The COVID-19 pandemic in an environmental and One Health context
Dr. Gigi Gronvall

Dr. Gronvall is a Senior Scholar at the Johns Hopkins Center for Health Security and an Associate Professor in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. She is an immunologist by training. During the COVID-19 pandemic, she has led the Center’s ongoing efforts to track the development and marketing of molecular and antigen tests and serology tests, as well as the development of national strategies for COVID-19 serology (antibody) tests and SARS-CoV-2 serosurveys in the United States. Dr. Gronvall is the author of Synthetic Biology: Safety, Security, and Promise and Preparing for Bioterrorism: The Alfred P. Sloan Foundation’s Leadership in Biosecurity. She also is a member of the Threat Reduction Advisory Committee, which provides the Secretary of Defense with independent advice and recommendations on reducing the risk to the United States, its military forces, and its allies and partners posed by nuclear, biological, chemical, and conventional threats.
Kirsten Koehler, PhD, is an Associate Professor in the Department of Environmental Health and Engineering. Her research focuses on improving spatiotemporal exposure assessment and exposure assessment methods to inform occupational and public health policy. Dr. Koehler has a deep interest in investigating the influence of microenvironments on personal exposure and developing methods to improve the accuracy and representativeness of hazard maps. She is also working to develop novel aerosol samplers to improve the relationship between exposures and health effects.
Dr. Jennifer Nuzzo

Dr. Nuzzo is a Senior Scholar at the Johns Hopkins Center for Health Security and an Associate Professor in the Department of Environmental Health and Engineering and the Department of Epidemiology at the Johns Hopkins Bloomberg School of Public Health. An epidemiologist by training, her work focuses on global health security, with a particular focus on outbreak detection and response, health systems as they relate to global health security, international and domestic biosurveillance, and infectious disease diagnostics. She directs the Outbreak Observatory, which conducts, in partnership with front-line public health practitioners, operational research to improve outbreak preparedness and response. Together with colleagues from the Nuclear Threat Initiative and the Economist Intelligence Unit, she co-leads the development of the first-ever Global Health Security Index, which benchmarks 195 countries’ public health and healthcare capacities and capabilities, their commitment to international norms and global health security financing, and socioeconomic, political, and environmental risk environments. Previously, she has conducted research related to the Affordable Care Act, tuberculosis control, foodborne outbreaks, and water security. Dr. Nuzzo is an Associate Editor of the peer-reviewed journal Health Security.
Dr. Tara Kirk Sell

Dr. Sell is a Senior Scholar at the Johns Hopkins Center for Health Security and an Assistant Professor in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health. Dr. Sell’s work focuses on improving public health policy and practice in order to reduce the health impacts of disasters and terrorism. She has led several studies on public health communication during the Zika outbreak and misinformation during the 2014 Ebola outbreak. She is now working on misinformation during the COVID-19 outbreak and is a member of the CONVERGE COVID-19 Longitudinal Risk Communication work group, supported by the National Science Foundation. Prior to her work in academia she was a professional athlete and won a silver medal in the 2004 Olympics.
One Health

Human Health

Animal Health

Environmental Health

Plant Health

Image: Meghan Davis