

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

**Virtual Workshop on Geospatial Needs for a Pandemic-Resilient World**

**Mapping Science Committee**

June 17, 2020

1:00–5:15 pm eastern

**Preliminary Agenda**

1:00 Introductions and overview (*15 minutes*)

Harvey Miller, Chair, The Ohio State University

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**1:15 Topic 1: Modeling the spatial spread of disease and its local burden (*60 minutes*)**  
Moderator: Dan Brown, University of Washington

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Agent-based contagion modeling from playground to planet  
Josh Epstein, New York University

How should we sample the world for pandemic response?  
Simon Hay, University of Washington

An embedded recursive SIR model for county level analysis of Covid-19  
Sean Ahearn, Hunter College

Discussion

**2:15 Break (*15 minutes*)**

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**2:30 Topic 2: Geospatial needs for rapid response (*75 minutes*)**  
Moderator: Harvey Miller

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The criticality of authoritative data sources  
Marie Pepler and Christopher Cretini, U.S. Geological Survey

Spatiotemporal patterns and simulations for fighting against COVID-19  
Chaowei (Phil) Yang, George Mason University

Geospatial considerations for community-based contact tracing  
Elisabeth Root, The Ohio State University

Geospatial mapping for precision public health response  
David Blazes, Bill and Melinda Gates Foundation

Discussion

**3:45 Break** (*15 minutes*)

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**4:00 Topic 3: Spatial indicators of resilience and recovery** (*60 minutes*)

Moderator: Kathleen Stewart, University of Maryland

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The new normal? Responsible use of geospatial information in a post COVID-19 world  
Ed Parsons, Google

Measuring mobility, social distancing, and economic impact with anonymized mobile device data ([data.covid.umd.edu](https://data.covid.umd.edu))

Lei Zhang, University of Maryland

Public transit as an indicator: Connecting geotemporal ridership data with disease spread and policy

Jonathan Scheff, Transit

Discussion

**5:00 Wrap-up** (*15 minutes*)

5:15 Workshop adjourns