



Ministry  
of Defence

# SMA UK MoD Panel Discussion

## Post-COVID Scenarios – and What Data & Tech Choices Can Steer Us to a Better Future?

*Part of the SMA UK MoD Speaker Series, entitled*

*COVID-19: Second- and Third-Order Effects—System  
Shocks, Disruption, and Emergence*

**Thursday 10 September 2020  
1130-1300 Eastern Time/1630-1800 Britain Time**

**[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

**Panel Overview:** The pandemic is not just a global health crisis. A downturn in Western economies could boost a rising China, while a global depression could breed support for protectionism. International bodies designed to safeguard public health appear weak and unable to contain the crisis, and alliances with transatlantic and transpacific partners are fraying as nations turn inward and close borders. Will the coronavirus tip the balance against global cooperation and strengthen the forces of nationalism, populism, and authoritarianism?

Moreover, before COVID-19, there were three trends occurring in the world that challenged the Westphalian notion of nation-states with complete sovereignty over citizens within their borders. The Westphalian ideal is the pattern of nation-states, with a rule of law defined by geographical borders, that emerged out of the Thirty Years War in Europe and replaced a patchwork quilt of overlapping medieval loyalties with more solid blocks of unitary rule under the rule of a sovereign. Pre-COVID, the three accelerating trends that challenged this Westphalian notion of nation-states were:

- the Internet and increasing transnational digitalization;
- increasing global commerce; and
- the global flow of humans, plants, animals, and infectious diseases.

Now, in the turbulent COVID-19 era, these trends are being challenged, and it is unclear if the post-COVID era will strengthen the idea of Westphalian nations states or result in some completely new way of organizing. This discussion will consider both multiple post-COVID scenarios for the world and what data and technology choices might steer us to a better future?

**Series Description:** The US Joint Staff Strategic Multilayer Assessment (SMA) and the UK Defence Science Technology Laboratory (Dstl; part of the United Kingdom Ministry of Defence [UK MoD])<sup>1</sup> have partnered to create the “COVID-19: Second- and Third-order Effects—System Shocks, Disruption, and Emergence” speaker series. With all of the focus on the very important tactical aspects of arresting the infectious disease and preserving life in response to the novel coronavirus (first-order effects), the aim of this series is to elevate the conversation to a more strategic level and consider the second- and third-order effects across global systems. In this context, it is perhaps helpful to view COVID-19 as a *Gray Rhino*,<sup>2</sup> one of many highly probable, high-impact, yet underappreciated threats that could present similar patterns of systemic shocks and disruption in the future.

Our approach in this series is to ask gifted thinkers to apply a combination of foresighting and sensemaking for the SMA and the UK MoD communities. Speakers will explain what they are watching, communicate how they are making sense of these observations and patterns (analytic approaches), and give us a hint of what we should be keeping an eye on (e.g., Are there historical patterns? Should we expect transformative changes to the global order and who might be advantaged by them? Where do the speakers see fragility, anti-fragility, adaption, and even perhaps emergent behaviors that may have consequences?). Our goals are to reach beyond monitoring; to actively understanding the breadth, complexity, and impact on national defense and security with the clear aim of working towards mitigation, resilience, and sustainability; and to turn thought into action.

What do the second- and third-order impacts from the Gray Rhino that is COVID-19 teach us about future Gray Rhinos beyond infectious disease? What does this Gray Rhino reveal about the often-underappreciated relationships between national security, economic and financial systems, governance, populations and the social contract, and political stability throughout the globe? How might this understanding shape our decisions going forward? The future global world order, technology and COVID, the health and security nexus, societal resilience, and the utility of the systems thinking, and net assessment are just a few of the issues that we hope to explore in this series.

**Speakers:** The speakers for this discussion are provided below. **All are from the Atlantic Council’s GeoTech Center, Strategic Foresight Initiative, and Center for Security and Emerging Technology.**

- **Dr. David A. Bray**
- **Dr. Matthew J. Burrows**
- **Dr. Divya Chander**
- **Dr. Jason Matheny**

---

<sup>1</sup> SMA POC: Nicole Peterson, [npeterson@nsiteam.com](mailto:npeterson@nsiteam.com); UK POC: Ella Fleming, [efleming@mail.dstl.gov.uk](mailto:efleming@mail.dstl.gov.uk)

<sup>2</sup> Popularized by Michele Wucker, a *gray rhino* is a highly probable, high impact yet neglected threat: kin to both the elephant in the room and the improbable and unforeseeable black swan. Gray rhinos are not random surprises but occur after a series of warnings and visible evidence.

# Speaker Biographies

## Dr. David A. Bray

Dr. David A. Bray has served in a variety of leadership roles in turbulent environments, including bioterrorism preparedness and response from 2000-2005, time on the ground in Afghanistan in 2009, serving as the non-partisan Executive Director for a bipartisan National Commission on R&D, and providing leadership as a non-partisan federal agency Senior Executive. He accepted a leadership role in December 2019 to incubate a new global Center with the Atlantic Council. He also provides strategy to both Boards and start-ups espousing human-centric principles to technology-enabled decision making in complex environments. He was also named a Senior Fellow with the Institute for Human-Machine Cognition in starting in 2018. Business Insider named him one of the top “24 Americans Who Are Changing the World” under 40 and he was named a Young Global Leader by the World Economic Forum for 2016-2021. From 2017 to the start of 2020, David served as Executive Director for the People-Centered Internet coalition Chaired by Internet co-originator Vint Cerf, focused on providing support and expertise for community-focused projects that measurably improve people’s lives using the internet. He also was named a Marshall Memorial Fellow and traveled to Europe in 2018 to discuss Trans-Atlantic issues of common concern including exponential technologies and the global future ahead. Later in 2018, he was invited to work with the U.S. Navy and Marines on improving organizational adaptability and to work with U.S. Special Operation Command’s J5 Directorate on the challenges of countering misinformation and disinformation online. He has received both the Joint Civilian Service Commendation Award and the National Intelligence Exceptional Achievement Medal.

## Dr. Matthew J. Burrows

Dr. Mathew J. Burrows serves as the director of the Atlantic Council’s Foresight, Strategy, and Risks Initiative in the Scowcroft Center for Strategy and Security. He was appointed counselor to the National Intelligence Council (NIC) in 2007 and director of the Analysis and Production Staff (APS) in 2010. As director of APS, Burrows was responsible for managing a staff of senior analysts and production technicians who guide and shepherd all NIC products from inception to dissemination. He was the principal drafter for the NIC publication *Global Trends 2030: Alternative Worlds*, which received widespread recognition and praise in the international media and among academics and think tanks. In 2005, he was asked to set up and direct the NIC’s new Long Range Analysis Unit, which is now known as the Strategic Futures Group.

## Dr. Divya Chander

Dr. Divya Chander is an anesthesiologist, critical care physician, and neuroscientist who also works at the intersection of health, data, technology, and data security. She is a practicing physician, Chair of Neuroscience and Faculty of Medicine at Singularity University, Visiting Scholar in Medicine at Stanford (where she was faculty for 8 years), and Senior Non-Resident Fellow at the Atlantic Council GeoTech Center. She leads 2 companies co-founded during the pandemic – Lucidify, a remote brain monitoring platform, and Plexxus, a company building the world’s connected global immune system. Dr. Chander also served on a NASA task force for COVID19, and both co-chairs and directs the post-pandemic global health initiative for OneShared.World. Her research interests center around mapping human consciousness, how consciousness will be altered by human augmentation, and how mapping consciousness in humans may enable us to recognize it in non-human, intelligent beings (both on and off-planet, e.g. through initiatives like SETI). Dr. Chander also contributes to space life sciences and medicine. A finalist for astronaut selection and an alumnus of the International Space University, Dr. Chander has performed remote simulations of trauma rescues, anesthesia and surgery in Mars analogue settings. In addition, she has also been involved with a consortium that elaborated a road-map for studying the effect of microgravity and radiation on the nervous system, cardiovascular system, cognition and sleep. Her desire is to someday see the Earth rise from the surface of the moon.



## **Dr. Jason Matheny**

Jason Matheny is Founding Director of Georgetown's Center for Security and Emerging Technology (CSET). Previously he was Assistant Director of National Intelligence, and Director of IARPA, responsible for the development of breakthrough technologies for the U.S. intelligence community. Before IARPA, he worked at Oxford University, the World Bank, the Applied Physics Laboratory, the Center for Biosecurity, and Princeton University, and was the co-founder of two biotechnology companies.

Jason is a member of the National Security Commission on Artificial Intelligence and the National Academies' Intelligence Community Studies Board; is a recipient of the Intelligence Community's Award for Individual Achievement in Science and Technology, the National Intelligence Superior Service Medal, and the Presidential Early Career Award for Scientists and Engineers; and was named one of Foreign Policy's "Top 50 Global Thinkers." He has served on various White House committees related to artificial intelligence, biosecurity, high-performance computing, and quantum information science. He co-led the National AI R&D Strategic Plan released by the White House in 2016 and was a member of the White House Select Committee on AI, created in 2018. He holds a Ph.D. in applied economics from Johns Hopkins University, an MPH from Johns Hopkins University, an MBA from Duke University and a B.A. from the University of Chicago.

