CONFLICT IN THE 21ST CENTURY

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CONFLICT IN THE 21ST CENTURY

The 27th Annual Norris and Margery Bendetson EPIIC
International Symposium

and

First Annual Tufts Pugwash Chapter Discussion

Photo on front by Jacob Silberberg (EPIIC'01, TILIP'02)

DEDICATION

TIM HETHERINGTON

"Tim Hetherington was much more than a war reporter. He had an extraordinary talent for documenting, in compassionate and beautiful imagery, the human stories behind the headlines… His work has raised the visibility of many of the world's forgotten conflicts."

-- Kenneth Roth, executive director of Human Rights Watch; IGL Dr. Jean Mayer Global Citizenship Award recipient, 2004

EPIIC this year is dedicated to the British photographer and film-maker, Tim Hetherington, a Board member of the Institute's Program on Narrative and Documentary Practice. He was killed while covering the war in Libya on April 20, 2011. Hetherington reported on many of the world's most critical human rights stories: conflicts in Liberia, Afghanistan, Darfur, and Libya.

The 27th Annual Norris and Margery Bendetson EPIIC International Symposium
February 22-26, 2012

Symposium Program

Wednesday, February 22
• Power Transitions in the 21st Century, 7:00pm

Andrew J. Bacevich, Professor of International Relations and History, Boston University; Author, *Washington Rules: America's Path to Permanent War*

Ariel Levite, Non-resident Senior Associate, Nuclear Policy Program, Carnegie Endowment; former Principal Deputy Director General for Policy, Israeli Atomic Energy Commission

Gwyn Prins, Director, Mackinder Programme for the Study of Long Wave Events, London School of Economics; Member, Strategy Advisory Panel, Minister of Defense, United Kingdom

Zhang Qingmin, Professor of Diplomacy, Center for International Strategic Studies, Peking University

Sergey Zuev, Rector, Moscow School of Social and Economic Science
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Presentation on BRIC: The Role of Rising Powers in the International Order

Lowell H. Schwartz, Political Scientist, RAND Corporation; former Adviser on Arms Control and European Security, International Security Affairs, Office of the Secretary of Defense

with EPIIC Colloquium and TILIP students

Thursday, February 23
• The Present and Future Battlefield: Cyberwarfare, Neuroscience and Robotics, 7:00pm

Braden Allenby, Lincoln Professor of Engineering and Ethics, and Professor of Civil, Environmental and Sustainable Engineering, and of Law, at Arizona State University; Founding Chair, Consortium for Emerging Technologies, Military Operations, and National Security

Ronald Arkin, Regents' Professor and Director, Mobile Robot Laboratory, Georgia Institute of Technology; Co-editor, *Governing Lethal Behavior in Autonomous Robots*

Ariel Levite, Non-resident Senior Associate, Nuclear Policy Program, Carnegie Endowment; former Principal Deputy Director General for Policy, Israeli Atomic Energy Commission

William C. Martel, Associate Professor of International Security Studies, The Fletcher School, Tufts University; Former Director and Founder, Center for Strategy and Technology

Jonathan D. Moreno, Author, *Mind Wars: Brain Science and the Military in the 21st Century*; Senior Fellow, Center for American Progress

Capt. Wayne Porter (US Navy), Co-author (with Mark Mykleby), "A National Strategic Narrative" as "Mr. Y"; Chair, Systemic Strategy and Complexity, Global Public Policy Academic Group, Naval Postgraduate School; former Special Assistant for Strategic Synchronization to the Chairman, US Joint Chiefs of Staff

Friday, February 24
• "Mr. Y": US National Strategic Policy Directions, 10:00am

Antonia Chayes, Professor of Practice in International Politics and Law, The Fletcher School, Tufts University; former Under Secretary of the US Air Force*

Lt. General Dirk Jameson (USAF, ret), former Deputy Commander in Chief and Chief of Staff, U.S. Strategic Command

Col. Mark "Puck" Mykleby (US Marines, ret.), Co-author (with Wayne Porter), "A National Strategic Narrative" as "Mr. Y"; former Special Strategic Assistant to the Chairman, US Joint Chiefs of Staff; former Deputy Division Head for the development of strategy for Special Operations Forces, USSOCOM

Capt. Wayne Porter (US Navy), Co-author (with Mark Mykleby), "A National Strategic Narrative" as "Mr. Y"; Chair, Systemic Strategy and Complexity, Global Public Policy Academic Group, Naval Postgraduate School; former Special Assistant for Strategic Synchronization to the Chairman, US Joint Chiefs of Staff

• Eye to Eye, Drone to Drone: The (De)Personalization of Warfare, 12:00pm

Ronald Arkin, Regents' Professor and Director, Mobile Robot Laboratory, Georgia Institute of Technology; Co-editor, *Governing Lethal Behavior in Autonomous Robots*

Ami Ayalon, former Commander, Israel Navy; former Director, Israel Security Agency (Shin Bet); Member, Knesset

Lt. General Dirk Jameson (USAF, ret), former Deputy Commander in Chief and Chief of Staff, U.S. Strategic Command

William Ostlund (US Army), former Commander, 2d Battalion (Airborne), 503d Infantry, Kunar Province, Afghanistan; former Deputy Commander, 75th Ranger Regiment, Fort Benning, Security Studies Fellow, The Fletcher School, Tufts University

Col. Ferdinand Safari, Defense Attache, Rwandan Embassy

Susannah Sirkin, Deputy Director, Physicians for Human Rights

Wendell Wallach, Chair, Working Research Group in Technology and Ethics, Yale University

• #Power: Youth, Technology and the State, 2:00pm

Montasser Jemali Anas, Student, Faculty of Legal, Political and Social Sciences, Tunis; President and Founder, League of Young Patriots

Sherif Mansour, Senior Program Officer, Middle East and North Africa, Freedom House; Co-founder, International Quranic Center in Washington, DC

Oliver Wilcox (EPIIC'01), Senior Development Advisor, Middle East Bureau, US Agency for International Development*

Student Presentations:
  NIMEP Tunisia Group and Rachel Brandenburg (EPIIC'03)
  Seoul National University Delegation

• Welcome/Introductions/Recognition, 6:30pm

Recognition of Amir, Author of *Zahra's Paradise*, and Lt. Anne Gibbon, Naval Special Warfare Development Group, US Navy

• Dr. Jean Mayer Award Keynote Address, 6:45pm

Steven Pinker, Author, *The Better Angels of our Nature: Why Violence Has Declined*; Professor of Psychology, Harvard University

Discussant: Christopher Lydon, Journalist; Host, Radio Open Source

• Responsibility to Protect, Right to Prosecute?, 8:00pm

Alex de Waal, Executive Director, World Peace Foundation; Research Professor, The Fletcher School, Tufts University; former Senior Advisor, African Union High Level Implementation Panel for Sudan

Kishore Mandhyan, Deputy Political Director and former Deputy Director of Political, Peacekeeping and Humanitarian Affairs, Executive Office, United Nations Secretary-General

Col. William Ostlund (US Army), former Commander, 2d Battalion (Airborne), 503d Infantry, Kunar Province, Afghanistan; former Deputy Commander, 75th Ranger Regiment, Fort Benning, Security Studies Fellow, The Fletcher School, Tufts University

Gwyn Prins, Director, Mackinder Programme for the Study of Long Wave Events, London School of Economics; Member, Strategy Advisory Panel, Minister of Defense, United Kingdom

Susannah Sirkin, Deputy Director, Physicians for Human Rights

Abiodun Williams, Acting Senior Vice President, Center for Conflict Management, US Institute of Peace; former Director of Strategic Planning, Office of the United National Secretary-General

Saturday, February 25
• Resource Wars and the Changing Climate of Conflict, 10:00am

Cullen Hendrix, Assistant Professor of Government, College of William and Mary; Author, "Climate Change, Rainfall, and Social Conflict in Africa"*

Abbas Maleki, Associate Professor of Energy Policy, MIT

William Moomaw, Professor of International Environmental Policy, The Fletcher School, Tufts University

Peter Rosenblum, Clinical Professor, Human Rights Law, Columbia Law School

• Money, Munitions, and Markets: The Perpetuation of Conflict, 2:00pm

Mark Baillie, King's College, London, War Studies Dept.; Consultant, AKE Ltd

Jack Blum, Attorney, specializing in issues of money laundering, financial crime, and international tax evasion; former Investigator, US Senate Foreign Relations Committee

Angelica Duran Martinez, PhD Candidate, Brown University; Co-author, "Does illegality breed violence?: Drug trafficking and state-sponsored protection rackets"

Andrew Feinstein, Author, *The Shadow World: Inside the Global Arms Trade*; Founding Director, Corruption Watch*

Andrew Kain, Founder and Chief Executive Officer, AKE; former Member and Instructor, Special Air Service Regiment, United Kingdom

Peter Rosenblum, Clinical Professor, Human Rights Law, Columbia Law School

Jake Sherman, Deputy Director for Programs (Conflict), Center for International Cooperation, New York University*

Dick Simon, Co-founder, Peace Action Network, Young Presidents' Organization; Chair, Presidents Action Network Chapter, World Presidents' Organization (WPO) (PAN)

• Expert-led, Small-group Discussions, 4:00pm

topics being determined

• The Media and Warfare, 8:00pm

Daniel Bennett, War Studies Department, King's College, London; Author, Reporting War, a blog for the Frontline Club

Nick Birnback, Chief, Public Information, United Nations Political Office for Somalia (UNPOS)

Carlotta Gall, Senior Reporter for Afghanistan/Pakistan, *The New York Times*; Fellow, Nieman Foundation, Harvard University

Jeff Howe, Assistant Professor, School of Journalism, Northeastern University; Author, *Crowdsourcing: How the Power of Crowds Is Driving the Future of Business**

Gary Knight, Photojournalist; Co-founder, VII Photo Agency; Author, *Evidence: The Case Against Milosevic*; Founding Director, Program on Narrative and Documentary Practice, Institute for Global Leadership, Tufts University

Ramesh Raskar, Associate Professor and Head, Camera Culture Research Group, MIT Media Lab*

Presentation of Photojournalist Tim Hetherington's work as compiled by Photojournalist Christopher Anderson

Sunday, February 26
• Future Flashpoints, 1:00pm

Sami al-Faraj, Founder and Director, Kuwait Centre for Strategic Studies

Nick Birnback, Chief, Public Information, United Nations Political Office for Somalia (UNPOS)

Christian Parenti, Author, *Tropic of Chaos: Climate Change and the New Geography of Violence*

Steven E. Miller, Director, International Security Program, Belfer Center for Science and International Affairs, Harvard University; Editor-in-Chief, *International Security*

Col. Ferdinand Safari, Defense Attache, Rwandan Embassy

John P Williams, Program Manager, Asymmetric and Irregular Threats, The Johns Hopkins University

• Post-Conflict Challenges and Building Peaceful Societies, 3:30pm

Mowaffak al-Rubaie, former National Security Advisor, Iraq (under the Coalition Provisional Authority); former MP, Iraq's Council of Representatives (Parliament)

Susan Bissell, Chief of Child Protection, UNICEF

Alex de Waal, Executive Director, World Peace Foundation; Research Professor, The Fletcher School, Tufts University; former Senior Advisor, African Union High Level Implementation Panel for Sudan

Sahana Dharmapuri, former Gender Advisor on conflict and complex emergency situations, Office of Women in Development, USAID; Fellow, Carr Center for Human Rights Policy, Harvard University

Zainab Salbi, Founder and President, Women for Women International*

Ervin Staub, Author, *Overcoming Evil: Genocide, Violent Conflict and Terrorism*; Professor of Psychology, Emeritus, University of Massachusetts, Amherst

Student Presentation:
      EPIIC Uganda Group

* confirmation pending

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Visiting Student Delegations

Each year, as part of its TILIP program (www.tuftsgloballeadership.org/programs/tilip), the IGL invites delegations from various countries to attend and participate in the symposium, along with delegations from the US military academies as part of its ALLIES Program.

This year, TILIP delegations will be coming from: China, Iran, Iraq, Israel, Russia, Rwanda, Singapore, and South Korea (totaling @ 70 students).

ALLIES delegations will be coming from the US Air Force Academy, the US Military Academy, and the US Naval Academy (totaling @55 students).

Pugwash Discussion: The Science, Technology, and the Ethics of National Security

Day-long Forum, Thursday, February 23rd
Part of the *2012 EPIIC Symposium: Conflict in the 21st Century*
Institute for Global Leadership
Tufts University, Medford, MA

"Throughout history, technological evolution and military activity have been linked. The existential challenge to society represented by warfare, combined with the immediate advantage that new technology can deliver, tends to accelerate technological innovation and diffusion. The relationships between the resulting technology systems, and consequent social and ethical issues and changes, are quite complex, however, and understanding and managing them to enhance long-term military advantage and security, is a critical and underappreciated challenge. This is particularly true when, as now, technological change is both rapid and accelerating; posing the risk of cultural backlashes that could affect both short term mission capabilities and longer term security interests.

Many technologies of sufficient power to be of interest militarily have at least the potential to be deeply destabilizing to existing economic, social, and technological systems. Examples might include the possibility that military RFID sensor systems, insect robots and cyborgs are shifted from theatre intelligence to domestic intelligence; that telepathic helmet technology transitions from a small unit communication enhancement to a non-intrusive thought detection device in civil society; or that warrior enhancement technology results in radical life extension for selected civilian populations. Emerging technologies are likely to have similar destabilizing effects within the military as well, potentially affecting not just military operations, but military culture and organization, as well as broader social perspectives on military initiatives generally.

These challenges are far more profound than is usually realized, in part because it is not just military and security domains that are being destabilized by accelerating technologies, but also the institutions and social structures upon which they are predicated, such as the nation-state and the idea of war as a public, not private, activity. It is our belief, however, that despite the complexity and unpredictability of the environment within which we all find ourselves, it is still possible to res3ond rationally, responsibly, and ethically to these challenges. It is that belief which lies behind the establishment and work of this Consortium."

Braden Allenby
Founding Chair, Consortium for Emerging Technologies, Military Operations, and National Security
Program Participant

Roundtable Schedule:

- 9:00-9:30am | Introduction and Overview

- 9:45-10:45am | Robotics

- 11:00am-12:00pm | Neuroscience

- 12:00-1:00pm | Lunch

- 1:15-2:15pm | CyberSystems

- 2:15-3:30pm | Ethics

- 3:30-5:00pm | Norms and Governance

- 5:00-6:30pm | Dinner

- 7:00pm | Symposium Panel – The Present and Future Battlefield

Participants:

Braden Allenby, Arizona State University

Braden R. Allenby is currently Lincoln Professor of Engineering and Ethics, and Professor of Civil, Environmental and Sustainable Engineering, and of Law, at Arizona State University, having moved from his previous position as the Environment, Health and Safety Vice President for AT&T in 2004. He is the founding director of the Center for Earth Systems Engineering and Management, and the founding chair of the Consortium for Emerging Technologies, Military Operations, and National Security, at ASU. He is also an AAAS Fellow, a Batten Fellow in Residence at the University of Virginias Darden Graduate School of Business Administration, and a Fellow of the Royal Society for the Arts, Manufactures & Commerce. He was the U.S. Naval Academy Stockdale Fellow in 2009-2010, a Templeton Fellow in 2008-2010, and the J. Herbert Hollowman Fellow at the National Academy of Engineering in 1991-1992. During 1995 and 1996 he served as Director of Energy and Environmental Systems at Lawrence Livermore National Laboratory. Dr. Allenby received his BA from Yale University in 1972, his J. D. from the University of Virginia Law School in 1978, his Masters in Economics from the University of Virginia in 1979, his Masters in Environmental Sciences from Rutgers University in the Spring of 1989, and his Ph.D. in Environmental Sciences from Rutgers in 1992. His areas of expertise include industrial ecology, sustainable engineering, earth systems engineering and management, and emerging technologies. His latest books are Industrial Ecology and Sustainable Engineering (co-authored with Tom Graedel, 2010), The Theory and Practice of Sustainable Engineering (Pearson/Prentice-Hall, 2011), and The Techno-Human Condition (with Dan Sarewitz, 2011).

-Robotics-

Colin Allen, Indiana University

Colin Allen received his B.A. in philosophy from University College London in 1982 and his Ph.D. in philosophy from UCLA in 1989. He has broad research interests in the general area of philosophy of biology and cognitive science, with particular interests in animal behavior and cognition. He has received funding from the National Science Foundation and several grants from the National Endowment for the Humanities for his work in digital humanities. His work on the prospects of moral capabilities in machines is also influential. Allen's appointment at IU is split between the Department of History and Philosophy of Science and the Cognitive Science Program, where he is currently serving as Director. He is also a member of IU's Center for the Integrative Study of Animal Behavior and adjunct professor in the Philosophy Department at IU. Allen directs the NEH-funded Indiana Philosophy Ontology (InPhO) project, is Associate Editor of the Stanford Encyclopedia of Philosophy, and is Associate Editor of Noesis: Philosophical Research Online. Allen has over 100 book chapters, journal articles, and conference proceedings papers. His coauthored books include *Moral Machines: Teaching Robots Right from Wrong* (OUP 2009) and *Species of Mind* (MIT Press, 1997). He coedited *The Evolution of Mind* (Oxford University Press, 1998), *Nature's Purposes* (MIT Press, 1998), and *The Cognitive Animal* (MIT Press, 2002). He is also coauthor of a logic textbook, *Logic Primer*, published by MIT Press, and co-developer of two logic instructional sites on the world wide web at http://logic.tamu.edu and http://www.poweroflogic.com. In 2008, Colin Allen was recognized as Faculty Mentor of the Year by Indiana University's Graduate and Professional Student Organization. In 2010 he received a Humboldt Research Award, granted in recognition of a researcher's entire achievements to date, from Germany's Alexander von Humboldt Foundation.

Ronald Arkin, Georgia Tech

Ronald C. Arkin received the B .S. Degree from the University of Michigan, the M.S. Degree from Stevens Institute of Technology, and a Ph.D. in Computer Science from the University of Massachusetts, Amherst in 1987. He then assumed the position of Assistant Professor in the College of Computing at the Georgia Institute of Technology where he now holds the rank of Regents' Professor and is the Director of the Mobile Robot Laboratory. He also serves as the Associate Dean for Research and Space Planning in the College of Computing at Georgia Tech since October 2008. During 1997-98, Professor Arkin served as STINT visiting Professor at the Centre for Autonomous Systems at the Royal Institute of Technology (KTH) in Stockholm, Sweden. From June-September 2005, Prof. Arkin held a Sabbatical Chair at the Sony Intelligence Dynamics Laboratory in Tokyo, Japan and then served as a member of the Robotics and Artificial Intelligence Group at LAAS/CNRS in Toulouse, France from October 2005-August 2006. Dr. Arkin's research interests include behavior-based reactive control and action-oriented perception for mobile robots and unmanned aerial vehicles, hybrid deliberative/reactive software architectures, robot survivability, multiagent robotic systems, biorobotics, human-robot interaction, robot ethics, and learning in autonomous systems. He has over 170 technical publications in these areas.

-Neuroscience-

Jonathan Moreno, UPenn Center for Bioethics

Jonathan D. Moreno is a Senior Fellow at American Progress, where he edits the magazine, Science Progress. He is one of 13 Penn Integrates Knowledge university professors at the University of Pennsylvania. He is also professor of medical ethics and health policy, of history and sociology of science, and of philosophy. In 2008-09 he served as a member of President Barack Obama's transition team. Moreno is an elected member of the Institute of Medicine/National Academy of Sciences and is a national associate of the National Research Council. He has served as a senior staff member for three presidential advisory commissions, including the current bioethics commission under President Obama, and has given invited testimony for both houses of Congress. Moreno has served as adviser to many nongovernmental organizations, including the Howard Hughes Medical Institute and the Bill and Melinda Gates Foundation. He is a member of the Governing Board of the International Neuroethics Society, a faculty affiliate of the Kennedy Institute of Ethics at Georgetown University, a fellow of the Hastings Center and the New York Academy of Medicine, and a past president of the American Society for Bioethics and Humanities. He advises various science, health, and national security agencies and serves as a member of the Defense Intelligence Agency's TIGER committee on potentially disruptive novel technologies. He was an Andrew W. Mellon postdoctoral 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.

Wendell Wallach, Yale Interdisciplinary Center for Bioethics

Wendell Wallach is a lecturer and consultant at Yale University's Interdisciplinary Center for Bioethics. Before coming to Yale, Wendell was a founder and the President of two computer consulting companies, Farpoint Solutions and Omnia Consulting Inc. Among the clients served by Mr. Wallach's companies were PepsiCo International, United Aircraft, and the State of Connecticut. At Yale University, Wendell chairs the working research group on Technology and Ethics, leads a seminar for bioethics interns, and functions as a senior coordinator for other working groups and projects. He has lectured worldwide, published many articles, and is presently writing two books. Cybersoul explores the ways in which cognitive science and the Information Age are altering our understanding of human decision-making and ethics. *Machine Morality: From Aristotle to Asimov and Beyond*, which Wallach is co-authoring and which will be published by MIT Press, explores the prospects for designing computer systems capable of making moral decisions. Wendell is recognized as one of the leaders in the new field of Machine Ethics, and designed the first course anywhere on this subject, which he has taught twice at Yale.

-Cyber-

David Clark, MIT

David Clark is a Senior Research Scientist at the MIT Computer Science and Artificial Intelligence Laboratory, where he has worked since receiving his Ph.D. there in 1973. Since the mid 70s, Dr. Clark has been leading the development of the Internet; from 1981-1989 he acted as Chief Protocol Architect in this development, and chaired the Internet Activities Board. His current research looks at re-definition of the architectural underpinnings of the Internet, and the relation of technology and architecture to economic, societal and policy considerations. He is helping the U.S. National Science foundation organize their Future Internet Design program. He is past chairman of the Computer Science and Telecommunications Board of the National Academies, and has contributed to a number of studies on the societal and policy impact of computer communications. He is co-director of the MIT Communications Futures Program, a project for industry collaboration and coordination along the communications value chain.

Herbert Lin, Chief Scientist at Computer Science and Telecommunications Board

Dr. Herbert Lin is chief scientist at the Computer Science and Telecommunications Board, National Research Council of the National Academies, where he has been study director of major projects on public policy and information technology. These studies include a 1996 study on national cryptography policy (Cryptography's Role in Securing the Information Society), a 1991 study on the future of computer science (Computing the Future), a 1999 study of Defense Department systems for command, control, communications, computing, and intelligence (Realizing the Potential of C4I: Fundamental Challenges), a 2000 study on workforce issues in high-technology (Building a Workforce for the Information Economy), a 2002 study on protecting kids from Internet pornography and sexual exploitation (Youth, Pornography, and the Internet), a 2004 study on aspects of the FBI's information technology modernization program (A Review of the FBI's Trilogy IT Modernization Program), a 2005 study on

electronic voting (Asking the Right Questions About Electronic Voting), a 2005 study on computational biology (Catalyzing Inquiry at the Interface of Computing and Biology), a 2007 study on privacy and information technology (Engaging Privacy and Information Technology in a Digital Age), a 2007 study on cybersecurity research (Toward a Safer and More Secure Cyberspace), a 2009 study on healthcare informatics (Computational Technology for Effective Health Care: Immediate Steps and Strategic Directions), a 2009 study on offensive information warfare (Technology, Policy, Law, and Ethics Regarding U.S. Acquisition and Use of Cyberattack Capabilities), and a 2010 study on cyber deterrence (Proceedings of a Workshop on Deterring Cyberattacks: Informing Strategies and Developing Options for U.S. Policy).

Prior to his NRC service, he was a professional staff member and staff scientist for the House Armed Services Committee (1986-1990), where his portfolio included defense policy and arms control issues. He received his doctorate in physics from MIT.

-Military-

Captain Wayne Porter, Naval Postgraduate School

Capt. Wayne Porter's distinguished career in the U.S. Navy began with his commission in 1986. His tours have included Fleet Ocean Surveillance Intelligence Center, The USS Blue Ridge (LCC-19), Office of the Chief of Naval Operations (CNO), and the Office of the Chairman of the Joint Chiefs. He co-authored, with Col. Mark Mykleby, the National Strategic Narrative, published by the Woodrow Wilson Center for Scholars and subsequently cited in televised editorials on both CNN and MSNBC. The Naval Postgraduate School community recently welcomed alumnus Capt. Wayne Porter as the new Chair of Systemic Strategy and Complexity under the Global Public Policy Academic Group. Porter most recently served as the special strategic assistant to former Chairman of the Joint Chiefs of Staff Adm. Mike Mullen, and co-wrote "A National Strategic Narrative," with retired Marine Corps Col. Mark Mykleby, which offers a contextual narrative to help guide future U.S. policy. Porter has long contemplated complexity theory and social cognitive and behavioral aspects of a strategic environment, and felt that NPS was the perfect place to explore those topics collaboratively in a setting where they could have a tangible and lasting impact on research and education. With the support of Mullen, who took Porter's idea to Secretary of Defense Leon Panetta, the NPS Chair of Systemic Strategy and Complexity was established.

Colonel William B. Ostlund, The Fletcher School

Colonel William B. Ostlund is the deputy commander for the 75th Ranger Regiment at Fort Benning, Georgia. He earned a B.S. from the University of Nebraska at Omaha and an M.A.L.D. from Tufts University in Boston, MA. Colonel Ostlund has served in a variety of command and staff positions in the United States, Korea, Europe, the Balkans, Iraq, and Afghanistan; most notably as commander of 2d Battalion (Airborne), 503d Infantry, in Vicenza, Italy, and Kunar Province, Afghanistan, during Operation Enduring Freedom VIII. Colonel Ostlund holds a Bachelor's degree in Political Science from the University of Nebraska at Omaha and a Master of Arts in International Relations from The Fletcher School. His military education includes the Infantry Officer Basic and Advanced Courses, the Command and General Staff Officers Course, and the Joint and Combined Warfighting School.

Benjamin Paganelli, Lt Col. (ret) USAF

Col Paganelli is a partner and senior consultant with Viable International Applications (VIA) Unlimited, a research and consulting firm focused on success in the international community. In 2004 Paganelli attended the NATO Planning School and began his assignment as the chief air planner to NATO's International Security Assistance Force (ISAF), Afghanistan and in the same role for the development of NATO's first rapid response force (NRF). Paganelli joined the faculty of the United States Air Force Academy in 2007 and was named an Assistant Professor of Political Science in 2009. He is a combat veteran of Operations Northern Watch, Southern Watch, Iraqi Freedom, Enduring Freedom, and ISAF.

John P Williams, Maj. (ret) USMC, The Johns Hopkins University

John Williams is the Program Manager for Asymmetric and Irregular Challenges at the Johns Hopkins University Applied Physics Laboratory (JHU/APL). His work and research focuses on the study and analysis of Unconventional Warfare, non-violent conflict, and the evolving role of U.S. national power in a changing security environment to inform resource decisions at the national leadership level. Prior to his work at JHU/APL, John was the Deputy Director of the Center for Middle East and Islamic Studies at the United States Naval Academy (USNA). He also served as the Associate Chair of the Political Science Department

and taught courses on armed groups and threats to national security. John has presented at numerous conferences and has received several Fellowships, including the MIT Seminar XXI Program and the U.S. Army Peacekeeping and Stability Operations Institute. Through a twenty-year career as a U.S. Marine, John served as an infantry officer, an intelligence officer and as a Foreign Area Officer, and spent considerable time in the Pacific Rim, the Middle East and the Balkans. A 1988 graduate of the Virginia Military Institute with a Bachelor of Arts degree in English Literature, he also holds a Masters of Arts degree from the Naval Postgraduate School in National Security Affairs.