureau. Dr. Czarnecki has consulted on and taught strategic planning, futures research, and systems analysis to international and United States national security uniformed and civilian students. In addition to his teaching, Dr. Czarnecki is developing an applied theory and statistical model of Joint Operations. He is initiating a new research program concerning the collision of information technology and human cognitive limits in military operations.

He holds masters' and doctorate degrees from the State University of New York at Buffalo in Political Science and has written on futures research, strategic planning, joint operations, and environmental policy. Dr. Czarnecki is a distinguished graduate of the Armed Forces Staff College and the Naval War College; he also is a graduate of the Army War College's Defense Strategy Program.

CDR Alfred Elkins, USN (Retired)

CDR Al Elkins is a senior analyst with the Joint Warfare Analysis Center where he identifies, harvests, and generates future initiatives for the center. He finished his 28-year surface warfare career as a systems analyst at the Chief of Naval Operations Strategic Studies Group. His work now focuses on how national power can be employed today, analogous to a series of investments, for as-yet unimagined future scenarios. While he was on active duty, CDR Elkins wrote the concept of operations for the Navy's Littoral Combat Ship, had a day named in his honor by the mayor of San Francisco for his efforts as the city's Base Transition Coordinator, and conducted the initial photographic analysis of the maiden voyage of the Soviet TYPHOON SSBN. Before he joined the Navy, he was a journalist, working on daily newspapers and freelancing.

CDR Elkins holds a Bachelors degree from the University of Florida in Journalism and earned a Masters in National Security and Strategic Studies from the U.S. Naval War College. He has done graduate work at the University of California, Berkeley and spent a summer studying complex systems at the Santa Fe Institute.

Dr. Warren Fishbein

Warren Fishbein is Deputy Director of the CIA's Global Futures Partnership (GFP), which for over a decade has organized projects for the Agency and the

intelligence community aimed at catalyzing new thinking about security and intelligence issues. He is currently focused on GFP's initiative to develop the Global Futures Forum, a multinational, multi-sector community engaging in unclassified dialogue and research on transnational security challenges. Dr. Fishbein has twenty-five years of experience in intelligence, working on such issues as Atlantic security, analytic methods, and intelligence futures. He is the co-author, along with Greg Treverton of RAND, of the Kent Center Occasional Paper, *Making Sense of Transnational Threats*.

Dr. Fishbein holds a doctorate in political science from the Massachusetts Institute of Technology.

Mr. Thomas Ferleman

Thomas Ferleman is a Senior Managing Consultant with IBM Global Business Services. He has provided strategy-level consulting to the United Nations, the Joint Chiefs of Staff, the U.S. Army, the U.S. Air Force, the Missile Defense Agency, Defense Intelligence Agency, and the President's Commission on Critical Infrastructure Protection.

He is currently pursuing a Doctorate of Strategic Leadership from Regent University. His dissertation is *International Futures: Forecasting Global Patterns, Defining Alternatives, and Mitigating Risk*. He holds a Master of Business Administration, a Masters of Science in Management, and a B.S. in Government and Politics from the University of Maryland, University College.

Dr. Stacy Bergstrom Haldi

Stacy Bergstrom Haldi is the author of *Why Wars Widen: A Theory of Predation and Balancing*, as well as various articles, op eds and book reviews. She taught Strategy and Policy for the U.S. Naval War College for seven years, as well as international relations and political theory for Gettysburg College. She currently works for the U.S. government. She earned her Ph.D. in International Relations from the University of Chicago in 2000.

Colonel Thomas X. Hammes, USMC (Retired)

Colonel Hammes served at all levels in the operating forces to include command of a rifle company, weapons company, intelligence company, infantry battalion, and the Chemical Biological Incident Response Force during his thirty years in the Marine Corps. He participated in stabilization operations in Somalia and Iraq as well as training insurgents in various places. He never served in the Pentagon, Headquarters Marine Corps, or a Joint Staff.

Colonel Hammes earned a B.S. from the U.S. Naval Academy and then attended the Basic School, U.S. Army Infantry Officers Advanced Course, Marine Corps Command and Staff College, and the Canadian National Defense College. He also

spent one year on a Research Fellowship with the Mershon Center for Strategic Studies. His final tour in the Marine Corps was as Senior Military Fellow at the Institute for National Strategic Studies, National Defense University. He is the author of *The Sling and the Stone: On War in the Twenty-First Century* and numerous articles and opinion pieces. He is currently reading for a D.Phil. in Modern History at Oxford University.

Dr. Noel Hendrickson

Dr. Noel Hendrickson is on the faculty of James Madison University, where he developed and now teaches a series of four courses on advanced reasoning methods for intelligence analysis (Hypothesis Testing, Causal Analysis, Counterfactual Reasoning, and Strategy Assessment). These courses serve as the “critical thinking” component of JMU’s Information Analysis major, which is designed to educate future intelligence analysts. His dissertation and early research focused on reasoning strategies for analyzing agents and their intentions, and the structure and explanation of contingencies in human decision and action. More recently, his work has focused on developing new methods of analysis for intelligence. For example, he is currently developing a normative theory of counterfactual reasoning: a more precise mechanism for assessing alternate scenarios and their consequences that builds on current academic work on counterfactuals in political science, history, psychology, logic, and analytic philosophy. His publications include a series of papers in action theory, counterfactual reasoning, and (as a co-author) *The Elements of Critical Thinking* (forthcoming from Rowman and Littlefield).

Dr. Hendrickson earned a B.A. in Philosophy at San Jose State. His graduate work was done at the University of Wisconsin where he earned an M.A. and a Ph.D. in Philosophy.

Lieutenant Colonel Frank Hoffman, USMC Reserve (Ret)

LtCol Frank G. Hoffman is a Research Fellow at the Center for Emerging Threats and Opportunities (CETO) in Quantico, VA, and is a non-resident Senior Fellow of the Foreign Policy Research Institute. His military career includes twenty-four years as a Marine infantry officer and several tours at Headquarters Marine Corps and the Pentagon. He has served on the staff of two Congressional Commissions, including the Commission on Roles and Missions of the Armed Services, and the U.S. National Security Commission/21st Century (Hart-Rudman Commission). He also served on three Defense Science Boards, including the 2004 Defense Science Board for Post-Conflict Stability Operations.

LtCol Hoffman is a graduate of the University of Pennsylvania (Wharton School, B.S. Economics, 1978), and George Mason University (M.Ed., 1992). He graduated from the Naval War College with highest distinction (1995). He holds the Navy Commendation Medal (gold star in lieu of second award), Navy Achievement Medal, and the Department of the Navy Civilian Superior Service Medal (1998).

Dr Ely Karmon

Dr. Ely Karmon is a Senior Research Scholar at the International Policy Institute for Counter-terrorism, and since 2003, also at The Institute for Policy and Strategy, The Interdisciplinary Center, Herzliya, Israel. From 1970 to 1990 he served as advisor and researcher in international relations at the Prime Minister's Ministry in Israel. He is also an Advisor to the Israeli Ministry of Defense, and his fields of research include political violence and extremism, international terrorism, WMD terrorism, ethnic conflicts, anti-Semitism and racism, Middle Eastern security, and Israeli regional strategy. He is a member of the International Permanent Observatory (IPO) on Security Measures During Majors Events at the United Nations Interregional Crime and Justice Research Institute (UNICRI), Turin, Italy. He is a member of the Atlantic Forum of Israel. Dr. Karmon is involved in NATO workshops on terrorism and on the Mediterranean Dialogue. Has written extensively on international terrorism and has participated to numerous international conferences. His book, *Coalitions between Terrorist Organizations: Revolutionaries, Nationalists, Islamists*, was published in May 2005 by Brill Academic Publishers (Leiden and Boston).

Dr. Karmon has a B.A. in English and French Culture from the Hebrew University, Jerusalem. He took a Licence in International Relations from the Institut d'Etudes Politiques and a Licence in Bantu languages from the Ecole de Langues Orientales, Paris. He earned his Ph.D. at the Department of Political Science at Haifa University. His Ph.D. thesis deals with *Coalitions of Terrorist Organizations: 1968 - 1990*.

Dr. Barton Kunstler

Dr. Barton Kunstler is a consultant and educator and the author of *The Hothouse Effect*, published by the American Management Association. The book addresses the development of high-performing groups driven by creative interactions at all levels of organizational complexity. Dr. Kunstler has published numerous journal articles and book chapters on technology, leadership, creativity, eCommerce, and education and has frequently presented on these topics. He has been featured on several TV shows and written a regular column about future-oriented issues in Massachusetts's *Metrowest Daily News*. *The Hothouse Effect* has garnered attention from organizations worldwide, including the U.S. embassy in Ankara, Saatchi & Saatchi, The Economist, My Business magazine, the American Red Cross, USA Today, and the U.S. Forest Service, it has been translated—as a whole or in parts—into numerous languages. He recently co-edited a special issue of *On the Horizon* dedicated to presenting and analyzing institutional strategic approaches to online learning in higher education. Dr. Kunstler has worked as a full professor and program director at the Lesley University School of Management in Cambridge, Massachusetts, and as Director of the Graduate Communication Management program at Emerson College in Boston, where he developed innovative programs that promote high-level analytic, strategic, and communication skills in organizational settings.

Dr. Kunstler earned his Bachelor's degree at SUNY at Stonybrook (1971) and his doctorate in Classics at Boston University (1983).

Mr. Bruce LaDuke

Mr. Bruce LaDuke is a question consultant and an expert in knowledge creation, performance, integration, change management, knowledge management, and social transformation. He is the author of *Directional Categorization*, which is a new and powerful mind tool akin to brainstorming, mind mapping, or lateral thinking. *Digital Categorization* is focused on the question/definition cycle of knowledge creation. Mr. LaDuke is also an expert in industrial performance, knowledge management, and communications and has a wealth of knowledge on virtually any business topic. Mr. LaDuke is conversant on topics like nanotechnology, molecular manufacturing, the convergence, singularity, possible futures, and others.

Mr. LaDuke earned a B.F.A. in Graphic Design/Advertising from Ball State University.

Ms. Christine A. R. MacNulty, FRSA

Ms Christine MacNulty has more than thirty-five years experience in long-term strategic planning for cultural change, technology forecasting, and technology assessment. She consults at to the most senior levels within the department of Defense. Her current DoD projects bring together her knowledge of strategy, cultures, and cognition to help in understanding our adversaries in order to develop non-traditional operations, information operations, and strategic communications. For her contribution to British industry, she was elected a Fellow of the prestigious Royal Society of Arts, Manufactures and Commerce. She has authored numerous papers and is a very popular conference speaker. She has co-authored of two books: *Industrial Applications of Technology Forecasting*, and, *Network-Centric Operations: Translating Principles into Practice* (to be published in 2007). She is the founding President and CEO of Applied Futures, a consultancy based near Washington, D.C.

She holds a B.S. in Mathematics from the University of London and has done postgraduate work at the George Washington University.

Dr. Colleen McCue

Dr. Colleen McCue is a consultant with DeticaDFI, a specialist consultancy delivering information services, knowledge management, and tailored solutions to senior decision makers in the U.S. government. Previously, she was the Supervisor of the Crime Analysis Unit at the Richmond Police Department. She also held the appointment of Clinical Assistant Professor in the Departments of Surgery and Emergency Medicine at the Medical College of Virginia, Virginia Commonwealth University. Dr. McCue served as the developer and coordinator of the Cops & Docs Working Group and Program and was an active member of the Virginia Homicide

Investigators Association. She has published her research findings in journals and book chapters; she lectures and provides training to health care providers, law enforcement professionals, and academic groups on topics related to substance abuse and drug selling, trauma, and lethal and non-lethal violence. She is the author of *Data Mining and Predictive Analysis*.

Dr. McCue earned a B.A. in Psychology from the University of Illinois, Chicago and her Ph.D., also in Psychology, from Dartmouth College. She completed a postdoctoral fellowship in the Department of Pharmacology, Medical College of Virginia/Virginia Commonwealth University.

Dr. Steven Metz

Dr. Steven Metz is Chairman of the Regional Strategy and Planning Department and Research Professor of National Security Affairs at the Strategic Studies Institute. He has been with SSI since 1993, previously serving as Henry L. Stimson Professor of Military Studies and SSI's Director of Research. Dr. Metz has also been on the faculty of the Air War College, the U.S. Army Command and General Staff College, and several universities. He has been an advisor to political campaigns and elements of the intelligence community; served on many national security policy task forces; testified in both houses of Congress; and spoken on military and security issues around the world. He is the author of more than 100 publications including articles in journals such as *Washington Quarterly*, *Joint Force Quarterly*, *The National Interest*, *Defence Studies*, and *Current History*. Dr. Metz's research has taken him to 30 countries, including Iraq immediately after the collapse of the Hussein regime. He currently serves on the RAND Corporation Insurgency Board and is at work on two books: *Iraq and the Evolution of American Strategy* and *Perdition's Gate: Insurgency in the 21st Century*.

Dr. Metz earned his Bachelor and Masters degrees in international relations from the University of South Carolina. He holds a Ph.D. from the Johns Hopkins University.

Dr. Matthew S. Mingus

Dr. Matthew Mingus is an Associate Professor of Public Administration and Doctoral Director in the School of Public Affairs and Administration, Western Michigan University, where he has taught since 1998. He primarily teaches the history of public administration, organizational behavior and change, and research methods. His research agenda has increasingly focused on Canada-U.S. relations and comparative administration, with a focus on governance and network theory.

He earned a B.A., *summa cum laude*, from the University of Denver. His postgraduate degrees include an M.P.A. from the University of Victoria in British Columbia, and a Ph.D. in Public Administration from the University of Colorado Graduate School of Public Affairs. Dr. Mingus was the inaugural Fulbright Research Chair in Public Policy, Governance, and Public Administration at the University of Ottawa in Fall 2005 and is also a Truman Scholar (1986 – Colorado). His Fulbright

research focused on democratic reform efforts at the provincial and federal levels in Canada.

Mr. Graham T. T. Molitor

Mr. Molitor, an authority on forecasting government policy, is president of Public Policy Forecasting, and former vice president/legal counsel of the World Future Society. He headed lobbying staffs at General Mills and Nabisco, chaired a legislative Commission on the Future, directed research for the White House Conference on the Industrial World Ahead, served on the White House Social Indicators Committee, headed research for both of Vice President Rockefeller's presidential campaigns and played part-time roles in two other presidential campaigns, worked as a legal counsel in the U.S. Congress, and served with the Assistant Chief of Staff at the Pentagon. He served in elective, appointive, or advisory capacities on assignments ranging from the White House to local government. Mr. Molitor's expertise spans the government policy issue spectrum, and his unique predictive skills are based on broad experience as a lawyer, lobbyist, political campaign strategist, university professor, author, encyclopedist, forecaster/futurist, and business owner/executive.

Mr. Molitor received a B.S. from the University of Washington and his Bachelor of Law from the American University.

Professor Dennis M. Murphy

Dennis M. Murphy is Professor of Information Operations and Information in Warfare and Director of the Information in Warfare Group at Center for Strategic Leadership, U.S. Army War College, where he teaches information operations and strategic communication elective courses and conducts workshops focused on the information element of power. Professor Murphy served in a variety of command and staff positions over his twenty-seven years of U.S. Army service and was an associate professor at West Point. He was the first George C. Marshall Fellow for Political-Military and Diplomatic Gaming at the Department of State's Foreign Service Institute in 1999. His work in information operations (IO) and strategic communication includes a tour as senior observer-trainer for the Battle Command Training Program, where he trained NATO multinational forces on IO prior to their initial deployment to Bosnia. He is widely published in *Military Review*, the *Field Artillery Journal*, the *Foreign Service Journal*, and *NECWORKS Journal*.

Professor Murphy earned a B.S. from the United States Military Academy. He was awarded an M.S. in Mechanical Engineering from Pennsylvania State University.

Dr. William M. Nolte

Dr. William M. Nolte is currently a Research Professor at the School of Public Policy, University of Maryland. Previously he served as the Director of Education and Training in the office of the Director of National Intelligence and the Chancellor of the National Intelligence University. He was also the Deputy Assistant Director of Central

Intelligence, Central Intelligence Agency, for analysis and production, where he supported the Director in coordinating the analytic programs of the agencies of the United States intelligence community. The focus of his efforts was the integration of a range of programs developing the tools and techniques to be used by future generations of intelligence analysts. Earlier assignments include both analytic and managerial positions, including tours as senior intelligence advisor to National Security Agency's (NSA) director of operations and as NSA's liaison to the National Archives. During the Clinton administration, he created and led NSA's reinvention laboratory for analysis and reporting.

Dr. Nolte earned a B.A. in History from La Salle University. In addition to his Ph.D. in History from the University of Maryland, he has done additional graduate work in management and information management at the University of Maryland and completed the Intelligence and Policy Seminar at the John F. Kennedy School, Harvard University.

Dr. William G. Perry

Dr. William Perry is a professor of computer information systems in the College of Business at Western Carolina University. He teaches advanced computer networking and information security. Dr. Perry has written a number of books and articles. His most recent book, *Developing Professional Information Security Competencies*, is to be published by Delmar in 2007. He is a former U.S. Naval officer and has experience in counterintelligence and threat assessment. He has coordinated and participated in various security-related workshops involving the FBI, the Central Intelligence Agency, and the U.S. State Department. Dr. Perry also served as editor on two books related to the intelligence community and has made national presentations on protecting the nation's critical infrastructure.

Dr. Perry earned his B.A. at the University of South Florida. He completed his graduate work at the University of North Dakota where he earned his M.A. and Ph.D.

Mr. Erik Peterson

Mr. Erik Peterson is senior vice president at the Center for Strategic and International Studies (CSIS) and director of the Seven Revolutions Initiative, a broad-based effort to forecast key trends out to the year 2025. He also holds the William A. Schreyer Chair in Global Analysis, an endowed position named in honor of the Merrill Lynch chairman emeritus and CSIS Executive Committee member. Prior to coming to CSIS he was the director of research at Kissinger Associates.

He holds an M.B.A. in International Finance from the Wharton School at the University of Pennsylvania, an M.A. in International Law and Economics from the School of Advanced International Studies at the Johns Hopkins University, and a B.A. from Colby College. He holds the Certificate of Eastern European Studies from the University of Fribourg in Switzerland and the Certificate in International Legal Studies

from The Hague Academy of International Law in the Netherlands. His areas of expertise are geopolitical and country risk assessment, international trade and finance, international business strategy, and global strategic planning.

Mr. Timothy S. Rosenberg, JD

Mr. Tim Rosenberg is an information security specialist with a strong legal background. Tim is the President and CEO of White Wolf Consulting, a company designed to produce and deliver Information Protection training to a wide variety of clients. He has been an Associate Research Professor at the George Washington University, where he taught Information Warfare and Computer Security courses as well as an Adjunct for Georgetown University's Security Studies Program. Tim has presented material at a variety of international conferences and has also been a guest lecturer at the U.S. Military Academy at West Point, the Army War College Center for Strategic Leadership, and the Villanova University School of Law.

Mr. Rosenberg has a B.S. from Indiana University of Pennsylvania and earned a Jurist Doctor from the Villanova University School of Law. He was admitted to the Pennsylvania Bar in 1997.

Mr. Timothy J. Smith

Mr. Smith is a career analyst and methodologist with the Office of Naval Intelligence (ONI). He has served as an intelligence watch officer, an integration analyst in SPEAR, ONI's air warfare team, and as a Modeling and Simulation Coordinator and Analytic Methodologist. He actively supports the ODNI policy of modernizing Intelligence Community (IC) assessment methodology, and is devising a methodology of interdisciplinary 'computational collaboration' in intelligence assessment laboratories. This methodology and its rationale are the topic of his 2006 Galileo Award-winning paper *Predictive Network-Centric Intelligence: Toward a Total-Systems Transformation of Analysis and Assessment*.

Mr. Smith has a B.A. in International Order and Conflict from the University of Maryland and is pursuing further graduate studies.

T. Irene Sanders

T. Irene Sanders, executive director of the Washington Center for Complexity and Public Policy and author of *Strategic Thinking and the New Science: Planning in the Midst of Chaos, Complexity and Change* (The Free Press), pioneered the application of insights from chaos theory and complexity to strategic thinking—the most essential skill in today's fast-paced global environment. She developed the FutureScape® visual thinking tool now being used to enhance strategic thinking and planning sessions and scenario-building exercises for major corporations, nonprofit organizations and governments worldwide. Her work has been featured in a wide-range of publications including: *Art Education, The Christian Science Monitor, Continental, Foresight, Investor's Business Daily, Management Review, InnerEdge, The Rocky Mountain*

News, Urban Land, The Washington Post as well as the forthcoming books, *The Third-Lens: Multi-ontology Sense-making and Strategic Decision-making* (Ashgate, 2007) and *New Urbanism and Beyond* (Rizzoli, 2008).

The Washington Center for Complexity & Public Policy conducts research and education programs that promote complexity science literacy and the development and implementation of new approaches to public policymaking. As *Thought Leaders*, the Center's work is based on the premise that complex systems research provides a new sense-making framework for developing *insight* about the present and *foresight* about the future. Its work is focused at the intersection of strategic thinking & planning, futures research, intelligence analysis and public policymaking. For additional information, please visit www.complexsys.org.

Mr. Donald E. Vandergriff

Mr. Donald E. Vandergriff is an analyst at the Army Capabilities Integration Center in Washington, D.C. He previously taught military science at Georgetown University and leadership in the Masters of Leadership Excellence program at the Center of Professional Development, also at Georgetown University. Additionally, he is a professor at the American Military University. He has had extensive experience in the field with the Army. After he transferred from the Marine Corps to the Army National Guard, he initially served as a cavalry platoon leader in the 278th Armored Cavalry Regiment (TNARNG). Upon entering active duty, he served in the Republic of Korea, at the National Training Center, and in the Middle East and Germany.

He has his undergraduate degree in Education from the University of Tennessee, a graduate degree in Military History from American Military University, and has begun his Ph.D. studies in Military History at the University of North Carolina, Chapel Hill. He has lectured extensively on military effectiveness and cultural impacts in the United States and Europe. He has also been the subject of several articles that deal with military effectiveness and military transformation, including features in the *Washington Post*, *The Atlantic Monthly*, *The New Yorker Magazine*, *The National Journal*, *Government Executive Magazine*, *The Washington Monthly*, *Army Times*, *Stars and Stripes*, *Norfolk News-Gazette* and *Pittsburg Star*.

Mr. William O. Waddell

Mr. Bill Waddell is the director of the Command and Control Group in the Center for Strategic Leadership's Science and Technology Division and is also a Co-Chair for the emerging Proteus Management Group. He has been on the faculty of the U.S. Army War College since December 1994, teaching Command and Control systems and applications, Military Crisis Action Planning, Information Operations and Command and Control Warfare, and Network Centric Warfare. He has oversight and maintenance of the Global Command and Control System at USAWC, the development of the Joint Robotics program, the War College's participation in the Defense Information Systems

Agency's Network Centric Enterprise Services program, and the application of collaboration and collaborative systems into the Army War College's academic and exercise program. In his personal life Mr. Waddell is the Northeast Regional Director for the international ALERT Cadet program, dedicated to teaching character to young men ages 8-17.

Mr. Waddell is a retired Naval Aviator. He has a B.S. in Education from the University of Wisconsin, Lacrosse. He earned an M.A. in Strategic Studies from the Naval War College and an M.A. from Salve Regina University in International Relations.

Dr. J. Michael Waller

Dr. Waller holds the Walter and Leonore Annenberg Chair in International Communication and directs the graduate programs on public diplomacy and political warfare at the Institute of World Politics. He was a founding editor of *Demokratizatsiya: The Journal of Post-Soviet Democratization*, published in cooperation with the American University and Moscow State University. Dr. Waller was a member of the staff of the U.S. House of Representatives and the U.S. Senate, served on the White House Task Force on Central America, and has served as a consultant to the U.S. Information Agency, the U.S. Agency for International Development, and to the Office of the Secretary of Defense in support of Operation Enduring Freedom. In 2006, he received a citation from the Director of the FBI for "exceptional service in the public interest."

Dr. Waller earned his undergraduate degree at George Washington University where he was elected Phi Beta Kappa. He was John M. Olin Fellow at Boston University where he took his M.A. He received his Ph.D. from Boston University's, Institute for the Study of Conflict, Ideology, and Policy, where he was the recipient of the University Professors Alumni Award for Best Dissertation.

Dr. Guntram Werther

Dr. Guntram Werther is Professor of International Politics and Economics at Western International University and is newly affiliated with Thunderbird—the Garvin School of International Management. Since 1986, he has studied comparative conflict styles and mirroring management approaches of governments dealing with ethnic national self-determination movements and, since 1992, worked on developing holistically integrative analysis techniques for better predicting emerging trends and patterns of international change. Dr. Werther's "profiling international change processes" approach is an integratively holistic and socio-psychologically grounded approach to understanding how change happens within and among different societies. It has been used successfully and extensively within corporate venues.

Dr. Werther earned a B.Sci. in Wildlife Management from the University of Arizona (Tucson) in 1974. He received his doctorate in Comparative Politics from Washington University in St. Louis in 1990, where his dissertation was defended "with

distinction," and was twice nominated as the best work in comparative politics nationally.

Ms. Linda Williams

Ms. Linda Williams is the Vice Chancellor of the National Intelligence University (NIU) and Deputy Chief Learning Officer in the office of the Assistant Deputy Director of National Intelligence for Education and Training (ADDNI/E&T). The ADDNI/E&T, on behalf of the Director of National Intelligence, directs the community's office of education and training and concurrently coordinates the education, training, and related research programs of the United States Intelligence Community as the Chancellor of the NIU. Prior to joining the office of the ADDNI/E&T, Ms. Williams served as the program manager for analytic tools and the Chief Technology Officer for the office of the Assistant Director of Central Intelligence for Analysis and Production (ADCI/AP). She managed the Analytic Tools program, led the Analytic Research Network in developing the Analytic Research Agenda, and coordinated information sharing for the ADCI/AP.

Ms. Williams has served over twenty-nine years in the Intelligence Community in a variety of managerial, budgetary, liaison, and technical positions. She is certified as an Intelligence Community Officer. Ms. Williams holds a B.A. in Russian from Florida State University, a B.S. in Computer Science from the University of Maryland, University College, and a Masters of Strategic Studies from the U.S. Army War College.

Mr. Christopher C. Wright

Mr. Wright is a National Security Studies Fellow in the National Security Analysis Department of the Johns Hopkins University Applied Physics Laboratory (APL). In this position he has been responsible for guiding and undertaking analyses on topics ranging from airborne electronic attack force mix to tactical communications network sufficiency. Before joining APL, Mr. Wright served in the federal government for over thirty-four years, the last fifteen as a member of the Senior Executive Service. He was Director, Force Structure Analysis Division, and Director, Tactical Air Forces Division, in the Office of the Director, Program Analysis and Evaluation, Office of the Secretary of Defense, from 1990 to 2005. He received the Presidential Rank Award of Meritorious Federal Executive in 2000. During his government career he served in exchange assignments in the United Kingdom and Australia and also served as a member of a U.S. arms control negotiations team in Vienna, Austria.

He holds a B.A. from Harvard College and an M.S. from the Massachusetts Institute of Technology.