



MAD SCIENTIST 2016: STRATEGIC SECURITY ENVIRONMENT IN 2050

8-9 August 2016

Georgetown University
School of Continuing Studies
640 Massachusetts Ave NW
Washington DC 20001

**VIPS &
INVITED SPEAKERS**



General Mark A. Milley

39th Chief of Staff for the U.S. Army

General Mark A. Milley assumed duty as the 39th Chief of Staff of the U.S. Army August 14, 2015 after most recently serving as the 21st Commander of U.S. Army Forces Command at Fort Bragg, North Carolina.

A native of Winchester, Massachusetts, General Milley graduated and received his commission from Princeton University in 1980. He has had multiple command and staff positions in eight divisions and Special Forces throughout the last 35 years.

He has served in command and leadership positions from the platoon and operational detachment alpha level through Corps and Army Command including the 82nd Airborne Division and the 5th Special Forces Group at Fort Bragg, North Carolina; the 7th Infantry Division at Fort Ord, California; the 10th Mountain Division at Fort Drum, New York; the 2nd Infantry Division in Korea; the Joint Readiness Center at Fort Polk, Louisiana; the 25th Infantry Division at Schofield Barracks, Hawaii; the 101st Airborne (Air Assault) at Fort Campbell, Kentucky; and the 1st Cavalry Division and 3rd Infantry Division in Baghdad, Iraq. He commanded the 1st Battalion, 506th Infantry, 2nd Infantry Division; the 2nd Brigade, 10th Mountain Division; served as the Deputy Commanding General for the 101st Airborne (Air Assault); and served as the Commanding General for 10th Mountain Division. While serving as the Commanding General, III Corps and Fort Hood, he deployed as the Commanding General, International Security Assistance Force Joint Command and Deputy Commanding General, U.S. Forces – Afghanistan. Additionally, he served on the operations staff of The Joint Staff as the J33/DDRO, and as a Military Assistant to the Secretary of Defense at the Pentagon. His operational deployments include the Multi-National Force and Observers, or MFO, Sinai, Egypt; Operation JUST CAUSE, Panama; Operation UPHOLD DEMOCRACY, Haiti; Operation JOINT ENDEAVOR, Bosnia-Herzegovina; Operation IRAQI FREEDOM, Iraq; and three tours during Operation ENDURING FREEDOM, Afghanistan. He also deployed to Somalia and Colombia.

General Milley's education includes a Bachelor's Degree in Political Science from Princeton University, Master's Degrees from Columbia University (International Relations) and from the U.S. Naval War College (National Security and Strategic Studies). He is also a graduate of the MIT Seminar XXI National Security Studies Program.

General Milley and his wife have been married for more than 30 years and have two children.

His awards and decorations include the Defense Distinguished Service Medal; Army Distinguished Service Medal with two bronze oak leaf clusters; Defense Superior Service Medal with two bronze oak leaf clusters; Legion of Merit with two bronze oak leaf clusters; Bronze Star Medal with three bronze oak leaf clusters; Meritorious Service Medal with silver oak leaf cluster; Army Commendation Medal with four bronze oak leaf clusters; Army Achievement Medal with one bronze oak leaf cluster; National Defense Service Medal with one bronze service star; Armed Forces Expeditionary Medal with two bronze service stars; Afghanistan Campaign Medal with two bronze service stars; Iraq Campaign Medal with two bronze service stars; Global War on Terrorism Service Medal; Korea Defense Service Medal; Humanitarian Service Medal; Army Service Ribbon; Overseas Service Ribbon with numeral 5; NATO Medal with bronze service star; and the Multi-national Force and Observers Medal. He is authorized to wear the Combat Infantryman Badge with star; Expert Infantryman Badge; Master Parachutist Badge; Scuba Diver Badge; Ranger Tab; Special Forces Tab; Joint Chiefs of Staff Identification Badge; Joint Meritorious Unit Award; and Meritorious Unit Commendation and the French Military Parachutist Badge.



General David G. Perkins

Commanding General

U.S. Army Training and Doctrine Command

Fort Eustis, Virginia

General David G. Perkins assumed duties as Commander, United States Army Training and Doctrine Command on March 14, 2014 after serving as Commander, United States Army Combined Arms Center, Fort Leavenworth, Kansas.

General Perkins was the 21st Commander of the United States Army Combined Arms Center from November 2011 to February 2014, where he was the lead for synchronizing leader development across the Army, the management of the Army's training support and training development enterprises, and the development and integration of the doctrine the Army uses to fight and win our Nation's wars.

Previously General Perkins served as the Commanding General of the 4th Infantry Division (Mechanized) where his primary mission was to assist and develop the Iraqi Security Forces in U.S. Division-North to take security responsibility following the transition of U.S. Forces from Iraq. General Perkins also served as the Brigade Commander for the 2nd Brigade, 3rd Infantry Division (Mechanized) during the invasion of Iraq, commanding the unit's "Thunder Run" into Baghdad and subsequent stability operations in support of Operation Iraqi Freedom, where he earned the Silver Star, the nation's third highest award for valor.

General Perkins was commissioned into the Armor Branch upon graduation from the United States Military Academy at West Point in 1980. In addition to the posts noted above, he held leadership positions in armor and mechanized infantry units in Europe, the United States, and the Middle East. He also held a number of key staff assignments, including Deputy Chief of Staff for Strategic Effects for Multi-National Forces-Iraq, Deputy Chief of Staff for Operations for United States Army Europe, and Special Assistant to the Speaker of the House, United States House of Representatives.

General Perkins holds a Bachelor of Science Degree from the United States Military Academy, a Masters Degree in Mechanical Engineering from the University of Michigan, and a Masters Degree in National Security and Strategic Studies from the Naval War College.

General Perkins was born in New Hampshire.



Lieutenant General Kevin W. Mangum

Deputy Commanding General / Chief of Staff

U.S. Army Training and Doctrine Command

Fort Eustis, Virginia

Lieutenant General (LTG) Kevin W. Mangum graduated from the United States Military Academy at West Point, NY in May 1982 where he was commissioned as a Second Lieutenant of Armor. Highlights of LTG Mangum's career include tours with 8th Army, the 101st Airborne Division (Air Assault), 2nd Infantry Division and 10th Mountain Division and two Joint tours. He has commanded at every level from platoon to Commanding General, United States Army Aviation Center of Excellence and Fort Rucker, Alabama.

After his initial tour in the 128th Aviation Company (Assault Helicopter) at Camp Page, Korea, he was selected for assignment with Task Force 160. He has since served four tours with the 160th Special Operations Aviation Regiment with duties ranging from section leader, battalion S-3 to command at company, battalion, and regiment levels. LTG Mangum also commanded A Company, 4th Battalion, 101st Aviation Regiment and 2nd Aviation Battalion, 2nd Aviation Regiment at Camp Stanley, Korea.

LTG Mangum's joint service includes tours at the Joint Electronic Warfare Center, Kelly Air Force Base, Texas and Joint Special Operations Command at Fort Bragg. In May 2008, he was assigned to his first post as a general officer, serving as the senior commander of Fort Drum and division rear commander of the 10th Mountain Division. He served as Deputy Commanding General of 1st Armor Division and United States Division-Center, Operation Iraqi Freedom, Iraq. LTG Mangum commanded the U.S. Army Special Operations Aviation Command upon its provisional activation on March 25, 2011. LTG Mangum commanded the United States Army Aviation Center of Excellence and Fort Rucker, Alabama prior to assuming duties as the Deputy Commanding General/Chief of Staff, U.S. Army Training and Doctrine Command on 28 March, 2014.

His numerous deployments include duty in the Republic of Korea, Honduras, Persian Gulf, Turkey, Bosnia, Afghanistan and Iraq. LTG Mangum also served as a U.S. Army War College Fellow at the Fletcher School of Law and Diplomacy, Tufts University. He holds a Masters of Business Administration from Webster University. His military awards and decorations include the Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit, Distinguished Flying Cross, Combat Action Badge, Parachutist Badge, Air Assault Badge and the Master Army Aviator Badge.



BG Mark W. Odom

Director

Concept Development and Learning

Army Capabilities Integration Center

United States Army Training and Doctrine Command

Brigadier General Mark Odom received a Regular Army commission as an Infantry Officer through the ROTC program in 1987. During his career, he has held a range of staff and leadership positions in the 82nd Airborne Division, the 2nd Infantry Division, the 173rd Airborne Brigade, the 4-25th Airborne Brigade, and the 75th Ranger Regiment. Brigadier General Odom has also served on the Joint Staff. He currently serves as the Director for Concept Development and Learning at the Army Capabilities Integration Center.

Brigadier General Odom commanded 1-40th Cavalry Squadron from 2005-2008, 2nd Ranger Battalion from 2008-2010, and the 75th Ranger Regiment from 2011-2013.

Brigadier General Odom's operational deployments include *Operation Joint Guardian* (Kosovo), *Operation Iraqi Freedom* (Iraq), *Operation Enduring Freedom* (Afghanistan) and *Operation Inherent Resolve* (Iraq).

Brigadier General Odom holds a BA in Political Science from Middlebury College, an MA in War Studies from King's College London, and an MA in National Security Studies from the National War College.

Brigadier General Odom is married and has one daughter.



COL (Ret) David Maxwell

Associate Director

Center for Security Studies

Edmund A. Walsh School of Foreign Service

Georgetown University

David S. Maxwell is the Associate Director of the Center for Security Studies and the Security Studies Program, Edmund A. Walsh School of Foreign Service, Georgetown University. He is a 30 year veteran of the US Army retiring in 2011 as a Special Forces Colonel with his final assignment serving on the military faculty teaching national security strategy at the National War College. He is a graduate of Miami University in Oxford, Ohio and holds Masters of Military Arts and Science degrees from the US Army Command and General Staff College and the School of Advanced Military Studies and a Master of Science degree in National Security Studies from the National War College of the National Defense University.

He has served in various command and staff assignments in the Infantry in Germany and Korea as well as in Special Forces at Ft. Lewis, Washington, Seoul, Korea, Okinawa, Japan and the Philippines with total service in Asia of more than 20 years. He served on the United Nations Command / Combined Forces Command / United States Forces Korea CJ3 staff where he was a planner for UNC/CFC OPLAN 5027-98 and ROK JCS – UNC/CFC CONPLAN 5029-99 and later served as the Director of Plans, Policy, and Strategy (J5) for Special Operations Command Korea (SOCKOR). From 2000 to 2002 he commanded 1st Battalion, 1st Special Forces Group (Airborne) in Okinawa, Japan during which his operational detachments participated in numerous operations throughout Asia and the Pacific in Korea, Japan, Thailand, Sri Lanka, Bangladesh, India, Indonesia, Malaysia, Australia, Vietnam, and the Philippines, including deployment to Mindanao and Basilan Island for the initial execution of Operation Enduring Freedom – Philippines. He has been the G3 and Chief of Staff of USASOC and Chief of Staff, SOCKOR. He commanded the Joint Special Operations Task Force-Philippines in 2006-2007. He is a fellow at the Institute of Korean-American Studies (ICAS). He is on the Board of Directors of the Committee for Human Rights in North Korea, Small Wars Journal, and the International Council of Korean Studies. He teaches “Unconventional Warfare and Special Operations for Policy Makers and Strategists.”



Dr. David Alberts

Institute of Defense Analyses

David S. Alberts undergraduate work was at City College of New York where he received a BA in Statistics in 1964. He received a Masters (1966) and a Doctorate in Operations Research (1968) from the University of Pennsylvania.^[2]

Alberts' academic career has included serving as first Director of the Computer Science Program at NYU and has held professional rank posts at NYU Graduate School of Business, CUNY, and most recently as a Research Professor at George Mason University.

He was the Director, Advanced Concepts, Technologies, and Information Strategies (ACTIS), Deputy Director of the Institute for National Strategic Studies, and the executive agent for DoD's Command and Control Research Program. This included responsibility for the Center for Advanced Concepts and Technology (ACT) and the School of Information Warfare and Strategy (SIWS) at the National Defense University.

He has chaired numerous international and national conferences and symposia and has many publications, some of which are included in tutorials given by the IEEE and other professional societies. He has served as an officer in a number of professional societies and has actively contributed to AIAA, MORS, TIMS, AFCEA, and ORSA. At the local level, Alberts has served as Assistant to the Commissioner, NYPD.

Recent honors have included the Secretary of Defense's Outstanding Public Service Award, Aviation Week and Space Technology's Government/Military Laurel, and the inaugural Network-centric warfare Award for Best Contribution to the Theory of NCW presented by the Institute for Defense and Government Advancement (IDGA).



Dr. Jason Augustyn

President, FutureScout LLC

jason@futurescoutllc.com

Dr. Jason Augustyn is President of FutureScout, LLC, a research and analysis firm focused on helping public agencies and nonprofits design creative solutions to complex strategic and organizational problems. After earning a Ph.D. in Cognitive Science from Penn State University, Dr. Augustyn worked as a Research Psychologist with the United States Army. In this role, he conducted applied research on a variety of topics related to human-computer interaction, virtual reality, and the design of technologies for visualizing complex battlefield data. This work nurtured Dr. Augustyn's passion for putting a deep understanding of user needs and context at the forefront of technology development. Based on his experience with user-centered design, in 2010 Dr. Augustyn became a principal internal consultant to the United States Army on the use of wargaming as a tool for exploring future military technologies. In this capacity he developed and ran a variety of games that brought together scientists, engineers, and Soldiers to play through the implications of technology trends ranging from "Iron Man" style exoskeletons to self-assembling defensive perimeters for base camps. These wargames informed senior Army leadership on the opportunities and challenges around emerging technologies and shaped the Army's \$2.28 billion basic and applied R&D budget. In 2012, Dr. Augustyn founded FutureScout with the goal of developing new research and analysis approaches that help decisionmakers understand trends and make better decisions at the nexus of people, organizations, and technology. FutureScout has been proud to work with the U.S. Army, U.S. Special Operations Command, the Rockefeller Foundation, and other innovative clients.



Mr. Max Brooks

Nonresident Senior Fellow

Brent Scowcroft Center on International Security

Max Brooks is a Nonresident Senior Fellow with the Brent Scowcroft Center on International Security's Art of the Future project.

Mr. Brooks is a New York Times bestselling author. His fiction, while undeniably entertaining, works to raise awareness on the issues of disaster preparedness, crisis management, and survival for the common reader — all under the thematic guise of a zombie apocalypse. He has devoted much of his life to the study and development of “anti-ghoul” security, culminating in a genuine interest in the fundamentals and logistics that go into keeping our world safe from natural and man-made disaster threats.

Mr. Brooks worked as a writer for Saturday Night Live and after working for the BBC in Great Britain and East Africa, Brooks began writing *The Zombie Survival Guide*. Brooks' New York Times best-seller, *World War Z: An Oral history of the Zombie War*, has been made into a major motion picture starring Brad Pitt. The book tells the story of the world's desperate battle against the zombie threat with a series of first-person accounts “as told to the author” by various characters around the world. *Publishers Weekly* called the novel “surprisingly hard to put down.”



Dr. Elizabeth Chalecki

Assistant Professor of Political Science

University of Nebraska, Omaha

Dr. Chalecki came to the University of Nebraska Omaha in August 2014. She earned her Ph.D. in International Relations from the Fletcher School of Law & Diplomacy at Tufts University, and also earned an M.Sc. in Environmental Geography from the University of Toronto. She is a Non-Resident Research Fellow at the Stimson Center. Dr. Chalecki recently concluded a fellowship at Goucher College as the Visiting Mellon Scholar for Environmental Studies. She has taught at Boston College, Boston University, California State University-Hayward and the Monterey Institute of International Studies. She has also worked for the Pacific Institute, Environment Canada, the U.S. Department of Commerce, and the Brookings Institution.

Dr. Chalecki researches trans-boundary environmental, security, and foreign policy topics such as climate change and security, international environmental policy and the intersection of science and International Relations. She writes about cool stuff like climate change and Arctic security, environmental terrorism, climate change and international law, public perception of environmental issues and water in outer space.



Dr. William T. Eliason

Director, National Defense University Press

Editor in Chief, *Joint Force Quarterly*

Professor, Dwight D. Eisenhower School for National Security and Resource Strategy

William T. “Bill” Eliason, Colonel, USAF (Retired), Ph.D., is the Director of the National Defense University Press and Editor in Chief of *Joint Force Quarterly*, the professional military journal of the Chairman of the Joint Chiefs of Staff and serves as a professor of Defense Strategy and Resources at the Dwight D. Eisenhower School for National Security and Resource Strategy at Ft McNair in Washington, DC. He holds the academic rank of University Professor. Prior to arriving at NDU, Colonel Eliason served for over 30 years on active duty in a variety of operational and staff positions as a Master Air Battle Manager qualified as an aircrew member in U.S. and NATO Airborne Warning and Control System (E-3) aircraft and commander of a Control and Reporting Center (CRC). He is a graduate of every level of USAF professional military education including Class III of the School of Advanced Air and Space Studies. His service included duty in (or above) nearly 40 countries and at every level of command in the USAF as well as duty with Joint and NATO commands including service on the staffs at the Supreme Headquarters Allied Powers Europe, the Air Staff at The Pentagon, Seventh Air Force in Korea and the United States Joint Forces Command.

Colonel Eliason completed his military career on the faculty of the Joint Advanced Warfighting School at the National Defense University’s Joint Forces Staff College while simultaneously earning his doctorate in international studies from Old Dominion University in Norfolk, Virginia. He served as the second leader of the school during an intense period of growth and expanding positive impact on the Joint Force. One of the USAF’s leading strategists, decorated combat squadron commander and theater campaign planner, he was hand-picked to lead a campaign assessment team to Kabul, Afghanistan where he worked directly for the ISAF Commander to refine the command’s approach to that conflict. While clearly an Airman at heart, Dr. Eliason brings a wealth of U.S. Air Force, Joint, Combined, and Interagency experience and contacts as well as a professor’s inside view of joint professional military education to his position. His academic interests lie in history and international relations with his specific focus on U.S. leadership in nuclear arms control agreements and non-proliferation. He is also a volunteer with the Civil Air Patrol, the USAF Auxiliary, as a mission pilot performing search and rescue, public affairs and professional development duties for the National Capital Wing.

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Dr. Baruch Fischhoff

Howard Heinz University Professor

**Social and Decision Sciences, Engineering and Public Policy
Carnegie Mellon University**

Baruch Fischhoff, Ph.D., is the Howard Heinz University Professor in the departments of Social and Decision Sciences and of Engineering and Public Policy at Carnegie Mellon University, where he heads the Decision Sciences major. A graduate of the Detroit Public Schools, he holds a BS in mathematics and psychology from Wayne State University and an MA and PhD in psychology from the Hebrew University of Jerusalem. He is a member of the Institute of Medicine of the National Academy of Sciences and. He is past President of the Society for Judgment and Decision Making and of the Society for Risk Analysis, and recipient of its Distinguished Achievement Award. He was founding chair of the Food and Drug Administration Risk Communication Advisory Committee and recently chaired the National Research Council Committee on Behavioral and Social Science Research to Improve Intelligence Analysis for National Security and currently co-chairs the National Research Council Committee on Future Research Goals and Directions for Foundational Science in Cybersecurity and the National Academy of Sciences Sackler Colloquium on “The Science of Science Communication.” He is a former member of the Eugene, Oregon Commission on the Rights of Women, Department of Homeland Security's Science and Technology Advisory Committee, the World Federation of Scientists Permanent Monitoring Panel on Terrorism, and the Environmental Protection Agency Science Advisory Board, where he chaired the Homeland Security Advisory Committee. He is a Fellow of the American Psychological Association, the Association for Psychological Science (previously the American Psychological Society), the Society of Experimental Psychologists, and the Society for Risk Analysis. He has co-authored or edited eleven books, *Acceptable Risk* (1981), *A Two-State Solution in the Middle East: Prospects and Possibilities* (1993), *Elicitation of Preferences* (2000), *Risk Communication: A Mental Models Approach* (2002), *Intelligence Analysis: Behavioral and Social Science Foundations* (2011), *Risk: A Very Short Introduction* (2011), *Communicating Risks and Benefits: An Evidence-Based Guide* (2011), *Judgment and Decision Making* (2011), *Risk Analysis and Human Behavior* (2011), *The Science of Science Communication I* (2013), and *Counting Civilian Casualties* (2013) and *The Science of Science Communication II* (2014).



Mr. Thomas F. Greco

Deputy Chief of Staff, G-2

U.S. Army Training and Doctrine Command

Mr. Thomas F. Greco serves as the Director of Intelligence, Deputy Chief of Staff, G-2 for the U.S. Army Training and Doctrine Command (TRADOC G2). This is a Tier Two Defense Intelligence Senior Executive Service (DISES) position. He is the Army's lead for developing, defining, and applying current and future threats and environments in support of Army leader development, concept development, capability design, training readiness, and experimentation. He also leads the Army's enterprises for Critical Thinking, Foreign Military and Cultural Studies, and the OE Training Support Center. TRADOC G2 supports the Army's Combat Training Centers, deployed forces in Afghanistan, all of the Army's educational institutions and capability development and integration activities. He is responsible for managing a staff of more than 500 employees, acts as the program manager for the TRADOC civilian intelligence career field and oversees a budget in excess of \$250 million.



Dr. Paul Horn

**Senior Vice Provost for Research
Senior Vice Dean for Strategic Initiatives and Entrepreneurship,
Tandon School of Engineering, New York University (NYU)**
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Dr. Paul M. Horn is the Senior Vice Provost for Research and Senior Vice Dean for Strategic Initiatives and Entrepreneurship, Tandon School of Engineering, responsible for providing University-wide leadership in advancing research at NYU, coordinating research among various schools of the University, and shaping the strategic planning for the University's research enterprise.

Dr. Horn leads strategic University efforts in developing industrial linkages and relations for the University and its faculty, promoting an active entrepreneurial environment, and facilitating a globally-integrated research university, including campus-wide information technology.

Dr. Horn was named NYU Distinguished Scientist in Residence in September of 2007 and Senior Vice Provost for Research in September 2009. Prior to his NYU position, he was Senior Vice President of the IBM Corporation and Executive Director of Research. In this job, he directed IBM's worldwide Research program with 3,200 technical employees in eight sites in five countries around the world, and helped guide IBM's overall technical strategy. In his 28 years with IBM, Dr. Horn was a champion for translating technology-based research into marketplace opportunities. Under his leadership, IBM Research produced an unmatched string of technological breakthroughs, including the chess-playing supercomputer Deep Blue, the world's first copper chip, the giant magneto-resistive head (GMR), strained silicon (a discovery that allows chips to run up to 35 percent faster), and BlueGene, the world's fastest supercomputer that brought computing leadership back to the United States.

Dr. Horn graduated from Clarkson College of Technology and received his doctoral degree in physics from the University of Rochester in 1973. Prior to joining IBM in 1979, Dr. Horn was a professor of physics in the James Franck Institute and the Physics Department at the University of Chicago. Dr. Horn is a Fellow of the American Physical Society and was an Alfred P. Sloan Research Fellow from 1974-1978. He is a member of the National Academy of Engineering, a former Associate Editor of Physical Review Letters, and has published over 85 scientific and technical papers.

Dr. Horn has received numerous awards including the 1988 Bertram Eugene Warren Award from the American Crystallographic Association, the 2000 Distinguished Leadership award from the New York Hall of Science, the 2002 Hutchison Medal from the University of Rochester, and the 2002 Pake Prize from the American Physical Society. In 2003, Dr. Horn was named as one of the top computing business leaders in the US by Scientific American magazine. He is also a member of numerous professional committees including the GAO (General Accountability Office) board of advisors, the board of trustees of the Committee for Economic Development, and the Board of the Tandon School of Engineering.



Mr. Garth Jensen

Director for Innovation

mmowgli Program Director

Naval Surface Warfare Center

Carderock Division

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Current: Director for Innovation at the Carderock Division, NSWC, in West Bethesda, MD. In this role Mr. Jensen is responsible for initiating, prototyping, assessing, and scaling cultural interventions that create and sustain a culture of innovation, and for leading the Carderock Division's strategic planning and execution for innovation.

Most Recently: Two-time Science Advisor for ONR assigned to the Pentagon staff. In this role Mr. Jensen was instrumental in creating, piloting and implementing **mmowgli**, a crowdsourcing and gamification platform that the Navy, DoD and FedGov now use regularly to generate and harvest fresh insight from a diverse pool of players worldwide.

Previous:

- Deputy Department Head, Ship Signatures Department, Carderock Division, NSWC
- Executive Director, South Florida Ocean Measurement Center
- Various Detail Assignments to NAVSEA and ONR
- Various Supervisory and Program Management Positions within Carderock
- Division Officer and Department Head, USS Baton Rouge (SSN 689)

Formal Education:

- BSME Tennessee Tech University, 1984
- Naval Nuclear Propulsion Officer Training Program, 1986
- Graduate Certificate, Engineering Management, George Washington University, 2005
- Graduate Certificate, Systems Analysis, Naval Postgraduate School, 2008



**Lieutenant Colonel Patrick S. Kirchner,
USMC**

**Strategic Foresight, Future Assessment Division
Marine Corps Warfighting Laboratory**

Lieutenant Colonel Kirchner is a native of Detroit, Michigan, with 30 years of service in the United States Marine Corps. He enlisted as an AV-8B Harrier jet engine mechanic and place captain, and was later commissioned and trained as an Air Defense Control Officer. Career highlights include instructor staff at the Navy Fighter Weapons School (TOPGUN), and a later tour as the Marine Corps Military Assistant to Andrew W. Marshall, the Director of Net Assessment. He serves as a Strategic Foresight Analyst at the Marine Corps Warfighting Lab in Quantico, Virginia. Lieutenant Colonel Kirchner holds a Master of Military Studies from the Marine Corps University, a BA in Psychology from the University of Michigan, and two Certificates in Foresight from the University of Houston.



COL Patrick Mahaney

**Director,
Chief of Staff of the Army's Strategic Studies Group**

Colonel Patrick J. Mahaney, Jr. is an Army Special Forces Officer currently serving as Director of the Chief of Staff of the Army's Strategic Studies Group. He most recently served as a Military Fellow at the Council on Foreign Relations. He has commanded the Asymmetric Warfare Group, a Special Forces battalion and a Special Operations Task Force in Afghanistan. Colonel Mahaney has served in the 7th Special Forces Group, Joint Special Operations Command, the Special Warfare Center and School, the Combined Forces Special Operations Component Command-Afghanistan, and in a range of combat and operational assignments. Colonel Mahaney holds a B.A. from New York University, and Master's degrees from Columbia University and the University of Perugia (Italy). He is a graduate of the Army War College's Fellowship program, and is a member of the Council on Foreign Relations.



Dr. Steven Mintz

Professor, University of Texas at Austin

Founding Director, University of Texas System's Institute for Transformational Learning

A leading educational innovator and an award-winning teacher and author, Professor Mintz is the founding director of the University of Texas System's Institute for Transformational Learning and a leading authority on families, children, youth, and the life course.

In his UT System role, he is responsible for making a quality education more accessible, affordable, and successful. To achieve this goal, his institute designs breakthrough pathways to a meaningful credential, creates technologies to support immersive and personalized education, and harnesses the power of fine-grained learning analytics.

As a historian, he is the author of 14 books, including *The Prime of Life: A History of Modern Adulthood*, a *New York Times Book Review* Editor's Choice, and [Huck's Raft: A History of American Childhood](#), which received major prizes from the Association of American Publishers, the Organization of American Historians, and the Texas Institute of Letters.

A former fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford and visiting scholar at Harvard's Center for European Studies, he came to UT from Columbia University. He has also taught at Oberlin College, the University of Houston, Harvard University's Extension School, Pepperdine University, and Universitat-GH-Siegen.

In addition, he has served as president of the Society for the History of Children and Youth, and chaired the Council on Contemporary Families, an organization of leading academics and clinicians committed to improving the public conversation on families and their needs. □□

A pioneer in the application of new technologies to historical research and teaching, he is past president of H-Net: Humanities and Social Sciences Online, which serves over 200,000 academics world-wide. He is also the creator of the [Digital History](#) website, which is used by 150,000 teachers and students a week and which has been named one of the Top 5 sites in U.S. history and been placed on the National Endowment for the Humanities EdSitement list of exemplary online resources in the humanities.

In addition to playing an active role in the professional development of K-12 teachers and in programs to bring students from historically underrepresented groups into the professoriate, he is a member of the Society of American Historians, whose members are chosen on the basis of literary distinction. He has also chaired the Bancroft Prize and Frederick Douglass Book Prize juries, and received over \$15 million in external funding, including two National Endowment for the Humanities Challenge Grants.

He blogs on *Inside Higher Ed* and *Psychology Today*; his writings have also been featured in *The New York Times* and *The Washington Post*.



Dr. Jonathan D. Moreno

Professor of Medical Ethics and Health Policy, of History and Sociology of Science, and Philosophy

University of Pennsylvania

Jonathan D. Moreno is the David and Lyn Silfen University Professor at the University of Pennsylvania where he is a Penn Integrates Knowledge (PIK) professor. At Penn he is also Professor of Medical Ethics and Health Policy, of History and Sociology of Science, and of Philosophy.

His latest book is *Impromptu Man: J.L. Moreno and the Origins of Psychodrama, Encounter Culture, and the Social Network* (2014), which Amazon called a “#1 hot new release.” Among his previous books are *The Body Politic*, which was named a Best Book of 2011 by Kirkus Reviews, *Mind Wars* (2012), and *Undue Risk* (2000). He has published hundreds of papers, articles, reviews and op-eds.

Moreno frequently contributes to such publications as *The New York Times*, *The Wall Street Journal*, *The Huffington Post*, *Psychology Today*, and *Nature* and often appears on broadcast and online media. In 2008-09 he served as a member of President Barack Obama’s transition team. His work has been cited by Al Gore and was used in the development of the screenplay for “The Bourne Legacy.” His online neuroethics course drew more than 36,000 registrants in fall 2013. *The American Journal of Bioethics* has called him “the most interesting bioethicist of our time.”

Moreno is an elected member of the National Academy of Medicine and is the U.S. member of the UNESCO International Bioethics Committee. A Senior Fellow at the Center for American Progress in Washington, D.C., Moreno has served as an adviser to many governmental and non-governmental organizations, including three presidential commissions, the Department of Defense, the Department of Homeland Security, the Department of Health and Human Services, the Centers for Disease Control, the Federal Bureau of Investigation, the Howard Hughes Medical Institute, and the Bill and Melinda Gates Foundation. He holds the Visiting Professorship in History at the University of Kent in Canterbury, England. Moreno’s writings have been translated into Chinese, German, Japanese and Portuguese.

Moreno received his Ph.D. in philosophy from Washington University in St. Louis, was an Andrew W. Mellon post-doctoral fellow, holds an honorary doctorate from Hofstra University, and is a recipient of the Benjamin Rush Medal from the College of William and Mary Law School, the Dr. Jean Mayer Award for Global Citizenship from Tufts University, and the Penn Alumni Faculty Award of Merit.



Dr. Jonathan D. Moyer

Director

Frederick S. Pardee Center for International Futures

University of Denver

Jonathan D. Moyer is Research Assistant Professor at the Josef Korbel School of International Studies and Associate Director of the Frederick S. Pardee Center for International Futures. He works in three areas, all of which extend and use the International Futures (IFs) integrated assessment platform. Jonathan aids the strategic planning efforts of various countries, international organizations, and corporations. This funded research has supported analysis for groups like the Arrow Electronics, New Partnership for African Development, USAID, and the Western Cape provincial government of South Africa. He also leads the creation of new data and tools to better understand and analyze international relations theory. This funded research has supported the creation of many new data series including contributions to documents such as the U.S. National Intelligence Council Global Trends 2030 report. Jonathan also researches the impact of developmental imbalances on state failure and fragility. He is Lead Co-PI on a three-year Minerva-funded research grant that began in the fall of 2014.

Jonathan has been working with IFs since he started his MA program at the University of Denver in the fall of 2005. In addition to organizations listed above, he has consulted for the European Commission, Government of Kosovo, Government of Slovenia, Institute for Security Studies, and United States Institute of Peace.



Dr. Albert Palazzo

**Director
War Research Centre, Australia**

Dr. Albert Palazzo is the Director of the Australian Army's War Research Centre. His Ph.D. is from The Ohio State University and his thesis was published as *Seeking Victory on The Western Front: The British Army & Chemical Warfare in World War I*. He has published widely on the history of the Australian Army and the contemporary character of war. His major works include *The Australian Army: A History of its Organisation, 1901-2001*; *Moltke to bin Laden: The Relevance of Doctrine in Contemporary Military Environment*, *The Australian Army in Vietnam*, *The Future of War Debate in Australia*, and *Forging Australian Land Power, A Primer*. His current research is on the effect of resource limits and climate change on the future character of war and technological advances and the rising superiority of the defence.



Dr. Christopher Rice

**Deputy Director
Chief of Staff of the Army's Strategic Studies Group**

Dr. Christopher Rice is the Deputy Director of the Chief of Staff of the Army's Strategic Studies Group (SSG). He has served in the Defense Department and the Intelligence Community in a range of technical leadership roles for seventeen years. Prior to joining the SSG, Dr. Rice served as a Division Head in the US Army Training and Doctrine Command G2 developing long-range assessments of the Operational Environment; he previously served at the National Counterterrorism Center as the Lead Strategic Assessment Officer in the Directorate of Strategic Operational Plans, and with the Joint Warfare Analysis Center in a variety of Senior Scientist and Project Lead roles providing direct support to Combatant Commands. Dr. Rice served ten years as an infantryman in the United States Army, Army Reserve, and National Guard. He holds a BS in Economics from the University of North Carolina-Asheville and a Ph.D. in Economics from the University of Maryland-College Park.



Mr. Peter Singer

**Strategist at New America
Editor, *Popular Science***

Peter Warren Singer is Strategist at New America and an editor at *Popular Science* magazine. He has been named by the Smithsonian as one of the nation's 100 leading innovators, by Defense News as one of the 100 most influential people in defense issues, by Foreign Policy to their Top 100 Global Thinkers List, and by Onalytica market research as one of the ten most influential voices in the world on cybersecurity. Peter's award winning books include *Corporate Warriors: The Rise of the Privatized Military Industry*, *Children at War*, *Wired for War: The Robotics Revolution and Conflict in the 21st Century*; and *Cybersecurity* and *Cyberwar: What Everyone Needs to Know*. His latest is *Ghost Fleet: A Novel of the Next World War*, a technothriller crossed with non-fiction research, which has been endorsed by people who range from the Chairman of the Joint Chiefs to the co-inventor of the Internet to the writer of HBO *Game of Thrones*.

His past work include serving as coordinator of the Obama-08 campaign's defense policy task force, in the Office of the Secretary of Defense, and as the founding director of the Center for 21st Century Security and Intelligence at Brookings, where he was the youngest person named senior fellow in its 100 year history.



Dr. Amy Zalman

Founder & Principal, Strategic Narrative Institute LLC
Adjunct Professor, Strategic Foresight, Georgetown University

Amy Zalman is a global security futurist dedicated to leveraging the power of narrative to accelerate transformational change. She is the principal owner of the Strategic Narrative Institute LLC, which provides consulting services and training to leaders and institutions seeking to strengthen their ability to understand, manage and benefit from disruptive change. She is currently also an adjunct Professor of Strategic Foresight Methods at Georgetown University in Washington DC, and is a member of the Board of Visitors of Air University (at Maxwell Air Force Base) and a Board Director of the Council on Emerging National Security Affairs.

During the course of her career, Amy has served as a leader, teacher, author and consultant in public, private and non-profit sectors. She is the former Chief Executive Officer and President of the World Future Society, the world's first and largest membership organization for futurists and advocacy on behalf of future-critical issues. From 2014-2016, she led the 50-year old organization through a transition from a publishing business model to a global platform for membership and thought leadership. She reorganized the internal structure, refreshed the Board of Directors, revitalized global brand value and raised net profit significantly. From 2012-2014, Amy served as the inaugural Department of Defense Chair of Information Integration and professor of security strategy at the National War College in Washington DC, with the mandate to advance the teaching of "the information element of national power" to the future strategic leaders of the United States. From 2007 – 2012, she worked at Science Applications International Corporation (SAIC, now Leidos), a Washington DC based Fortune 500 science and technology firm, and a founding partner of Oryx Communications, which supported organizations expanding into the Middle East and North Africa. She has additionally served on the faculties of New York University, Cornell University and the New School University in New York.

Amy has maintained a career-long focus on the impacts of change in the global security environment, such as shifts in global balance of power, defense and intelligence related issues, and information security, and on the critical roles of cultures, communication, narrative and myth in generating change and innovation. These are frequent topics in her role as a keynote and public speaker, and as an author. In the past several years, her audiences have included the U.S. Army Training & Doctrine Command Commander's Retreat, Atlantic Council Global Strategy Forum, *Forbes* Mexico Summit, KBS Korea Future Forum, the U.S. Library of Congress, the G20 Young Entrepreneurs' Alliance Summit in Istanbul, Global Reporting Initiative Corporate Sustainability Trends in Rome, the Netherlands Ministry of Foreign Affairs, US Congress, USSOCOM, DoD Highlands Forums, the Marine Corps Public Affairs Leadership Conference, the Heritage Foundation, TEDx, and others.

Amy addresses a similar range in her writing for policy journals and publications such as the Huffington Post, The Globalist, Die Presse, Information Operations Journal, Government Executive, the Globalist, and many others. Her recent publications span foresight related topics for corporate and public sector audiences and include titles such as, "Could a Public Transportation Revolution See Us Bypass Cars Altogether" (for *Automotive World*, 2015), to "Measuring State Power" (December, 2015) on behalf of a US government client. She has been featured in interviews in the Atlantic magazine, Huffington Post, the Voice of America, CNBC's The Edge, Engineering & Technology magazine and elsewhere.

Amy holds a Ph.D. in Middle Eastern Studies from New York University, a Masters Degree of Fine Arts from Cornell University, a Bachelors Degree from Columbia University and an honorary Master's Degree from the National War College. She is a former Fulbright scholar in Jordan, and a former fellow at the EastWest Institute in New York. She is proficient in Arabic and Hebrew.



Dr. Fran Zenzen

**Chief Operating Officer,
Arizona State University Research Enterprise (ASURE)**

Fran Zenzen, Ph.D. - ASURE Chief Operating Officer Two-time Arizona State University graduate Dr. Fran Zenzen was appointed chief operating officer of the ASU Research Enterprise (ASURE) in May 2014. At ASURE she oversees all business development, research and operational functions. Zenzen brings to ASURE more than 30 years of experience in defense and intelligence. Prior to joining ASURE she was director of business development at General Dynamics, focusing on soldier systems and intelligence applications. In addition to her responsibilities at ASURE, Zenzen regularly teaches at ASU as an Adjunct Professor of Practice and is active in alumni affairs.

Zenzen is a member of the Institute of Electrical Engineers, Society of Women Engineers, Institute of Industrial Engineers, American Society of Quality, and the Institute for Operations Research and the Management Sciences. She is a published author and regularly is requested to speak at technical conferences focused on software reliability modeling and subcontractor performance.

She received her Ph.D. in industrial engineering and reliability from Arizona State University and also has an MBA from ASU, a master's in electrical engineering from Syracuse and a bachelor's in electrical engineering from Lehigh University.