MICHAEL A. JOHANSSON

ORCID: 0000-0002-5090-7722

professional experience

2024-present	Research Professor	Bouvé College of Health Sciences & Network Science Institute, Northeastern University, Boston, Massachusetts
2024-present	Associated Researcher	Dengue Branch, Centers for Disease Control and Prevention (CDC), San Juan, Puerto Rico
2018-present	Adjunct Lecturer	Harvard TH Chan School of Public Health, Boston, Massachusetts
2016-2024	Epidemic Analytics Team Lead	Dengue Branch, Centers for Disease Control and Prevention (CDC), San Juan, Puerto Rico

Additional temporary roles: Advisor to the Center for Forecasting and Outbreak Analytics (2021-2023), Senior Advisor for Infectious Disease Modeling and Analytics for the Office of the Deputy Director of Infectious Diseases (2020-2022), Co-Lead, Modeling Task Force, CDC COVID-19 Emergency Response (2020-2021); Technical Lead, Data & Analytics Task Force, Health and Human Services & Federal Emergency Management Agency (2020); Lead, Modeling Team, CDC Zika Emergency Response (2016-17)

2016-2024	Founder & Director	Outbreak Science, St. George, Vermont
2015-2018	Visiting Scientist	Harvard TH Chan School of Public Health, Boston, Massachusetts
2009-2024	Research Biologist	Dengue Branch, CDC, San Juan, Puerto Rico
2006-2009	Research Fellow	Dengue Branch, CDC, San Juan, Puerto Rico
2001-2002	Field Researcher	Proyectos Realizados en Informática, Salud, Medicina, y Agricultura, Iquitos, Peru
2000-2001	Laboratory Technician	Massachusetts General Hospital, Boston, Massachusetts

education

2011	Complex Systems Summer School	Santa Fe Institute, Santa Fe, New Mexico
2009	Markov Chain Monte Carlo Methods for Infectious Disease Studies	Summer Institute in Statistics and Modeling in Infectious Diseases, Seattle, Washington
2002-2008	Doctor of Philosophy	Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland

Department of Molecular Microbiology and Immunology.
Dissertation: The influence of climate on dengue transmission in Puerto Rico.
Advisor: Gregory E Glass.

1996-2000	Bachelor of Arts	Bowdoin College, Brunswick, Maine

magna cum laude. Major in Biology, minor in Spanish.

1999	Wildlife Conservation	School for International Training, Arusha, Tanzania
1998	Vassar-Wesleyan-Colgate in Spain	Madrid, Spain

teaching

2016, 2017	Faculty, Epidemic Forecasting, Computational Biology for Infectious Diseases Summer School, Hanoi, Vietnam
2016	Instructor, Dengue in the time of Zika: III International Course and Integrated Dengue Interventions. Bucaramanga, Colombia.
2003-2004	Teaching assistant, Infectious Disease Ecology, Johns Hopkins Bloomberg School of Public Health

professional activities & service

2024	Lead, Modeling Team, CDC Dengue-Oropouche Emergency Response

2022 National Center for Emerging and Zoonotic Infectious Diseases Honor Award, Excellence in Human Capital Management—Employee Development (James Virgil Peavy Award) (for creation of the CDC Public Health Analytics and Modeling Fellowship)
2022 CDC Charles C. Shepard Award (for the paper "SARS-CoV-2 Transmission from People Without COVID-19 Symptoms")
2022-2024 Steering Committee Member, Midas Coordination Center
2021-present Technical Expert, Global Arbovirus Initiative, World Health Organization
2021-2024 Member, Surveillance, Analytics, and Modeling/Forecasting Sub-Committee, CDC Climate and Health Task Force
2021 Co-Chair, Epidemic Modeling and Forecasting Fast Track Action Committee, White House Office of Science and Technology Policy
2021 CDC & ATSDR Honor Award, Excellence in Quantitative Science (for modeling work on the COVID-19 response)
2021 Panelist, Pivotal Interfaces of Environmental Health and Infectious Disease Research to Inform Responses to Outbreaks, Epidemics, and Pandemics, National Academies of Science, Engineering, and Medicine
2020-2021 Co-Lead, Modeling Team, CDC COVID-19 Emergency Response
2020 Member, Partners Group, COVID-19 Multi-Model Comparison Consortium
2020 Technical Lead, COVID-19 Data and Analytics Task Force, National Response Coordination Center, Federal Emergency Management Agency and Department of Health and Human Services
2019-present Member, Eliminate Yellow Fever Epidemics Risk Analysis Working Group, World Health Organization
2018-2019 Mozilla Open Leader
2018-present ASAPBio Ambassador
2017-2020 Founding Editor, PLOS Disease Surveillance & Forecasting Channel (https://channels.plos.org/dfs)
2017-present Member, World Health Organization International Health Regulations Roster of Experts
2017 CDC & ATSDR Honor Award, Excellence in Quantitative Science (for modeling work on the Zika response)
2016-2017 Lead, Modeling Team, CDC Zika Response
2016 Invited participant, Open Data Round Tables, White House Office of Science and Technology Policy
2016 Creator, Data repository of publicly available Zika data (github.com/cdcepi/zika)
2016-present External Advisor, Aircraft Disinsection Working Group, World Health Organization
2016-2017 External Advisor, Integrated Product Team, Department of Homeland Security
2016-2021 Advisory Board Member, Vector Behavior in Transmission Ecology Research Coordination Network
2015-present Co-lead, Epidemic Prediction Initiative (cdcepi.github.io, predict.cdc.gov)
2015-2019 Co-chair Pandemic Prediction & Forecasting Science and Technology Interagency Working Group, White House Office of Science and Technology Policy
2015-2018 Member, Scientific Working Group, Division of Vector-Borne Diseases, CDC
2015 Creator, Chikungunya Nowcast for the Americas (www.cdc.gov/chikungunya/modeling)
2013 Content Developer, CDC Solve the Outbreak Dengue Module (for iPad)
2013-2019 Deputy Editor, PLOS Neglected Tropical Diseases
2012-2013 Associate Editor, PLOS Neglected Tropical Diseases
2010 Co-creator, DengueMap (http://www.healthmap.org/dengue)

Meeting Organizer

2024 CDC/Council of State and Territorial Epidemiologists Infectious Disease Forecasting Workshop, Atlanta, Georgia
2024 CDC/Council of State and Territorial Epidemiologists Vector-Borne Disease Forecasting Workshop, Fort Collins, Colorado
2023 CDC/Council of State and Territorial Epidemiologists Infectious Disease Forecasting Workshop, Atlanta, Georgia
2023 Pan American Health Organization Meeting on Surveillance of Arboviral Diseases, Panama City, Panama

2022 **CDC/Council of State and Territorial Epidemiologists Infectious Disease Forecasting Workshop,** Atlanta, Georgia

2022 **CDC/Council of State and Territorial Epidemiologists Vector-Borne Diseases Forecasting Workshop,** Virtual

2021 **CDC/Council of State and Territorial Epidemiologists COVID-19 Forecasting Workshop,** Virtual

2020 **CDC/Council of State and Territorial Epidemiologists 2020 Vector-Borne Diseases Forecasting Workshop,** Vector Week, Fort Collins, Colorado

2019 **Yellow Fever Seminar: The risk of Yellow Fever introduction to Puerto Rico and U.S. Virgin Islands**, Centers for Disease Control and Prevention, Atlanta, Georgia

2019 **Council of State and Territorial Epidemiologists/CDC FluSight Seasonal Influenza Forecasting Workshop**, Council of State and Territorial Epidemiologists, Atlanta, Georgia

2019 **Council of State and Territorial Epidemiologists Vector-Borne Diseases Forecasting Workshop**, University of California, Davis, California

2019 **Pan-American Health Organization/World Health Organization and CDC Meeting on Surveillance of Arboviral Diseases**, Pan-American Health Organization, Washington D.C.

2019 **Rapid Review Design Sprint**, Mozilla, London, England

2018 **Epidemic Prediction Initiative Seasonal Influenza Forecasting Workshop**, Council of State and Territorial Epidemiologists, Atlanta, Georgia

2018 **Council of State and Territorial Epidemiologists/CDC Infectious Disease Forecasting for Public Health Workshop**, West Palm Beach, Florida

2016, 2017 **Seasonal Influenza Forecasting Workshop**, Centers for Disease Control and Prevention, Atlanta, Georgia

2015 **Integrating Prediction and Forecasting Models for Decision-Making: Dengue Epidemic Prediction (Final Meeting)**, White House Office of Science and Technology Policy, Washington, DC

2015 **Integrating Forecasting Models for Decision-making: A National Strategy**, White House Office of Science and Technology Policy, Washington, DC

2014 **Integrating Prediction and Forecasting Models for Decision-Making: Dengue Epidemic Prediction**, White House Office of Science and Technology Policy, Washington, DC

2013 **Participatory Surveillance in Latin America Workshop**, Rio de Janeiro, Brazil

2012 **Modeling Dengue Fever**, National Institute for Mathematical and Biological Synthesis Investigative Workshop, Knoxville, Tennessee

Reviewer Acta Tropica, American Journal of Epidemiology, American Journal of Tropical Medicine and Hygiene, Annals of Tropical Medicine and Parasitology, Dengue Bulletin, EcoHealth, Ecology Letters, eLife, Emerging Infectious Diseases, International Journal of Environmental Research and Public Health, Epidemiology and Infection, Infection and Drug Resistance, International Health, International Journal of Health Geographics, International Journal of Infectious Diseases, Journal of Economic Entomology, Journal of Global Infectious Diseases, Lancet Infectious Diseases Journal of Medical Entomology, Journal of Medical Internet Research Public Health and Surveillance, Journal of Medical Microbiology Case Reports, Memorias do Instituto Oswaldo Cruz, Morbidity and Mortality Weekly Report, New England Journal of Medicine, Nature, Nature Communications, Parasites & Vectors, PeerJ, PLOS Biology, PLOS Computational Biology, PLOS Currents Outbreaks, PLOS Medicine, PLOS Neglected Tropical Diseases, PLOS One, PLOS Pathogens, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B: Biological Sciences, Science of the Total Environment, Trends in Parasitology, Science, Scientific Reports, Journal of Theoretical Biology, Vaccine, Veterinary Research, Weather, Climate and Society, Zoonoses and Public Health

Review panels National Science Foundation Predictive Intelligence for Pandemic Prevention, Wellcome Trust Climate & Health, Medical Research Council (United Kingdom), CDC Division of Vector-Borne Disease Fellowship Program, Department of Health and Human Services Idea Lab, CDC-National Center for Atmospheric Research Joint Resident Postdoctoral Fellowship Training Program in Public Health & Climate Science, CDC-University of Georgia Collaborative Seed Award Program, CDC Public Health Preparedness and

Response Fiscal Allocation Process, CDC Innovation Fund, Transportation Research Board of the National Academies - The Role of Air Travel in the Transmission and Spread of Insect-borne Diseases

Professional societies

American Association for the Advancement of Science, American Society for Tropical Societies Medicine and Hygiene, Network Science Society

funding awards

2018 Applied forecasting for public health: Epidemic Prediction Initiative *Aedes* Forecasting Challenge, CDC Innovation Fund, 15 months, $127,500 (principal investigator)

2018 Rapid PREreview: A rapid preprint review platform to support outbreak science, Wellcome Trust, 1 year, £50,000 (co-investigator)

2018 Open Outbreak Data, Mozilla Foundation, 1 year, $5,000 (principal investigator)

2016 Overcoming uncertainty to enable estimation and forecasting of Zika virus transmission, National Science Foundation, 1 year, $200,000 (co-investigator)

2015 Epidemic Prediction Initiative, CDC Public Health Preparedness and Response, 3 years, $450,000 (principal investigator)

2015 Epidemic Prediction Initiative, Department of Health and Human Services Idea Lab, 3 months, $5,000 (principal investigator)

2014 Salud Boricua, Skoll Global Threats Fund, 1 year, $90,000 (principal investigator)

2012 Salud Boricua, CDC Innovation Fund, 1 year, $100,000 (principal investigator)

2009 Spatiotemporal Determinants of West Nile Virus Risk, Climate Change Capacity Building, Research and Public Health Action Intra-agency Initiative, 1 year, $50,000 (principal investigator)

2008 The risk of yellow fever introduction into Puerto Rico, CDC Preparedness Modeling Initiative, 1 year, $95,000 (principal investigator)

skills

Programming HTML, Java, LaTeX, Perl, Python, R

Languages English (native), Spanish (fluent), Swahili (minimal, rusted)

Non-scientific leadership

Co-founder Surfrider Foundation San Juan Chapter, Head Coach Massachusetts Institute of Technology Nordic Ski Team, Captain Bowdoin College Nordic Ski Team, Captain Hanover High School Nordic Ski and Track Teams

preprints

Lopez, VK, LS Bastos, CT Codeço, MA Johansson. A roadmap to account for reporting delays for public health situational awareness – a case study with COVID-19 and dengue in United States jurisdictions. medRxiv. 10.1101/2024.11.09.24315999 (2024).

Thayer, MB, M Marzan-Rodriguez, J Torres Aponte, A Rivera, DM Rodriguez, ZJ Madewell, K Rysava, G Paz-Bailey, LE Adams, MA Johansson. Dengue epidemic alert thresholds, a tool for surveillance and epidemic detection. medRxiv. 10.1101/2024.10.22.24315684 (2024).

Lopez, VK, …, MA Johansson. COVID-19 mitigation behaviors and policies limited SARS-CoV-2 transmission in the United States from September 2020 through November 2021. medRxiv. 10.1101/2023.07.19.23292882 (2023).

Ray, EL, …, MA Johansson*, NG Reich*. Ensemble Forecasts of Coronavirus Disease 2019 (COVID-19) in the U.S. medRxiv. 10.1101/2020.08.19.20177493 (2020). *shared senior authorship

Truelove, SA, …, MA Johansson. Epidemics, Air Travel, and Elimination in a Globalized World: The Case of Measles. medRxiv. 10.1101/2020.05.08.20095414 (2020).

ZIKAVAT Collaboration, …, MA Johansson, et al. Preliminary results of models to predict areas in the Americas with increased likelihood of Zika virus transmission in 2017. bioRxiv. 10.1101/187591 (2017).

peer-reviewed publications (https://scholar.google.com/citations?user=juo8LFQAAAAJ)

Brady, OJ, …, MA Johansson, et al. Why the growth of arboviral diseases necessitates a new generation of global risk maps and future projections. PLOS Computational Biology. In press.

Holcomb, K, B Biggerstaff, MA Johansson, P Mead, K Kugeler, R Eisen. Re-visiting the relationship between weather and inter-annual variation in human plague cases in the southwestern United States. American Journal of Tropical Medicine and Hygiene. 10.4269/ajtmh.24-0255 (2025).

Chin, T, MA Johansson, A Chowdhury, S Chowdhury, K Hosan, M Tanvir Quader, CO Buckee, AS Mahmud. Bias in mobility datasets drives divergence in modeled outbreak dynamics. Communications Medicine. 10.1038/s43856-024-00714-5 (2025).

Jones, FK, …, MA Johansson, et al. Leptospirosis Outbreak after Hurricane Fiona — Puerto Rico, 2022. Morbidity and Mortality Weekly Report. 10.15585/mmwr.mm7335a2 (2024).

Lipsitch, M, …, MA Johansson, et al. Infectious disease surveillance needs for the United States: Lessons from COVID-19. Frontiers in Public Health. 10.3389/fpubh.2024.1408193 (2024).

Lopez, VK, …, MA Johansson. Challenges of COVID-19 Case Forecasting in the US, 2020-2021. PLOS Computational Biology. 10.1371/journal.pcbi.1011200 (2024).

Kada, S, G Paz-Bailey, L Adams, MA Johansson. Age-specific case data reveal varying dengue transmission intensity in US states and territories. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0011143 (2024).

Jones, FK, …, MA Johansson, et al. Introduction and Spread of Dengue Virus 3, Florida, USA, May 2022–April 2023. Emerging Infectious Diseases. 10.3201/eid3002.231615 (2024).

Phillips, MT, …, MA Johansson, et al. Quantifying the relationship between arboviral infection prevalence and human mobility patterns among participants of the Communities Organized to Prevent Arboviruses cohort (COPA) in southern Puerto Rico. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0011840 (2023).

Howerton, E, …, MA Johansson, et al. Evaluation of the US COVID-19 Scenario Modeling Hub for informing pandemic response under uncertainty. Nature Communications. 10.1038/s41467-023-42680-x (2023).

Holcomb, KM, …, MA Johansson. Multi-model prediction of West Nile virus neuroinvasive disease with machine learning for identification of important regional climatic drivers. GeoHealth. 10.1029/2023GH000906 (2023).

Lim, Ah-Young, …, MA Johansson, et al. A systematic review of the data, methods and environmental covariates used to map Aedes-borne arbovirus transmission risk. BMC Infectious Diseases. 10.1186/s12879-023-08717-8 (2023).

Borchering, RK, JM Healy, BL Cadwell, MA Johansson, RB Slayton, M Wallace, M Biggerstaff. Public health impact of the U.S. Scenario Modeling Hub. Epidemics. 10.1016/j.epidem.2023.100705 (2023).

García-Carreras, B, M Hitchings, MA Johansson, et al. Accounting for assay performance when estimating the temporal dynamics in SARS-CoV-2 seroprevalence in the U.S. Nature Communications. 10.1038/s41467-023-37944-5 (2023).

Shea, K, …, MA Johansson, et al. COVID-19 reopening strategies at the county level in the face of uncertainty: Multiple Models for Outbreak Decision Support. Proceedings of the National Academy of Sciences. 10.1073/pnas.2207537120 (2023).

Holcomb, KM, …, MA Johansson. Evaluation of an open forecasting challenge to assess skill of West Nile virus neuroinvasive disease prediction. Parasites and Vectors. 0.1186/s13071-022-05630-y (2023).

Ray, EL, …, MA Johansson, et al. Comparing trained and untrained probabilistic ensemble forecasts of COVID-19 cases and deaths in the United States. International Journal of Forecasting. 10.1016/j.ijforecast.2022.06.005 (2022).

Cramer, EY, …, MA Johansson, et al. The United States COVID-19 Forecast Hub dataset. Scientific Data. 10.1038/s41597-022-01517-w (2022).

Reich, NG, …, MA Johansson, et al. Collaborative Hubs: Making the Most of Predictive Epidemic Modeling. American Journal of Public Health. 10.2105/AJPH.2022.306831 (2022).

Truelove S, …, MA Johansson, MC Runge, C Viboud. Projected resurgence of COVID-19 in the United States in July—December 2021 resulting from the increased transmissibility of the Delta variant and faltering vaccination. eLife. 10.7554/eLife.73584 (2022).

Cramer, EY, …, MA Johansson, et al. Evaluation of individual and ensemble probabilistic forecasts of COVID-19 mortality in the US. Proceedings of the National Academy of Sciences. 10.1073/pnas.2113561119 (2022).

Quandelacy, TM, ..., MA Johansson, et al. Reduced spread of influenza and other respiratory viral infections during the COVID-19 pandemic in southern Puerto Rico. PLOS One. (2022).

Walker, J, …, MA Johansson, et al. Modeling Strategies for the Allocation of SARS-CoV-2 Vaccines in the United States. Vaccine. 10.1016/j.vaccine.2022.02.015 (2022).

Pollett, S, MA Johansson, et al. Recommended reporting items for epidemic forecasting and prediction research: The EPIFORGE 2020 guidelines. PLOS Medicine. 10.1371/journal.pmed.1003793 (2021).

Oidtman, RJ, …, MA Johansson, et al. Trade-offs between individual and ensemble forecasts of an emerging infectious disease. Nature Communications. 10.1038/s41467-021-25695-0 (2021).

Biggerstaff, M, RB Slayton, MA Johansson, JC Butler. Improving Pandemic Response: Employing Mathematical Modeling to Confront COVID-19. Clinical Infectious Diseases. 10.1093/cid/ciab673 (2021).

Sharp, TM, KB Anderson, LC Katzelnick, H Clapham, MA Johansson, AC Morrison, E Harris, G Paz-Bailey, SH Waterman. Knowledge gaps in the epidemiology of severe dengue impede vaccine evaluation. Lancet Infectious Diseases. 10.1016/S1473-3099(20)30871-9 (2021).

Paul, P, …, MA Johansson, et al. Genomic Surveillance for SARS-CoV-2 Variants Circulating in the United States, December 2020–May 2021. Morbidity and Mortality Weekly Report. 10.15585/mmwr.mm7023a3 (2021).

Guagliardo, SAJ, …, MA Johansson, MS Cetron, RB Slayton, CR Friedman. Cruise ship travel in the era of COVID-19: A summary of outbreaks and a model of public health interventions. Clinical Infectious Diseases. 10.1093/cid/ciab433 (2021).

Borchering, RK, …, MA Johansson, K Shea, J Lessler. Modeling of Future COVID-19 Cases, Hospitalizations, and Deaths, by Vaccination Rates and Nonpharmaceutical Intervention Scenarios — United States, April–September 2021. Morbidity and Mortality Weekly Report. 10.15585/mmwr.mm7019e3 (2021).

Major, CG, G Paz-Bailey, SL Hills, DM Rodriguez, BJ Biggerstaff, MA Johansson. Risk estimation of sexual transmission of Zika virus-United States, 2016-2017. Journal of Infectious Diseases. 10.1093/infdis/jiab173 (2021).

Johansson, MA, H Wolford, P Paul, PS Diaz, TH Chen, CM Brown, MS Cetron, F Alvarado-Ramy. Reducing travel-related SARS-CoV-2 transmission with layered mitigation measures: Symptom monitoring, quarantine, and testing. BMC Medicine. 10.1186/s12916-021-01975-w (2021).

Quandelacy, TM, …, MA Johansson. Estimating incidence of infection from diverse data sources: Zika virus in Puerto Rico, 2016. PLOS Computational Biology. 10.1371/journal.pcbi.1008812 (2021).

Sánchez-González, L, TM Quandelacy, MA Johansson, et al. Viral etiology and seasonal trends of pediatric acute febrile illness in southern Puerto Rico; a seven-year review. PLOS One. 10.1371/journal.pone.0247481 (2021).

Galloway, SE, …, MA Johansson, et al. Emergence of SARS-CoV-2 B. 1.1. 7 Lineage—United States, December 29, 2020–January 12, 2021. Morbidity and Mortality Weekly Report. 10.15585/mmwr.mm7003e2 (2021).

Johansson, MA, et al. SARS-CoV-2 transmission from people without COVID-19 symptoms. JAMA Open Network. 10.1001/jamanetworkopen.2020.35057 (2021).

Pollett, S, MA Johansson, et al. Identification and evaluation of epidemic prediction and forecasting reporting guidelines: A systematic review and a call for action. Epidemics. 10.1016/j.epidem.2020.100400 (2020).

Sharp, TM, …, MA Johansson, B Rivera-Garcia. Epidemiologic and spatiotemporal trends of Zika Virus disease during the 2016 epidemic in Puerto Rico. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0008532 (2020).

Biggerstaff, M, …, MA Johansson, et al. Early insights from statistical and mathematical modeling of key epidemiologic parameters of COVID-19. Emerging Infectious Diseases. 10.3201/eid2611.201074 (2020).

Cator, LJ, …, MA Johansson, et al. The role of vector trait variation in vector-borne disease dynamics. Frontiers in Ecology & Evolution. 10.3389/fevo.2020.00189 (2020).

Paz-Bailey, G, …, MA Johansson. Recent influenza activity in tropical Puerto Rico has become synchronized with mainland US. Influenza and other respiratory viruses. 10.1111/irv.12744 (2020).

McGough, SF, MA Johansson, M Lipsitch, NA Menzies. Nowcasting by Bayesian Smoothing - A flexible, generalizable model for real-time epidemic tracking. PLOS Computational Biology. 10.1371/journal.pcbi.1007735 (2020).

Madewell, ZH, RR Hemme, L Adams, R Barrera, SH Waterman, MA Johansson. Comparing vector and human surveillance strategies to detect arbovirus transmission: A simulation study for Zika virus detection in Puerto Rico. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0007988 (2019).

Lutz, CS, …, MA Johansson, M Biggerstaff. Applying infectious disease forecasting to public health: A path forward. BMC Public Health. 10.1186/s12889-019-7966-8 (2019).

Biggerstaff, M, … MA Johansson, et al. Coordinating the real-time use of global influenza activity data for better public health planning. Influenza and Other Respiratory Viruses 10.1111/irv.12705 (2019).

Reich, NG, …, MA Johansson, et al. Accuracy of real-time multi-model ensemble forecasts for seasonal influenza in the U.S. PLOS Computational Biology. 10.1371/journal.pcbi.1007486 (2019).

Pollett, S, …, MA Johansson, et al. Genomic epidemiology as a public health tool to combat mosquito-borne virus outbreaks. Journal of Infectious Diseases. 10.1093/infdis/jiz302 (2019).

Johansson, MA , et al. An open challenge to advance probabilistic forecasting for dengue epidemics. Proceedings of the National Academy of Sciences. 10.1073/pnas.1909865116 (2019).

Monaghan, AJ, …, MA Johansson. Consensus and uncertainty in the geographic range of Aedes aegypti and Aedes albopictus in the contiguous United States. PLOS Computational Biology. 10.1371/journal.pcbi.1007369 (2019).

P-Y Kobres, JP Chretien, MA Johansson, et al. A systematic review and evaluation of Zika virus forecasting and prediction research during a public health emergency of international concern. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0007451 (2019).

Reich, NG, …, MA Johansson, et al. Reply to Bracher: Scoring probabilistic forecasts to maximize public health interpretability. Proceedings of the National Academy of Sciences. 10.1073/pnas.1912694116 (2019).

George, DB, ..., MA Johansson, et al. Technology to advance infectious disease forecasting for outbreak management. Nature Communications. 10.1038/s41467-019-11901-7 (2019).

Perkins, TA, …, MA Johansson, RC Reiner. Heterogeneous local dynamics revealed by classification analysis of spatially disaggregated time series data. Epidemics. 10.1016/j.epidem.2019.100357 (2019).

Rivers, C, …, MA Johansson et al. Using "outbreak science" to strengthen the use of models during epidemics. Nature Communications. 10.1038/s41467-019-11067-2 (2019).

Fox, SJ, SE Bellan, TA Perkins, MA Johansson, LA Meyers. Downgrading disease transmission risk estimates using terminal importations. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0007395 (2019).

Rund, SSC, …, MA Johansson, et al. MIReAD, a minimum information standard for reporting arthropod abundance data. Scientific Data. 10.1038/s41597-019-0042-5 (2019).

McGowan, CJ, M Biggerstaff, MA Johansson, et al. Collaborative efforts to forecast seasonal influenza in the United States, 2015–2016. Scientific Reports. 10.1038/s41598-018-36361-9 (2019).

Reich, NG, …, MA Johansson, et al. A collaborative multiyear, multimodel assessment of seasonal influenza forecasting in the United States. Proceedings of the National Academy of Sciences. 10.1073/pnas.1812594116 (2019).

Lai, S, MA Johansson, et al. Seasonal and interannual risks of dengue introduction from South-East Asia into China, 2005-2015. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0006743 (2018).

Mitchell, PK, L Mier-y-Teran-Romero, BJ Biggerstaff, …, MA Johansson. Reassessing Serosurvey-Based Estimates of the Zika Symptomatic Proportion. American Journal of Epidemiology. 10.1093/aje/kwy189 (2018).

Mier-y-Teran-Romero, L, MJ Delorey, JJ Sejvar MA Johansson. Guillain–Barré syndrome risk among individuals infected with Zika virus: a multi-country assessment. BMC Medicine. 10.1186/s12916-018-1052-4 (2018).

Johansson, MA, NG Reich, L Ancel Meyers, M Lipsitch. Preprints: An underutilized mechanism to accelerate outbreak science. PLOS Medicine. 10.1371/journal.pmed.1002549 (2018).

Siraj, AS, …, MA Johansson, et al. Spatiotemporal incidence of Zika and associated environmental drivers for the 2015-2016 epidemic in Colombia. Scientific Data. 10.1038/sdata.2018.73 (2018).

Adamski, A, …, MA Johansson, et al. Estimating the numbers of pregnant women infected with Zika virus and infants with congenital microcephaly in Colombia, 2015-2017. Journal of Infection. 10.1016/j.jinf.2018.02.010 (2018).

Biggerstaff, M, MA Johansson, et al. Results from the second year of a collaborative effort to forecast influenza seasons in the United States. Epidemics. 10.1016/j.epidem.2018.02.003 (2018).

Keegan, LT, J Lessler, MA Johansson. Quantifying Zika: Advancing the Epidemiology of Zika With Quantitative Models. Journal of Infectious Diseases. 10.1093/infdis/jix437 (2017).

Viboud, C, …, MA Johansson, et al. The RAPIDD Ebola forecasting challenge: Synthesis and lessons learnt. Epidemics. 10.1016/j.epidem.2017.08.002 (2017).

Russell, S, K Ryff, C Gould, S Martin, MA Johansson. Detecting Local Zika Virus Transmission in the Continental United States: A Comparison of Surveillance Strategies. PLOS Currents: Outbreaks. 10.1371/currents.outbreaks.cd76717676629d47704170ecbdb5f820 (2017).

Clapham, HE, DAT Cummings, MA Johansson. Immune status alters the probability of apparent illness due to dengue virus infection: Evidence from a pooled analysis across multiple cohort and cluster studies. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0005926 (2017).

Ray, EL, K Sakrejda, SA Lauer, MA Johansson, NG Reich. Infectious disease prediction with kernel conditional density estimation. Statistics in Medicine. 10.1002/sim.7488 (2017).

Mier-y-Teran-Romero, L, AJ Tatem, MA Johansson. Mosquitoes on a plane: Disinsection will not stop the spread of vector-borne pathogens, a simulation study. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0005683 (2017).

Oduyebo, T, …, MA Johansson, et al. Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure - United States (Including U.S. Territories), July 2017. Morbidity and Mortality Weekly Report. 10.15585/mmwr.mm6629e1 (2017).

Ng, V, …, MA Johansson, NH Ogden. Assessment of the probability of autochthonous transmission of chikungunya virus in Canada under recent and projected climate change. Environmental Health Perspectives. 10.1289/EHP669 (2017).

Siraj, AS, …, MA Johansson, Perkins TA. Temperature modulates dengue virus epidemic growth rates through its effects on reproduction numbers and generation intervals. PLOS Neglected Tropical Diseases. 10.1371/journal.pntd.0005797 (2017).

Watts AG, …, MA Johansson, et al. Elevation as a proxy for mosquito-borne Zika virus transmission in the Americas. PLOS ONE 10.1371/journal.pone.0178211 (2017).

Scarpino, SV, LA Meyers, & MA Johansson. Design strategies for efficient arbovirus surveillance. Emerging Infectious Diseases. 10.3201/eid2304.160944 (2017).

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Dengue in the Americas: Modeling what comes next. Infectious Disease Week. October 2015. San Diego, California.

Dengue Forecasting Results and Evaluation Metrics. White House Office of Science and Technology. September 2015. Washington, D.C.

Arbovirus invasion: Insights from models and chikungunya. Laboratory of Excellence for Epidemiology and Modeling Workshop: Ecology of Invasion. July 2015. Riva del Garda, Italy.

Challenges and Opportunities for Modeling Dengue and Chikungunya. National Center for Atmospheric Research/CDC Workshop on Climate and Health. July 2015. Boulder, Colorado.

Advancing epidemic prediction for public health decisions. 3rd International Conference on Digital Disease Detection. May 2015. Florence, Italy.

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Harnessing the numbers: Opportunities and challenges in participatory surveillance. Epicrowd. March 2015. Recife, Brazil.

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Participatory Surveillance and Vaccination: Opportunities for dengue surveillance, prevention, and control. 1st Immunization Conference: Prevention Tools for Children, Adolescents and Adults. May 2013. San Juan, Puerto Rico.

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Predicting the spread of arboviruses via travelers. CDC Modeling Infectious Diseases Group. October 2012. San Juan, Puerto Rico.

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Dengue & climate - Relationship status: It's complicated. NCAR Climate and Health Colloquium. July 2011. Boulder, Colorado.

Dengue & climate: Beyond the basics. NCEZID-NCEH Science Symposium on Climate and Health. May 2011. Atlanta, Georgia.

Predicting yellow fever virus spread via travelers. CDC Division of Vector-Borne Infectious Diseases. November 2010. San Juan, Puerto Rico.

Modeling the spread of vector-borne diseases. One Health One Model Zoonotic Disease Spread Model Discussion and Training Course. November 2010. Guelph, Ontario.

Dengue & climate: Beyond the basics. Society for Vector Ecology Meeting. September 2010. Raleigh, North Carolina.

Dengue/yellow fever: Modeling arboviral disease transmission and spread. USAID PREDICT Meeting. April 2010. Davis, California.

Modeling the potential spread of yellow fever by infected air travelers. CDC Division of Vector-Borne Infectious Diseases. November 2009. San Juan, Puerto Rico.

Epidemiology, math, and climatology applied: Understanding the influence of climate on dengue. University of Puerto Rico Rio Piedras Department of Biology Seminar. October 2009. San Juan, Puerto Rico.

Spatial patterns of dengue transmission. Modeling the Impact of Policy Options during Public Health Crises Workshop. July 2008. Banff, Canada.

Deconstructing dengue dynamics. CDC Division of Vector-Borne Infectious Diseases. July 2006. Fort Collins, Colorado.

The prevalence of leptospirosis in Belen. National University of the Peruvian Amazon Research Symposium. May 2002. Iquitos, Peru.