Eighth Annual Conference for Diversity in Mathematical Modeling and Public Health - Boston, December 9-10, 2019

MIDAS

SPEAKERS & COORDINATORS

Shweta Bansal, PhD

Georgetown University
sb753@georgetown.edu

Shweta Bansal is a Provost's Distinguished Associate Professor of Biology at Georgetown University and specializes in modeling for infectious diseases. She is trained as an interdisciplinary applied mathematician and disease ecologist from the University of Texas at Austin, and was a fellow of the prestigious RAPIDD Postdoctoral Program (of the US National Institutes of Health and the Department of Homeland Security). At Georgetown University, she leads a research group that develops data-driven mathematical models at the interface of social behavior and infectious disease dynamics using tools from network science, statistical physics, computer science, and statistics. She is a 1.5 generation immigrant and hails from the San Francisco Bay Area.

Jesús Cantú Jr., PhD Student

University of Chicago
jesusc@uchicago.edu

Jesus received his B.A. in Sociology from Princeton University and is currently a first-year Ph.D. student at the University of Chicago, program in Ecology and Evolution. He is interested in transmission dynamics and control of infectious diseases, as well as the implementation of cutting-edge epidemiological/statistical modeling in the analysis of big data for use in population health management.

Guido España, PhD

University of Notre Dame
gfcamargoe@unal.edu.co

Guido is a postdoctoral fellow in the Department of Biological Sciences at the University of Notre Dame and a visiting postdoc at the Mathematical Biosciences Institute at The Ohio State University. Guido's research is focused on supporting decision making with the use of mathematical and computational models to understand the dynamics of infectious diseases. In particular, his interests include the evaluation of vaccine impact and vector control in vector-borne diseases, such as dengue, chikungunya, and Zika.

Gloria Kang, PhD

Centers for Disease Control
opt7@cdc.gov

Gloria Kang earned her PhD in Biomedical and Veterinary Sciences and MPH in Infectious Disease from Virginia Tech. Her research interests include applications of computational epidemiology and infectious disease modeling to help inform public health policy. Currently, Gloria is a Prevention Effectiveness Fellow at the Centers for Disease Control & Prevention in the Health Economics and Modeling Unit where she provides mathematical, statistical, and epidemiological modeling assistance to groups across the agency.

Stephen Kissler, PhD

Harvard T.H. Chan School of Public Health
skissler@hsph.harvard.edu

Stephen is an applied mathematician interested in how geography and age structure affect the spread of infectious diseases. During his PhD at the University of Cambridge he developed mathematical models to explain unexpected features of the 2009 A/H1N1 influenza pandemic. Now at the Harvard School of Public Health, he uses medical insurance records to understand the links between disease, antibiotic prescribing, and antibiotic resistance.

Marc Lipsitch, DPhil

Harvard T.H. Chan School of Public Health
mlipsitc@hsph.harvard.edu

Marc Lipsitch is Professor of Epidemiology and Director of the Center for Communicable Disease Dynamics at Harvard T.H. Chan School of Public Health.His research focuses on the effect of immunity, vaccination, and antibiotic use on pathogen populations and the consequences for human health and disease.

Nikita Mahulkar

Harvard T.H. Chan School of Public Health
nmahulkar@hsph.harvard.edu

Nikita acts as the Program Coordinator for the Center for Communicable Disease Dynamics at the Harvard T.H. Chan School of Public Health. CCDD is funded by the National Institute of General Medical Sciences, and strives to enhance mathematical and statistical modeling methods for infectious disease data, while providing financial and scientific mentorship to gifted post-doctoral, doctoral, and masters students from backgrounds that are underrepresented in the public health sphere.

Tufail Malik, PhD

Merck
tufail.malik@merck.com

Tufail Malik is a Principal Scientist in the Economic and Data Sciences department at Merck. His job is to build and analyze dynamic models of infectious diseases and assess the health and economic value of interventions, primarily vaccines. Currently he is working on the models of pneumococcal vaccines. Before joining Merck in 2018 he worked in academia where he published epidemiological models of different infectious diseases including HPV, West Nile Virus, Zika, H1N1, MERS and Hepatitis C.

Pamela Martinez, PhD

Harvard T.H. Chan School of Public Health
pmartinez@hsph.harvard.edu

Pamela Martinez is a postdoctoral research fellow at the Harvard T.H. Chan School of Public Health working with Caroline Buckee and Marc Lipsitch. Her current research focuses on understanding strain diversity and the population dynamics of Streptococcus pneumoniae and their implications for disease control.

Tigist (Tiggy) Menkir, MS Student

Harvard T.H. Chan School of Public Health
tmenkir@hsph.harvard.edu

Tiggy is a second year masters student in infectious disease epidemiology at the Harvard Chan school of public health, where she is advised by Professor Caroline Buckee. Her research interests include the use of dynamic transmission models and statistical tools in machine learning to describe and predict the spread of infectious diseases in resource-constrained and data limited contexts. Her present research is focused on uncovering patterns in malaria reporting delays malaria data in Guyana and using regression-based models to estimate malaria cases in real time

Jessica Salerno

University of Pittsburgh, MIDAS Coordination Center
118jek@gmail.com

Jessica is one of the Project Coordinators for the MIDAS coordination Center. She will be graduating with her MPH at the end of this semester and also hopes to pursue a career in infectious disease modeling. Her research focuses on vaccine hesitancy and how it relates to measles outbreaks in Europe. She loves to travel, read, and meet new people and animals.

Mauricio Santillana, PhD

Harvard Medical School
msantill@fas.harvard.edu

Mauricio is a physicist and applied mathematician with expertise in mathematical modeling and scientific computing. He is an Assistant Professor at Harvard Medical School, a faculty member in the Computational Health Informatics Program at Boston Children's Hospital, and an associate at the Harvard Institute for Applied and Computational Sciences. Mauricio enjoys working with clinicians and public health officials in the design of decision-making support tools.

Stephanie Shadbolt

Fred Hutch, MIDAS Coordination Center
sshadbolt@fredhutch.org

Stephanie has over ten years of research administration experience at educational and research institutions. Since 2015, she is the Center for Inference and Dynamics of Infectious Diseases (CIDID) Associate Director and Outreach Coordinator, based at Fred Hutchinson Cancer Research Center in Seattle. CIDID is one of three MIDAS Centers of Excellence, funded by the National Institute of General Medical Sciences.

LCDR Rachel Slayton, PhD, MPH

Centers for Disease Control
via3@cdc.gov

LCDR Rachel Slayton, PhD, MPH, leads the Mathematical Modeling Unit in the Centers for Disease Control and Prevention's Division of Healthcare Quality Promotion. She has authored or co-authored over 50 peer-reviewed journal articles and has received numerous awards for her work including a CDC Director's Honor Award for Excellence in Quantitative Sciences. Her group's work focuses on developing mathematical models to better understand the transmission and prevention of multidrug resistant organisms and healthcare associated infections.

Xueting Qiu, PhD

Harvard T.H. Chan School of Public Health
Xueting.Qiu@uga.edu

Xueting Qiu is a postdoctoral research fellow under the mentorship of Drs. Marc Lipsitch and Bill Hanage in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health. Her research at CCDD focuses on understanding the molecular evolution of Streptococcus Pneumoniae and identifying critical genes/loci under selection that shape the pathogen populations. Before joining CCDD, she received her Ph.D. in Infectious Diseases from the University of Georgia in 2019 with her dissertation work focusing on applied phylodynamic modeling of respiratory viruses to understand viral evolution and diffusion dynamics in different populations.

Wilbert van Panhuis, MD, PhD

University of Pittsburgh
wgvanpanhuis@gmail.com

Dr. Van Panhuis's research in the fields of computational epidemiology and population health informatics aims to improve the efficient use of information for public health action. He leads multiple large-scale global health data initiatives, including Project Tycho, an open-access repository for global disease surveillance data and the MIDAS Coordination Center.