

## Government-University-Industry Research Roundtable January 2023 Webinar

### **'One Health' Approach for Effective Biodefense and Global Health Security**

#### **Abstract:**

The Government-University-Industry Research Roundtable will convene a webinar to discuss the latest [National Biodefense Strategy and Implementation Plan](#). The webinar will focus on the collaborative and transdisciplinary 'One Health' approach, as discussed in the Strategy, for effective biodefense and global health security. The speakers (below) will discuss the role of cross-sectoral partnerships and innovative approaches to achieve the goals and objectives articulated in the Strategy.

#### **Speaker Biographies:**



**Dr. Casey Barton Behravesh** is the Director of CDC's One Health Office in the National Center for Emerging and Zoonotic Infectious Diseases and a Captain in the United States Public Health Service. She serves as the agency's lead for implementing a multisectoral, One Health approach to public health that connects human, animal, and environmental health, enabling CDC and partners to address emerging zoonotic and infectious diseases and other shared health threats at the human-animal-environment interface. Dr. Barton Behravesh is experienced in bringing together human, animal, and environmental health officials at the local, state, federal, and global levels to bridge gaps related to emerging zoonotic and infectious diseases. During her extensive career at CDC, Dr. Barton Behravesh has done everything from investigating outbreaks in the field to conducting epidemiologic research related to the prevention and control of zoonotic, foodborne, and vector-borne diseases. She also serves as the head of the Collaborating Centre for Emerging and Re-emerging Zoonotic Diseases for the World Organisation for Animal Health (OIE). In her leadership role at CDC, she enjoys mentoring students and new staff to help them reach their career goals.

Dr. Barton Behravesh has a Master of Science degree in Veterinary Parasitology from Texas A&M University. She received her Doctor of Veterinary Medicine degree from Texas A&M University College of Veterinary Medicine and a Doctor of Public Health degree from the University of Texas Health Science Center at Houston School of Public Health. She also trained as CDC Epidemic Intelligence Service (EIS) officer. She is a diplomate of the American College of Veterinary Preventive Medicine, and has been the recipient of numerous awards, including CDC's James H. Steele Award for outstanding work on veterinary public health and One Health issues.



**Dr. Cyril Gerard Gay** has worked in the animal health research field for the last 25 years holding several positions of increasing responsibility in the federal government and the pharmaceutical industry. As Chief, Biotechnology Section, Center for Veterinary Biologics (CVB), United States Department of Agriculture (USDA), Dr. Gay developed the procedures for licensing molecular vaccines that led to the first license for a live recombinant vectored vaccine. In the pharmaceutical industry (SmithKline Beecham and Pfizer Animal Health), Dr. Gay led several cross-functional teams that successfully developed and licensed veterinary vaccines for companion animals and livestock. As Director, Global Product Development, Pfizer Inc., Dr. Gay developed strategic and tactical plans that interfaced R&D, clinical development, manufacturing, marketing, and product life-cycle management.

Dr. Gay joined Agricultural Research Service (ARS), USDA, in 2002. Dr. Gay currently holds the position of Senior National Program Leader and provides program direction and national coordination for the Department's intramural animal health research program, with focus on eight research laboratories located in Ames, Iowa, East Lansing, Michigan, Clay Center, Nebraska, Athens, Georgia, Orient Point, New York, Beltsville, Maryland, Pullman, Washington, and Manhattan, Kansas. Dr. Gay provides technical support within the interagency in the implementation of the President's National Strategy for Countering Biological Threats, including the National Bio and Agro Defense Facility (NBAF). Dr. Gay launched the Global African Swine Fever Research Alliance (GARA) in 2013 and currently serves as its Executive Secretary. Dr. Gay also serves as the Executive Secretary of the Global Foot-and-Mouth Research Alliance (GFRA).

Dr. Gay was the 2010 recipient of the USDA Secretary's Honors Award for interagency response to the pandemic H1N1 influenza outbreak; the ARS Special Administrator's Award for outstanding and rapid research support for pandemic H1N1; the USDA Secretary's Honor Award for Emergency Response to the 2013 Chinese H7N9 avian influenza outbreak and received a U.S. Presidential Rank Award in 2017. Dr. Gay obtained a B.Sc. in Chemistry and a Doctor of Veterinary Medicine from Auburn University, and a Ph.D. in Microbiology from The George Washington University.



**Dr. Joanna M. Prasher** has worked in public health emergency preparedness for more than 19 years and currently serves as the Senior Advisor for Medical Care and Countermeasures and the Team Lead for the Cross-Agency Preparedness Team within the Center for Preparedness and Response at the Centers for Disease Control and Prevention (CDC). In these roles she provides strategic coordination of medical countermeasure and chemical, biological, radiological and nuclear-related preparedness activities conducted across CDC and with federal interagency partners, in consideration of the needs and capabilities of state, tribal, local and territorial public health partners.

Prior to joining CDC in 2016, Dr. Prasher worked in medical countermeasure preparedness and response for 12 years with the Office of the Assistant Secretary for Preparedness and Response (ASPR). Dr. Prasher received a Bachelor's degree in Biology from Kalamazoo College (Magna Cum Laude), a Masters in Public Health from Emory University's Rollins School of Public Health, and a doctorate in Experimental Pathology from the University of Utah. She conducted post-doctoral work at Erasmus University in The Netherlands on the common molecular mechanisms underlying both myeloid leukemia and aging before the anthrax attacks of 2001 motivated her to move into biodefense policy.



**David Stiefel** is the Director for Biodefense on the National Security Council (NSC). At the NSC, David is focused on the U.S. Government's strategic approach to countering biological weapons, enhancing pandemic preparedness, and achieving global health security. David led President Biden's biopreparedness review, which culminated in the signing and release of National Security Memorandum -15 and the National Biodefense Strategy and Implementation Plan. On the NSC, David also focuses on efforts to improve our capabilities to respond faster, more efficiently, more effectively, and more equitably to biological incidents. David also played a key role in the drafting, signing, and release of National Security Memorandum -16 on Strengthening the Security and Resilience of U.S. Food and Agriculture. In addition to his work on the NSC, David is an adjunct faculty at Georgetown University within Biomedical Graduate Education and an adjunct faculty at the College of William and Mary within the Government Department.

David previously worked as an Environmental Consultant, toured full time professionally in a band, worked as a defense contractor for the Defense Threat Reduction Agency – focusing on Counter-Weapons of Mass Destruction Systems/Technology and supporting the Autonomy Community of Interest, and worked as a Presidential Management Fellow, first at the United States Department of Agriculture's (USDA) Natural Resources Conservation Service and subsequently for USDA's Office of Homeland Security. With USDA, David's portfolio focused

on defending against agroterrorism, biodefense policy and coordination, critical infrastructure security and resilience, global health security, and the Biological Weapons Convention.

David has a Bachelor's degree in Geology & Environmental Sciences, Media Arts & Design, and Jazz Studies from James Madison University ('07); a Master's degree from Georgetown University in Biohazardous Threat Agents and Emerging Infections Disease ('15); and he is currently a PhD Candidate at the University of Virginia in the doctoral program for Foreign Affairs. His PhD dissertation is focused on taboo against the utilization of biological weapons.