

**Gabriel Hamer** is a Professor in the Department of Entomology at Texas A&M University. His research broadly investigates the ecology of infectious diseases of humans, wild animals, and domestic animals, with particular attention to those transmitted by mosquitoes, ticks, and kissing bugs. He also develops and evaluates vector control approaches aimed at reducing human and animal disease. He has past and active international projects in Mexico, Guatemala, Uganda, and Argentina. He is a Subject Editor for the Journal of Medical Entomology, past Chair of the American Committee of Medical Entomology, and will spend 3 months in Argentina in 2026 as a US Fulbright Scholar.

**Dr. Mike Wimberly** is Interim Director of the Data Institute for Societal Challenges (DISC) and Professor of Geography and Environmental Sustainability at the University of Oklahoma. He is a geospatial data scientist whose research advances understanding of how environmental change shapes public health risks. His work focuses on vector-borne diseases, including West Nile virus in the United States, epidemic malaria in Ethiopia, and urban malaria in India. Dr. Wimberly collaborates with stakeholders to translate this research into operational decision-support tools, including the ArboMAP system for West Nile virus forecasting.

**Alex Perkins** is the Ann and Daniel Monahan Collegiate Professor of Biological Sciences at the University of Notre Dame. His research uses mathematical and computational modeling to better understand the drivers of mosquito-borne disease dynamics and to predict their responses to interventions and other future changes. His work has addressed several major arboviral diseases, including dengue, chikungunya, Zika, and yellow fever. A project he currently leads that has strong relevance to this webinar series is titled "Three-way coupling of water, behavior, and disease in the dynamics of mosquito-borne disease systems," which is funded by an Incorporating Human Behavior in Epidemiological Models award from the Directorate of Mathematical Sciences at the National Science Foundation. In collaboration with social scientists and mathematicians from the United States and Colombia, Dr. Perkins and his colleagues seek to understand how behavioral dynamics can be most effectively incorporated into mathematical epidemiological models to lead to improved usefulness of public health interventions against mosquito-borne diseases.

**Dr. Albert Icksang Ko** is the Raj and Indra Nooyi Professor of Public Health at the Yale School of Public Health and Collaborating Researcher at the Oswaldo Cruz Foundation, Brazilian Ministry of Health. He served as Chair of the Department of Epidemiology of Microbial Diseases at Yale (2010-2021) after being stationed with the Brazilian Ministry of Health in Salvador, Brazil for 15 years. Dr. Ko coordinates an urban health program in Brazil, which focuses on delineating the role of social marginalization, urban ecology, and climate on infectious disease threats to informal settlements and implementing community-driven

interventions in these settings. He serves as a principal investigator of NIAID research programs, including a cluster randomized controlled trial in Brazil which is evaluating the effectiveness of Wolbachia-infected *Aedes aegypti* in reducing arboviral infection. Dr. Ko has devoted a significant part of his efforts to global health training as program director of a Fogarty Global Infectious Disease Training Program (2003-2012) in Brazil and a Global Health LAUNCH Consortium (2012-present), which has trained more than 240 fellows in 17 LMICs. He was a member of the WHO R&D Blueprint Working Group and Taskforce for Zika Virus and serves on the NASEM Forum of Microbial Threats.