

*The National Academies of*  
**SCIENCES • ENGINEERING • MEDICINE**

**Anticipating Rare Events of Major Significance:  
An Unclassified Workshop**

Final Draft Agenda

**DAY 1: DECEMBER 17, 2021**

**SESSION 1 — IMPORTANCE AND SCOPE**

- 10:30 AM      **Introduction and Expectations of the Workshop**  
Christopher Barrett, Committee Chair  
University of Virginia Biocomplexity Institute
- 10:45 AM      **Sponsor Remarks**  
Theodore Plasse  
Defense Threat Reduction Agency

**SESSION 2 — MATHEMATICAL FOUNDATIONS**

- 11:00AM      **Alon Orlitsky**  
University of California, San Diego
- 11:30 AM      **BREAK**

**SESSION 3 — DETECTION, INDICATIONS AND WARNINGS**

- 11:45 AM      **Arvind Satyam**  
Pano AI
- 12:05 PM      **T. Charles Clancy**  
MITRE Labs
- 12:25 PM      **Elisabeth Pate Cornell**

Stanford University

12:45 PM      **Panel Discussion with Speakers 1-3**  
Robert Schock, Moderator

**1:20 PM      LUNCH**

**SESSION 4 — PLANNING, FORECASTING AND INTELLIGENCE PREPARATION**

2:15 PM      **Jeffrey Love**  
U.S. Geological Survey (USGS)

2:35 PM      **Nestor Alfonso Santamaria**  
Organisation for Economic Co-operation and Development (OECD)

2:55 PM      **Madhav Marathe**  
University of Virginia Biocomplexity Institute

3:15 PM      **Panel Discussion with Speakers 4-6**  
Christopher Barrett, Moderator

3:50 PM      **BREAK**

**SESSION 5 — FIRESIDE CHAT**

3:55 pm      **Madeleine Clare Elish**  
Google Research  
  
Michele Wucker, Moderator

4:25 PM      **Day One Concluding Remarks**  
Christopher Barrett, Committee Chair  
University of Virginia Biocomplexity Institute

**4:30 PM      ADJOURN DAY ONE**

## DAY 2: DECEMBER 21, 2021

### SESSION 6 — PLENARY

- 10:00 AM      **Welcome and Introduction for Day 2**  
Christopher Barrett, Committee Chair  
University of Virginia Biocomplexity Institute
- 10:05 AM      **Sponsor Remarks**  
Theodore Plasse  
Defense Threat Reduction Agency

### SESSION 7 — FIRESIDE CHAT

- 10:10 AM      **Markus Gesmann**  
Insurance Capital Markets Research  
  
Michele Wucker, Moderator
- 11:10 AM      **BREAK**

### SESSION 8 — MULTISOURCE INFORMATION FUSION, SITUATION ASSESSMENT, AND COURSE OF ACTION SELECTION

- 11:25 AM      **Pandemic Preparedness Response**  
**TBD**
- 11:45 AM      **Delores Knipp**  
University of Colorado Boulder
- 12:05 PM      **John Organek**  
Electric Infrastructure Security Council
- 12:25 PM      **Panel Discussion with Speakers 10-12**  
Vicki Bier, Moderator
- 1:00 PM      **LUNCH**

## SESSION 9 — ACTIVE PREVENTION AND DETERRENCE

- 1:50 PM      **Terik Daly**  
Johns Hopkins University Applied Physics Laboratory
- 2:10 PM      **Seth Baum**  
Global Catastrophic Risk Institute
- 2:30 PM      **Robert Axtell**  
George Mason University
- 2:50 PM      **Panel Discussion with Speakers 10-12**  
Justin Kasper, Moderator
- 3:25 PM      **Concluding Remarks**  
Christopher Barrett, Committee Chair  
University of Virginia Biocomplexity Institute
- 3:35 PM      **ADJOURN WORKSHOP**