

A Summit on Ending Biological Threats

Monday, September 26, 2022

Location & Logistics

Venue:

Hotel Washington
515 15th St NW
Washington, DC 20004

Room:

The main portion of the Summit will be held in the Grand Ballroom. Upon entering at the main entrance on F Street, proceed straight back and down the flight of stairs (elevators are also available). We will do our best to have members of the team available at the entrance to escort people to the Grand Ballroom.

Transit:

The Hotel Washington is a 5-minute walk from Metro Center, and is also walking distance from the Federal Triangle Metro Station and the McPherson Square Metro Station.

There is a parking garage directly across the street from the F Street entrance. Hotel Washington also provides valet parking.

COVID-19 Safety:

We recommend wearing masks when not actively eating, drinking, or speaking on stage, and kindly request that guests take a rapid COVID-19 test before arriving at the event and avoid attending if positive. We will have a limited number of tests and masks available upon check-in.

Chatham House Rule:

All discussions will be held under the Chatham House Rule, meaning participants are free to use the information received, but neither the identity nor the affiliation of the speaker, nor that of any other participant, may be revealed. No speakers will be recorded. CSR will prepare a follow-up report to the event, but no speaker identities will be mentioned.

Agenda

- 8:30am** Check-In for Attendees Begins
Hotel Washington
515 15th St NW
Washington, D.C. 20004
Grand Ballroom
- 9:00am - 9:30am** Continental Buffet Breakfast Available
- 9:10am - 9:15am** Welcome and Introduction to the Summit
[Christine Parthemore](#), CEO, Council on Strategic Risks
- 9:15am - 10:00am** Panel Discussion #1
Topic: How innovation and investments are evolving as the world nears three pandemic years
- Panelists:**
[Dr. Vikram \(Vik\) Bajaj](#), Managing Director, Foresite Capital
[Dr. Jason Kelly](#), Co-Founder and CEO, Ginkgo Bioworks
[Dr. Kevin O'Connell](#), Vice President, In-Q-Tel
- Moderator:**
Christine Parthemore, CEO, Council on Strategic Risks
- 10:15am - 10:30am** Break and Transition to Working Session #1
- 10:30am - 11:45am** Working Session #1
(Topic and room assignments will be posted Monday morning)
- Pathogen Early Warning
 - The Future of Rapid Medical Countermeasure Development and Manufacturing
 - Strategic Communications and Increasing Ambitions for Addressing Biological Threats
- 11:45am - 12:00pm** Transition to Lunch
Grand Ballroom

12:00pm - 1:00pm

Buffet Lunch & Panel Discussion #2

Topic: Bold & integrated strategy to address the full range of biological threats

Panelists:

[Dr. Dan Dodgen](#), Senior Advisor for Strategy, Policy, Planning, and Requirements, U.S. Health and Human Services

[Hon. Robert \(Bob\) Kadlec](#), MD, Senior Counsel, Senate HELP Committee

[Dr. Harshini Mukundan](#), Lawrence Berkeley National Laboratory

Moderator:

Hon. Andrew Weber, Senior Fellow, Council on Strategic Risks

1:00pm - 1:15pm

Break and Transition to Working Session #2

1:15pm - 2:15pm

Working Session #2

- Pathogen Early Warning
- Public-Private Partnerships - Opportunities, Challenges, and Next Steps
- Biodefense and Public Health: Building Towards a Holistic Capability

2:15pm - 2:30pm

Break & Transition to Grand Ballroom

2:30pm - 3:50pm

Lightning Talks and Q&A

Main Themes: Are we sustaining & building on advances stemming from COVID response? What are the most important initiatives for everyone to be aware of? How do we work to make life sciences work safer and more secure?

2:30pm: [Hon. Ali Nouri, Ph.D.](#), Assistant Secretary at the Office of Congressional and Intergovernmental Affairs, DoE

2:50pm: [Dr. Scott Oleson](#), Epidemiology Group Leader, Biobot Analytics

3:10pm: [Dr. Albert Swiston](#), Apriori Bio

3:30pm: [Dr. Kevin Esvelt](#), Sculpting Evolution Group, MIT

3:50pm - 4:00pm

Coffee Break

4:00pm - 4:30pm

The Importance of Data for Forecasting

Speaker:

[Dr. Dylan George](#), Center for Forecasting and Analysis, CDC

4:30pm - 5:15pm

Panel Discussion #3

Topic: Increasing policy ambition for addressing biological threats

Panelists:

[Dr. Hillary Carter](#), Deputy Senior Director for Global Health Security and Biodefense, NSC

[Dr. Andrew Hebbeler](#), Principal Assistant Director for Health and Life Science, Office of Science and Technology Policy

Moderator:

[Dr. Yong-Bee Lim](#), Deputy Director, Council on Strategic Risks

5:15pm - 5:20pm

Closing Remarks and Announcements

Hon. Andrew Weber, Senior Fellow, Council on Strategic Risks

5:20pm - 6:00pm

Networking Reception & Happy Hour

Grand Ballroom

6:00pm - 8:00pm

Dinner

Grand Ballroom

Speakers

Dr. Hillary Carter is the Deputy Senior Director for Global Health Security and Biodefense on the National Security Council. Prior to her role at the National Security Council, Dr. Carter was the Senior Advisor for Biosecurity and a Team Chief in the Office of Cooperative Threat Reduction (CTR) at the U.S. Department of State. Dr. Carter also served as the Acting Deputy Team Chief for the Biosecurity Engagement Program (BEP) and as a Program Officer for BEP programs in South and Southeast Asia, and the Middle East. Dr. Carter has worked closely with foreign counterparts, the U.S. Government interagency, non-governmental organizations, and international organizations to implement programs that strengthen global biosecurity. She received a Ph.D. in Cell and Developmental Biology from Vanderbilt University.

Dr. Daniel Dodgen is Senior Advisor for Strategy, Policy, Planning, and Requirements at U.S. Department of Health and Human Services. Prior to this role, Dr. Dodgen directed the office of Operational Policy and Strategic Planning for the Assistant Secretary for Preparedness and Response. This encompasses mental health, community resilience, national health security, health system policy, and at-risk individuals. Dr. Dodgen served as the Executive Director of the White House directed national advisory group on disaster mental health and led the nation's mental health response to Hurricanes Harvey, Irma, Maria, Katrina, Sandy, and others; the H1N1 epidemic, the BP oil spill, the Boston Marathon bombing, multiple mass shootings, and other natural and manmade disasters. He was one of the lead authors for *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. Dr. Dodgen also served as an advisor to the government of Greece and the State Department for the 2004 Olympics in Athens. Before joining HHS, Dr. Dodgen was Senior Federal Affairs Officer at the American Psychological Association (APA) following a Fellowship with the U.S. House of Representatives. With the Red Cross, he responded to the Los Angeles riots, the Northridge earthquake, the Oklahoma City bombings, and the September 11 Pentagon attack. He is on the Board of Directors of the International Association of Applied Psychology and is a Harvard Senior Executive Fellow. He is also a licensed clinical psychologist in Washington, DC.

Dr. Kevin Esvelt is Director of the Sculpting Evolution Group at the Massachusetts Institute of Technology. The group seeks to address difficult ecological problems for the benefit of humanity and the natural world. Dr. Esvelt leads the Nucleic Acid Observatory project, which aims to pioneer widespread, pathogen-agnostic, untargeted metagenomic sequencing of the environment to provide reliable early warning of all biological threats – including those we have never seen before. Prior to joining the MIT Media Lab, Dr. Esvelt invented phage-assisted continuous evolution (PACE), a synthetic microbial ecosystem for rapidly evolving biomolecules, in the laboratory of David R. Liu at Harvard University. At the Wyss Institute, Dr. Esvelt worked with George Church to develop the

CRISPR system for genome engineering and regulation, and he began exploring the use of bacteriophages and conjugation to engineer microbial ecosystems. Dr. Esvelt is credited as the first to describe how CRISPR gene drives could be used to alter the traits of wild populations in an evolutionarily stable manner. Recently, he and his Sculpting Evolution group devised a new form of technology, called “daisy drives,” which would let communities aiming to prevent disease alter wild organisms in local ecosystems. By emphasizing universal safeguards and early transparency, he has worked to ensure that community discussions always precede and guide the development of technologies that will impact the shared environment.

Dr. Dylan George is the Director of Operations at the Center for Forecasting and Outbreak Analytics (CFA). Before joining CDC, Dr. George was a vice president at Ginkgo Bioworks, where he helped develop improved real-time infectious disease monitoring capabilities and analytics for pandemic response. Prior to his role at Ginkgo, Dr. George was a vice president at In-Q-Tel (IQT), where he vetted life science, healthcare deals, and developed science and technical strategy to strengthen capacity within the United States to counter biological threats from infectious disease. Recently, Dr. George served on the Biden-Harris transition team working on national security policy for the COVID-19 response, and on the agency review team for the Department of Health and Human Services. Dr. George served Dr. John Holdren, assistant to the president for science and technology and director of the White House Office of Science and Technology Policy (OSTP), as senior policy advisor for biological threat defense. During 2013–2014, Dr. George worked in the Department of Health and Human Services within the Biomedical Advanced Research and Development Authority, where he led a team that developed analytical approaches to assess risks from emerging infectious diseases and other mass casualty events. During 2009–2013, Dr. George worked within the Department of Defense on anticipating and assessing infectious disease risks that would affect mission readiness and force health protection. Dr. George worked at the National Science Foundation within the divisions of Biological Infrastructure and Environmental Biology. While at the National Science Foundation, Dr. George also supported the National Ecological Observatory Network and the Ecology of Infectious Diseases program.

Dr. Andrew Hebbeler is Principal Assistant Director for Health and Life Science in the White House Office of Science and Technology Policy (OSTP). Prior to his role at OSTP, he was a senior director and lead scientist for global biological policy and programs at the Nuclear Threat Initiative. He previously served as deputy director of the U.S. Department of State’s Office of Science and Technology Cooperation and as a senior science, technology, and innovation adviser to the Secretary of State. He also led U.S. Cooperative Threat Reduction activities, including expansion of Nunn-Lugar cooperative threat reduction programs into Africa. From 2013-2015, he was Assistant Director for Biological and Chemical Threats at the Office of Science and Technology Policy in the Obama Administration. In federal service, Hebbeler led a wide range of policy and program efforts at the nexus of health, science, and security including combating the urgent rise of antibiotic-resistant bacteria, launching the global health security agenda, strengthening federal and

institutional oversight of life sciences dual use research, and responding to the Ebola epidemic in West Africa. He was a principal architect of the U.S. response to high-profile incidents at federal labs in 2014 involving smallpox discovery, anthrax exposure, and pandemic influenza contamination. Most recently, Hebbeler oversaw U.S. bilateral and multilateral science and technology cooperation, including with China. He led successful U.S. S&T negotiations with China on intellectual property and spearheaded a new global initiative aimed at promoting and protecting the integrity of the international research and development system.

Hon. Robert Kadlec, MD is Senior Counsel to the Senate Health, Education, Labor and Pensions Committee in the United States Congress. Dr. Kadlec previously served as the Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health & Human Services (HHS). Dr. Kadlec spent more than 20 years as a career officer and physician in the United States Air Force before retiring as a Colonel. Over the course of his career, he has held senior positions in the White House, the U.S. Senate, and the Department of Defense. Prior to his role as ASPR, he served as the Deputy Staff Director to the Senate Select Committee on Intelligence. Dr. Kadlec previously served as staff director for Senator Richard Burr's subcommittee on bioterrorism and public health in the 109th Congress. In that capacity, he was instrumental in drafting the Pandemic and All-Hazard Preparedness Bill which was signed into law to improve the nation's public health and medical preparedness and response capabilities for emergencies, whether deliberate, accidental, or natural. Dr. Kadlec also served at the White House from 2002 to 2005 as director for biodefense on the Homeland Security Council, where he was responsible for conducting the biodefense end-to-end assessment, which culminated in drafting the National Biodefense Policy for the 21st Century. He served as Special Assistant to President George W. Bush for Biodefense Policy from 2007 to 2009. Earlier in his career, he served as the Special Advisor for Counter proliferation Policy at the Office of the Secretary of Defense, where he assisted DOD efforts to counter chemical, biological, radiological, and nuclear (CBRN) threats in the wake of 9/11 and contributed to the FBI investigation of the anthrax letter attacks.

Dr. Jason Kelly is CEO and Co-founder of Ginkgo Bioworks. Ginkgo is a synthetic biology company headquartered in Boston, MA that programs cells for customers in the chemical, pharmaceutical, food and energy industries. Prior to founding Ginkgo, Jason received B.S. degrees in Chemical Engineering and Biology and a PhD in Biological Engineering all from MIT.

Dr. Harshini Mukundan is a Scientist and Program Manager at Lawrence Berkeley National Laboratory. Prior to her role at Berkeley Lab, she served in several positions at Los Alamos National Laboratory (LANL), including Team Leader for Chemistry for Biomedical Applications and Group Leader for Physical Chemistry and Applied Spectroscopy. Dr. Mukundan was also a National Institutes of Health Fellow at LANL. As an American Association for the Advancement of Science IF/THEN Ambassador, Dr. Mukundan works to support women in science, technology,

engineering and mathematics by empowering current innovators and inspiring the next generation of pioneers.

Hon. Ali Nouri, Ph.D. is Assistant Secretary for Congressional and Intergovernmental Affairs in the U.S. Department of Energy. He was previously serving as the Principal Deputy Assistant Secretary in that office. Prior to joining the Biden Administration, Dr. Nouri was the President of the Federation of American Scientists, a public policy organization focused on countering WMDs, addressing emerging infectious diseases, and crafting solutions to energy and innovation challenges. Under his leadership, the organization also tackled science denialism and COVID-19 misinformation by providing timely, science-based information to policy makers and to the public. Previously, Dr. Nouri served as an advisor in the U.S. Senate for nearly a decade, including six years for a member of the Senate Committee on Energy and Natural Resources. During his time in the Senate, he served in various positions including as an Energy and Environment Advisor, a National Security Advisor, and as a Legislative Director. Prior to that, Dr. Nouri served as an advisor to the office of UN Secretary General Kofi Annan where he developed initiatives to block biotechnology from being used to produce biological weapons. He earned a B.A. in biology from Reed College and a Ph.D. in molecular biology from Princeton University.

Dr. Kevin O’Connell is Vice President of In-Q-Tel, where he focuses on investment opportunities in the life sciences, particularly companies producing technologies that may be crucial to pandemic response. He has previously held research positions at the U.S. Army Edgewood Chemical Biological Center and at Michigan State University. Dr. O’Connell received his Ph.D. in bacteriology from the University of Wisconsin-Madison.

Dr. Scott Olesen is the Epidemiology Group Lead at Biobot Analytics. Previously, he was a Research Analyst in the Center for Public Health Preparedness and Resilience in the Institute for Public Research at CNA, where he helped advise the U.S. Navy, Federal agencies, and state and city officials on their COVID-19 responses. As an independent epidemiological consultant with Dr. Yonatan Grad, Dr. Olesen co-designed a model used to inform the design of the National Basketball Association’s “bubble” for the 2020 play-offs. Before the COVID-19 pandemic, he was Scientific Director at OpenBiome, a non-profit stool bank based in Boston. OpenBiome provides material for fecal microbiota transplantation (FMT) for use in treating *C. difficile* infection and for research.

Dr. Albert Swiston is the Vice President and Head of Data Science at Apriori Bio. Prior to his role at Apriori Bio, Dr. Swiston was Vice President and Head of Data Science at Volastra Therapeutics. He previously served as the Executive Director of Data Science and Scientific Informatics at Merck and was a Principal Investigator at the MIT Lincoln Laboratory where he worked as a part of the Bioengineering Systems and Technologies group. Dr. Swiston received his Ph.D. in Materials Science and Engineering from MIT.

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