



BIPARTISAN
COMMISSION
ON
BIODEFENSE

September 17, 2019

**Hudson Institute
1201 Pennsylvania Avenue, NW, 4th floor, Washington, DC 20004**

CYBERBIO CONVERGENCE: CHARACTERIZING THE MULTIPLICATIVE THREAT

Objectives

Provide the Blue Ribbon Study Panel on Biodefense with a better understanding of: (1) the convergence of cyber- and biological sciences; (2) the vulnerability of pathogen and biomanufacturing data systems; (3) biological risk mitigation; and (4) the vulnerability of intellectual property and the national and global bioeconomy. Provide academic, industry, and law enforcement experts with the opportunity to provide their perspectives, experiences, challenges, and recommended solutions with regard to cyberbiosecurity. Address public and private sector roles and responsibilities for cyberbiosecurity.

Schedule

10:00 am – 10:30 am **Opening Remarks**

10:30 am – 11:00 am **Congressional Perspective**

Sitting Member of Congress will discuss the role of the Legislative Branch in ensuring that the public and private sectors work to identify and eliminate cyberbiosecurity threat and vulnerabilities.

Representative Chrissy Houlahan (D-PA)

Member, House Committee on Armed Services, U.S. House of Representatives

11:00 am – 11:10 am **Break**

11:10 am – 12:10 pm **Panel One – Vulnerability of Pathogen and Biomanufacturing Data Systems**

Academic and private sector experts will address the vulnerability and misuse of pathogen databases, digital sequences, software to design novel DNA sequences, biomanufacturing supply chain data systems, and the use of DNA to store information.

Kelvin H. Lee, PhD

Director, National Institute for Innovation in Manufacturing Biopharmaceuticals;
Gore Professor, Department of Chemical Engineering, Delaware Biotechnology
Institute, University of Delaware

Corey Hudson, PhD

Senior Member, Technical Staff, Sandia National Laboratories

John M. Clerici, JD

Principal, Tiber Creek Partners, LLC

12:10 pm – 12:50 pm Lunch and Video - Germ Warfare: A Very Graphic History
Video from a Blue Ribbon Study Panel on Biodefense discussion of the Panel's graphic novel, Germ Warfare: A Very Graphic History. Filmed at the 2019 Awesome-Con in Washington, D.C.

12:50 pm – 1:50 pm Panel Two – Risk Associated with Misuse of Biotechnology
Industry and academic experts will address methods to reduce the risks associated with misuse of emerging technologies in the life sciences, the ramifications for cyberbiosecurity, and the adequacy of federal leadership in this regard,

James Diggans, PhD

Director, Bioinformatics and Biosecurity, Twist Bioscience

Allison Berke, PhD

Executive Director, Stanford Cyber Initiative, Freeman Spogli Institute for
International Studies, Stanford University

1:50 pm – 2:00 pm Break

2:00 pm – 3:00 pm Panel Three – Vulnerability of Intellectual Property and the Bioeconomy

Current and former officials for two law enforcement agencies address the need to adopt robust cyberbiosecurity policies for safeguarding intellectual property and economic activity generated by research and innovation in the biological sciences.

Edward H. You, MS

Supervisory Special Agent, Biological Countermeasures Unit, Countermeasures
and Operations Section, Weapons of Mass Destruction Directorate, Federal Bureau
of Investigation

Peter Edge, MPA

Vice President of Corporate Security, SOS International LLC; former Acting Deputy
Director, U.S. Immigration and Customs Enforcement

3:00 pm – 3:15 pm Closing Remarks

3:15 pm Adjourn