



Stanford Experts: COVID-19, the Environment and Public Health

Click on names for more info. For assistance in locating these faculty members, contact:

- *Chris Black, Stanford Woods Institute for the Environment: christineblack@stanford.edu or 415-320-3813 (m)*
- *Rob Jordan, Stanford Woods Institute for the Environment, rjordan@stanford.edu*
- *Josie Garthwaite, Stanford Earth: josieq@stanford.edu or (650) 497-0947*

Infectious Disease Dynamics and Ecology

[James Holland Jones](#)

Jones studies infectious disease dynamics, disease ecology and the effects of behavior change on epidemics. A biological anthropologist, he is working with colleagues to explore transmission dynamics, behavior change, and non-pharmaceutical interventions such as social distancing and hand-washing to control the COVID-19 outbreak. He is particularly interested in how behavior-change shapes the course of epidemics and how epidemics, in turn, shape behavior. Jones is an associate professor of Earth system science at Stanford's School of Earth, Energy & Environmental Sciences and a senior fellow at the Stanford Woods Institute for the Environment. **Contact:** jhj1@stanford.edu

[Erin Mordecai](#)

Mordecai, is a biologist who studies how climate, species interactions and global change influence infectious disease dynamics in both humans and natural ecosystems. Her lab has produced an [interactive modeling tool](#) to assess long-term COVID-19 interventions, such as social distancing. The model helps clarify that lifting interventions too early would likely lead to a second epidemic, and that strategies for turning on and off interventions as needed could be effective. Mordecai is an assistant professor of biology in the School of Humanities and Sciences, a fellow at the Stanford Woods Institute for the Environment and a faculty fellow at the Center for Innovation in Global Health and the King Center on Global Development. **Contact:** emordeca@stanford.edu

[Giulio de Leo](#)

An ecologist, de Leo investigates infectious disease dynamics on humans, and the scientific intersection of disease ecology, health and the environment. He is co-director of Stanford's Program for Disease Ecology, Health and the Environment, a professor of biology and a senior fellow at the Stanford Woods Institute for the Environment. **Contact:** deleo@stanford.edu, 831- 655-6202

Disease Transmission and Epidemics

[Michele Barry](#)

Barry's research has covered the potential for pandemic disease in fragile states and areas of unrest and civil war. She has long called for a global mechanism to help prepare for disease outbreaks, and increased funding, technology and cooperation to contain such outbreaks. She is Senior Associate Dean of Global Health at Stanford, Director of Stanford's Center for Innovation in Global Health, the Drs. Ben & A. Jess Shenson Professor, professor of medicine and senior fellow at the Stanford Woods Institute for the Environment and the Freeman Spogli Institute for International Studies.

Contact: michele.barry@stanford.edu, 650-736-0336

[Stephen Luby](#)

Luby is a physician and an epidemiologist. His research work includes emerging infection surveillance, epidemiology and outbreak response in low income countries. He lived in Pakistan for five years and Bangladesh for eight years where he studied the epidemiology of a broad array of infectious diseases, including influenza and Nipah virus. Nipah virus normally lives in fruit bats, but when it infects people, over half of the people die. People infected with Nipah virus can transmit it to others. He has worked on a number of interventions to reduce the risk of transmission of emerging infections. He is a professor of medicine (infectious diseases) at Stanford and senior fellow at the Stanford Woods Institute for the Environment and the Freeman Spogli Institute for International Studies. **Contact:** sluby@stanford.edu, 650-723-4129

[Jenna Davis](#)

Davis's research focuses on the interface of water, economic development and public health, particularly in low- and middle-income countries. With a background working to improve the health and well-being of communities through health behavior interventions along with equitable access to water supply and sanitation services, she has conducted field research in more than 20 countries. She can speak to the importance of effective and sustainable management of water and waste for stopping the spread of viruses. Davis is a professor of Civil and Environmental Engineering, the Higgins-Magid Senior Fellow at the Stanford Woods Institute for the Environment and director of the Stanford Program on Water, Health & Development. **Contact:** jennadavis@stanford.edu, (650) 725-9170

Public Risk Perception and Decision-making

[Gabrielle Wong-Parodi](#)

Wong-Parodi is a psychologist who applies social, behavioral, and decision science approaches to understand how people react to and are affected by large scale public threats – such as hurricanes and other extreme weather events – in order to develop interventions to improve adaptive capacity and resiliency. Wong-Parodi is a professor of Earth system science at Stanford's School of Earth, Energy & Environmental Sciences and a center fellow at the Stanford Woods Institute for the Environment.

Contact: gwongpar@stanford.edu, (650) 725-6457

Emissions and Air Quality

[Rob Jackson](#)

Rob Jackson, chair of the Global Carbon Project (GCP) scientific steering committee, works with his Stanford lab to examine the many ways people impact the earth. He and his GCP colleagues closely track the world's greenhouse gas emission levels and trends, and he can comment on the impact of wide-spread quarantine practices on emissions affecting air quality and climate change. Jackson is the Douglas Provostial Professor at Stanford's School of Earth, Energy & Environmental Sciences and a senior fellow at the Stanford Woods Institute for the Environment and Precourt Institute for Energy.

Contact: rob.jackson@stanford.edu, 650-497-5841

[Marshall Burke](#)

Burke's research focuses on social and economic impacts of environmental change, with specific focus on links between economic activity, air quality and health. Burke can comment on his recent [analysis](#) of air pollution changes wrought by the economic disruption of the COVID-19 pandemic. Burke is an assistant professor of Earth system science at Stanford's School of Earth, Energy & Environmental Sciences and a center fellow at the Freeman Spogli Institute for International Studies and the Stanford Woods Institute for the Environment.

Contact: mburke@stanford.edu, (650) 721-2203