



Samantha Bents

Ph.D. Student in Environment and Resources, admitted Autumn 2024

Bio

BIO

Samantha Bents (she/her/hers) is an E-IPER PhD student interested in studying the transmission dynamics of infectious diseases across changing temporal and spatial scales. She plans to investigate how these dynamics can be leveraged to design public health interventions targeting inequities in both the built and natural environment. Prior to beginning her PhD, she was a researcher at the National Institute of Allergy and Infectious Diseases (NIAID) and Fogarty International Center (FIC) NIH where her work focused on predictive disease modeling. She holds a B.A. from Princeton University in Ecology and Evolutionary Biology with a concentration in Global Health and Health Policy.

Publications

PUBLICATIONS

- **Trends in County-Level Childhood Vaccination Exemptions in the US.** *JAMA*
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- **Multiplex serology reveals age-specific immunodynamics of respiratory pathogens in the wake of the COVID-19 pandemic.** *Nature communications*
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- **Factors predicting incidence of nontuberculous mycobacteria in an era of climate change and altered ecosystems in the United States.** *The Science of the total environment*
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- **Scenario Projections of COVID-19 Burden in the US, 2024-2025.** *JAMA network open*
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- **Scenario Projections of Respiratory Syncytial Virus Hospitalizations Averted Due to New Immunizations.** *JAMA network open*
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- **Potential impact of annual vaccination with reformulated COVID-19 vaccines: Lessons from the US COVID-19 scenario modeling hub.** *PLoS medicine*

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- **The US COVID-19 and Influenza Scenario Modeling Hubs: Delivering long-term projections to guide policy.** *Epidemics*

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- **Modeling the impact of COVID-19 nonpharmaceutical interventions on respiratory syncytial virus transmission in South Africa.** *Influenza and other respiratory viruses*

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- **Application of a forecasting model to mitigate the consequences of unexpected RSV surge: Experience from the post-COVID-19 2021/22 winter season in a major metropolitan centre, Lyon, France.** *Journal of global health*

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