

SMA NDU/PRISM Panel Discussion

Fresh Options to Reinvigorate Defense Innovation for the World as It Is Now

Part of the new SMA NDU/PRISM Speaker Series, entitled

Innovation Now—New Paths Forwards

Wednesday 3 February 2021 1030-1200 EST/1530-1700 GMT

Join the Event via MS Teams

Strategic Multi-Layer Assessment (SMA) provides planning support to Commands with complex operational imperatives requiring multi-agency, multi-disciplinary solutions that are NOT within core Service/Agency competency. Solutions and participants are sought across USG and beyond. SMA is accepted and synchronized by Joint Staff/J-39 DDGO and executed by ASD (EC&P).

Agenda

<u>Panel Description</u>: US innovation is remarkable, but how can it be fostered now? We provide historical context and consider two particular challenges for the current epoch: (a) much innovation now occurs in civilian rather than defense settings (e.g., artificial intelligence [AI]); and (b) how to foster innovation amongst US alliances.

Our distinguished panelists include:

- Mr. Mike Brown (Director, Defense Innovation Unit, Former CEO of Symantec Corporation)
- Dr. Jim Lewis (Senior Vice President and Director, Strategic Technologies Program, CSIS)
- **Sir Geoff Mulgan** (University College, London, [UCL]; Former Chief Executive of Nesta, the UK's Innovation Foundation)
- Dr. Carl Hunt (US Army, Retired)

The moderator will be Dr. Nicholas Wright (Intelligent Biology, Georgetown University, UCL, and New America).

Speaker Series Description: Strategy is the art of creating power, and technological innovation has been central to creating global economic, political, and military power for at least the past two centuries. But how to foster innovation and translate it into power has differed across times and contexts. During the Cold War—which itself differed from previous epochs—defense industries spearheaded US innovation in key fields like air and space, whilst today civilian sectors dominate innovation in artificial intelligence (AI) or space. During the Cold War the US and Soviet Union both showed remarkable innovation—Sputnik sparked the ARPA's creation—and although for a few decades afterwards the US faced no true peer competitor, now China is transitioning to join the US at the technological frontier. This is the next phase of China's economic development as it transitions from catch-up imitation to innovation. Meanwhile, allies make significant contributions to US innovation, such as the UK-based pioneering AI unit DeepMind bought by Google, whilst Russia has regained its innovative mojo in niche areas, and the European Union (EU) now explicitly seeks "technological sovereignty."

So, what options does the US have to foster innovation in our contemporary world?

SMA will host a series of events to address this question, in order to help US and allied policymakers understand the challenge and to provide fresh paths forward.

Speaker Biographies

Mr. Mike Brown (Director, Defense Innovation Unit, Former CEO of Symantec Corporation)



Michael Brown is the Director of the Defense Innovation Unit (DIU) at the U.S. Department of Defense. DIU, established in 2015, fields leading-edge commercial capabilities to the military faster and more cost-effectively than traditional defense acquisition methods. With offices in Silicon Valley, Boston, Austin, and at the Pentagon, DIU is embedded in key innovation ecosystems across the country and builds direct relationships with organizations that strengthen our national security innovation base.

Previously, Michael served two years (2016-2018) as a White House Presidential Innovation Fellow at DoD. He is the co-author of a Pentagon study on China's participation in the U.S. venture ecosystem, a catalyst for the Foreign Investment Risk Review Modernization Act (FIRRMA). FIRRMA was signed into law in August 2018 and provided expanded jurisdiction to the Committee on Foreign Investment in the United States (CFIUS).

Additionally, he led the initiative for a new Defense Department-sponsored investment vehicle, National Security Innovation Capital (NSIC) to fund dual-use hardware technology companies.

Through August of 2016, Michael was the CEO of Symantec Corporation, the global leader in cybersecurity and the world's 10th largest software company with revenues of \$4 billion and more than 10,000 employees worldwide. Michael served as a member of Symantec's Board since its merger with Veritas in 2005. During his tenure as CEO (2014-2016), Michael led a turnaround developing a strategy focusing on its security business, sold its Veritas storage software business, hired a new executive leadership team and improved operating margins 300 basis points. Additionally, he led the articulation of a new company culture fostering innovation.

Michael is the former Chairman & CEO of Quantum Corporation (1995-2003), a leader in the computer storage industry. As CEO of Quantum, the company achieved record revenues of \$6 billion as the world's leader in disk drives for personal computers and the world's largest tape drive business. He joined Quantum in 1984 and served on its Board from 1995 until 2014.

After leaving Quantum, Michael served as Chairman of EqualLogic, a storage array company. Dell acquired EqualLogic in 2008 for \$1.4 billion, the largest all-cash deal for a venture-backed company up to that time.

He has been a member of the Board of Trustees of the Berklee College of Music in Boston since 2013 and previously served on the President's Advisory Council.

Michael received his BA degree in economics from Harvard University in 1980 and his MBA degree from Stanford University in 1984.

Dr. Jim Lewis (Senior Vice President and Director, Strategic Technologies Program, CSIS)

James Lewis is an internationally recognized expert on cybersecurity and technology who is a Senior Vice President and Program Director at the Center for Strategic and International Studies (CSIS). Before joining CSIS, he was a diplomat and a member of the Senior Executive Service. Lewis was the Rapporteur for the UN's three successful Group of Government Experts on Information Security. At State, he worked on a range of political-military issues and was a political advisor to several military commands. Lewis served on the U.S. delegations to P-5 talks on arms transfers and nonproliferation, negotiated bilateral agreements on transfers of military technology to Asia and the Middle East., and led the U.S. delegation to the Wassenaar Arrangement's Experts Group. He has authored numerous publications since coming to CSIS, is frequently quoted in the media, and has testified numerous times before Congress. Lewis is a Distinguished Visiting Professor of Cyber Studies at the U.S. Naval Academy's Center for Cyber Studies. He received his Ph.D. from the University of Chicago.



Sir Geoff Mulgan (University College, London, [UCL]; Former Chief Executive of Nesta, the UK's Innovation Foundation)



Sir Geoff Mulgan CBE is Professor of Collective Intelligence, Public Policy and Social Innovation at University College London (UCL), starting in the spring of 2020. Prior to that he was Chief Executive of Nesta, the UK's innovation foundation (an endowment which grew in worth to around £450m) between 2011 and the end of 2019. Between 1997 and 2004 Geoff had roles in the UK government including director of the Government's Strategy Unit and head of policy in the Prime Minister's office. From 2004 to 2011 he was the first Chief Executive of The Young Foundation. He was the first director of the think-tank Demos; and has been a reporter on BBC TV and radio.

He has a PhD in telecommunications and has been a visiting professor at London School of Economics (LSE), University College London (UCL) and Melbourne University, a senior visiting scholar at Harvard University and President of the Innovation Design Department at the Italian University for

Design (IAAD) in Turin. He has also been a regular lecturer at the China Executive Leadership Academy.

Geoff has founded or co-founded many organisations including: Demos, the Young Foundation, the Social Innovation Exchange (SIX), Uprising, Studio Schools Trust, Action for Happiness, the Alliance for Useful Evidence, States of Change, The Australian Centre for Social Innovation, Maslaha and Nesta Italia.

He has co-chaired a World Economic Forum group looking at innovation and entrepreneurship in the fourth industrial revolution.

He has advised many governments, foundations and companies, chaired an international advisory committee for the Mayor of Seoul and has sat on advisory committees for the Prime Minister's office in the United Arab Emirates, the Scottish Government and SITRA, the Finnish innovation agency. He will be a World Economic Forum Schwab Fellow from 2019-22. He's a board member of Reimagine Europa and the Culture Trust. He has pioneered many ideas used by governments, civil society and business – including joined-up government, anticipatory regulation, experimentalism, social investment and social impact bonds, open innovation and creative economy strategies, collective intelligence and data (these are covered in more detail in the 'ideas' section on this site).

Geoff is working from 2020 onwards with Demos Helsinki and the New Institute in Hamburg. At UCL he is a co-lead of the new International Public Policy Observatory on COVID (from December 2020). From January 2021 he will be a member of the International Advisory Board of the European Parliament's Science and Technology Options Assessment panel (STOA).

Geoff's books include 'The Art of Public Strategy' (Oxford University Press), 'Good and Bad Power' (Penguin), 'The Locust and the Bee' (Princeton University Press) and 'Big Mind: how collective intelligence can change our world' (Princeton University Press). His latest book – 'Social innovation: how societies find the power to change' – was published in late 2019 by Policy Press. His books have been translated into many languages including - Chinese, Arabic, Korean, Russian, Malay, Italian, Punjabi, Turkish, Romanian and Greek. More information on these and other books can be found in the books section of this site.

Geoff has given TED talks on the future economy, happiness and education (these and others can be found in the videos section of this site). He was knighted in the Queen's Birthday Honours in 2020

Dr. Carl Hunt (US Army, Retired)

Dr. Carl Hunt is currently an associate for leadership training and development for North American Training and Development, Houston, Texas, and the former owner and chief scientist of Pioneer Cyberspace Strategies, LLC, Woodland Park, CO. Prior positions included the Research Director for the Net Assessment Branch of the National Counterterrorism Center's Directorate of Strategic and Operational Planning, and the senior scientist for the USAF Institute of Technology's (AFIT) 2012-13 American Cyberspace Science, Education and Operations Initiative. As a research staff member of the Institute for Defense Analyses, he participated in a variety of Strategic Multilayer Assessment projects for the US Department of Defense's Research and Engineering Office.

Dr. Hunt's current study areas include research, development and application of leadership and team building techniques for cyberspace operations domains, and the application of complex systems approaches to leadership and power. He is the

principal co-author and editor of Paradoxes of Power: A Collection of Essays on Failed Leadership - and How to Fix It (Amazon, September, 2020).

Dr. Hunt served 30 years in the Army both as a military policeman and as an information systems technology officer, retiring from active-duty service at the rank of Colonel. Dr. Hunt holds the Ph.D. in Information Technology from George Mason University and is a graduate of the United States National War College. Dr. Hunt was also the primary editor and contributor to the Paradoxes of Power weblog and continues to write and research on the nature of information technology and science, as well as leadership and power in the Information Age.

Dr. Nicholas Wright (Intelligent Biology, Georgetown University, UCL, and New America)

Dr. Nicholas Wright is an affiliated scholar at Georgetown University, honorary research associate at University College London (UCL), Consultant at Intelligent Biology and Fellow at New America. His work combines neuroscientific, behavioural and technological insights to understand decision-making in politics and international confrontations, in ways practically applicable to policy. He leads international, interdisciplinary projects with collaborators in countries including China, the U.S., Iran and the UK. He was an Associate in the Nuclear Policy Program, Carnegie Endowment for International Peace, Washington DC and a Senior Research Fellow in International Relations at the University of Birmingham, UK. He has conducted work for the UK Government and U.S. Department of Defense. Before this he examined decision-making using functional brain imaging at UCL and in the Department of Government at the London School of Economics. He was a clinical neurologist in Oxford and at the National Hospital for Neurology. He has published academically (some twenty publications, e.g. Proceedings of the Royal Society), in general publications such as the Atlantic and Foreign Affairs, with the Pentagon Joint Staff (see www.intelligentbiology.co.uk) and has appeared on the BBC and CNN. Wright received a medical degree from UCL, a BSc in Health Policy from Imperial College London, has Membership of the Royal College of Physicians (UK), has an MSc in Neuroscience and a PhD in Neuroscience both from UCL.

