

**Quantitative Tools and Data Opportunities for
Pandemic Surveillance and Response Conference**

June 29-30, 2022

**Sheraton Commander Hotel
Liberty Ballroom
16 Garden St., Cambridge, MA 02138**

Co-sponsors:

Center for Communicable Disease Dynamics, Harvard T.H. Chan School of Public Health
Centers for Disease Control and Prevention

—Agenda—

Day 1- Wednesday, June 29, 2022

7:45 - 8:30 AM: Arrival & Check In

8:30 - 9:00 AM: Welcome & Introduction

- **Marc Lipsitch, DPhil**, Director, Center for Communicable Disease Dynamics, and Professor of Epidemiology, Harvard T.H. Chan School of Public Health

9:00 - 10:45 AM: Opening Session: Decision Making- Challenges and realities

Topics include: experience of government, public health officials and colleagues in responding to COVID-19

Speakers:

- **Charlie Baker**, Governor, State of Massachusetts (*virtual*)
- **Mark Ghaly, MD, MPH**, Secretary, California Health & Human Services Agency (*virtual*)
- **James Hildreth, PhD, MD**, President and CEO, Meharry Medical College; Member, Biden-Harris COVID-19 Health Equity Task Force (*virtual*)
- **Celia Quinn, MD, MPH**, Deputy Commissioner, Division of Disease Control, New York City Department of Health and Mental Hygiene
- **Anne Zink, MD, FACEP**, Chief Medical Officer, State of Alaska; President Elect, Association of State and Territorial Health Officials (ASTHO) (*virtual*)

Panel Discussion Moderators:

- **Caroline Buckee, PhD**, Associate Director, Center for Communicable Disease Dynamics, and Professor of Epidemiology, Harvard T.H. Chan School of Public Health

- **Ruth Lynfield, MD**, State Epidemiologist and Medical Director, Minnesota Department of Public Health

10:45 - 11:15 AM: Break**11:15 AM - 12:30 PM: Session 1: Detect- Identifying novel pathogens or types**

Speaker presentations & panel discussion

Topics include: wastewater detection, global observatory efforts, targeted surveillance of likely entry points

Speakers:

- **Duncan MacCannell, PhD**, Chief Science Officer, Office of Advanced Molecular Detection, Centers for Disease Control and Prevention
- **Jessica Metcalf, PhD**, Associate Professor, Princeton University (*virtual*)
- **Steven Riley, DPhil**, Director General, Data, Analytics and Surveillance, UK Health Security Agency

Panel Discussion Moderators:

- **Yonatan Grad, MD, PhD**, Faculty, Center for Communicable Disease Dynamics, and Associate Professor of Immunology and Infectious Diseases, Harvard T.H. Chan School of Public Health
- **Rangarajan Sampath, PhD**, Senior Vice President and Head, Center for Innovation in Diagnostics, Siemens Healthineers

12:30 - 1:30 PM: Break**1:30 PM – 3:00 PM: Session 2: Monitor- Quantifying the burden of infection and disease**

Speaker presentations & panel discussion

Topics include: role of crowdsourced and routinely collected data, genome sequencing, synthesis of epidemiological monitoring approaches

Speakers:

- **John Brownstein, PhD**, Chief Innovation Officer, Boston Children's Hospital; Professor, Harvard Medical School
- **Roni Rosenfeld, PhD**, Professor, Delphi Group, Carnegie Mellon University
- **Ana Bento, PhD**, Science Director, Pandemic Prevention Institute, Rockefeller Foundation
- **Paul Elliott, MBBS, PhD**, Professor, CBE, FMedSci, Imperial College London

Panel discussion moderators:

- **Nicholas Menzies, PhD**, Associate Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

- **Daniel Jernigan, MD, MPH**, Deputy Director for Public Health Science and Surveillance, Centers for Disease Control and Prevention

3:00 - 3:20 PM: Break

3:20 – 5:05 PM: Session 3: Understand- Intelligence into characteristics of infections and their consequences

Speaker presentations & panel discussion

Topics include: inequities, countermeasures and effectiveness of interventions (domestic & global context), disease transmissibility, use of longitudinal databases

Speakers:

- **Mary Bassett, MD, MPH**, Commissioner of Health, State of New York
- **Andrew Bindman, MD**, Executive Vice President and Chief Medical Officer, Kaiser Permanente (*virtual*)
- **David Eyre, DPhil**, Associate Professor, Oxford University
- **Kate Grabowski, PhD**, Associate Professor, Departments of Pathology and Epidemiology, Johns Hopkins University
- **Miguel Hernán, MD, MPH, ScM, DrPH**, Director, CAUSALab; Professor of Epidemiology and Biostatistics, Harvard T.H. Chan School of Public Health

Panel discussion moderators:

- **Marc Lipsitch, DPhil**, Director, Center for Communicable Disease Dynamics and Professor of Epidemiology, Harvard T.H. Chan School of Public Health
- **Jennifer Layden, MD, PhD**, Associate Deputy Director for Public Health Science and Surveillance, Centers for Disease Control and Prevention

5:05-5:15 PM: Day 1 Wrap Up & Day 2 Plan

Day 2- Thursday, June 30, 2022

8:00 - 8:45 AM: Arrival & Check In

8:45 - 8:50 AM Introduction

- **Marc Lipsitch, DPhil**, Director, Center for Communicable Disease Dynamics and Professor of Epidemiology, Harvard T.H. Chan School of Public Health

8:50 - 10:35 AM: Session 4: Predict/Project- Modeling current and future scenarios

Speaker presentations & panel discussion

Topics include: distribution of limited resources, mobility informed models, decision making, modeling hub efforts, transmission dynamic models

Speakers:

- **Jason Asher, PhD**, Senior Quantitative Analyst, Leidos, supporting Department of Health and Human Services, Assistant Secretary for Preparedness and Response
- **Caroline Buckee, PhD**, Associate Director, Center for Communicable Disease Dynamics, and Professor of Epidemiology, Harvard T.H. Chan School of Public Health
- **Jenny Durkan**, former Mayor of Seattle, Washington
- **Justin Lessler**, Faculty, Department of Epidemiology, University of North Carolina Gillings School of Global Public Health
- **Lauren Ancel Meyers**, Cooley Professor of Integrative Biology, Population Health, and Statistics & Data Science, University of Texas at Austin; Director, UT COVID-19 Modeling Consortium (*virtual*)

Panel discussion moderators:

- **Mauricio Santillana, PhD, MSc**, Professor, Departments of Physics and Electrical and Computer Engineering, Northeastern University; Affiliate Faculty, Center for Communicable Disease Dynamics, Harvard T.H. Chan School of Public Health
- **Daniel Larremore, PhD**, Assistant Professor of Computer Science, University of Colorado Boulder

10:35- 11:00 AM: Break**11:00 AM - 12:30 PM: Session 5: Act- Deploying effective interventions & Closing**

Topics include: decisions regarding timing and manner of interventions

Moderators:

- **Marc Lipsitch, DPhil**, Director, Center for Communicable Disease Dynamics and Professor of Epidemiology, Harvard T.H. Chan School of Public Health
- **Caroline Buckee, PhD**, Associate Director, Center for Communicable Disease Dynamics, and Professor of Epidemiology, Harvard T.H. Chan School of Public Health
- **Yonatan Grad, MD, PhD**, Faculty, Center for Communicable Disease Dynamics, and Associate Professor of Immunology and Infectious Diseases, Harvard T.H. Chan School of Public Health