Paige B. Miller

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Education

Ph.D University of Georgia (Athens, GA) *2015 - 2020*

B.A. Math and Biology, Gustavus Adolphus College (Saint Peter, MN) *2011 - 2015*

Experience

Intern Division of Global Migration and Quarantine, CDC (Atlanta, Georgia) *2017*
Data visualization and analysis of Electronic Data Notification system with the broader goal of improving data quality control and investigating trends in notifiable conditions.

Intern Division of HIV/AIDS Prevention, CDC (Atlanta, Georgia) *2015*
Data analysis for a project examining the efficacy of a brief messaging program about HIV testing among men who have sex with men.

Presentations and Publications

Journal Articles

Miller PB and JM Drake. The effects of core-periphery network structure on disease spread. *In Prep for BMC Theoretical Biology and Medical Modeling*.

Miller PB, Kennedy C, Vasquez D, Bui T, King J, Lewis V, Reynolds WC, Thomas O, Wenclawiak J, Drake JM. Characteristics of COVID-19 Outbreaks in Care, Correctional, and Food Processing Facilities in the United States. *In Prep for Emerging Infectious Diseases*.

Juliana Taube, **Miller PB**, JM Drake. An open-access database of transmission trees used to explore superspreader epidemiology. *In Review at Plos Computational Biology*.

Miller PB, Whalen CC, and JM Drake. Biology or Behavior? Effects of sex-traits and assortative mixing on male-bias in Tuberculosis. *In Review at Royal Society Open Science*.

Miller PB, Zalwango S, Galiwango R, Kakaire R, Sekandi J, Steinbaum L, Drake JM, Whalen CC, and N Kiwanuka.Tuberculosis spread in social networks: A cross-sectional study of TB in Kampala, Uganda. *In review at BMC Infectious Diseases*.

Drake JM, Brett TS, Chen S, Epureanu B, Ferrari M, Marty E, **Miller PB**, O'Dea EB, O'Regan SM, Park AW, and P Rohani. The statistics of epidemic transitions. 2018. *PLoS Computational Biology*.

Brett TS, O'Dea EB, Marty E, **Miller PB**, Park AW, Drake JM, and P Rohani. Anticipating epidemic transitions with imperfect data. 2018. *PLoS Computational Biology*.

Miller PB, O'Dea EB, Rohani P, and JM Drake. Forecasting infectious disease emergence subject to seasonal forcing. 2017. *BMC Theoretical Biology and Medical Modeling*.

Bloch Qazi M, **Miller PB**, Poeschel P, Phan MH, Thayer JL, Medrano CL, and MC Bloch Qazi. Transgenerational effects of maternal and grandmaternal age on offspring viability and performance in Drosophila melanogaster. 2017. *Journal of Insect Physiology*.

Mansergh G, **Miller PB**, JH Herbst, MJ Mimiaga, and J Holman. Effects of Brief Messaging about Undiagnosed Infections Detected through HIV Testing among Black and Latino Men who have Sex with Men in the United States. 2015. *Sexually Transmitted Diseases*.

Miller PB, Obrik-Uloho OT, Phan MH, Medrano CL, Renier JS, Thayer JL, Wiessner G, and MC Bloch Qazi. 2014. The Song of the Old Mother: Reproductive Senescence in Female Drosophila. *FLY*.

Presentations

Miller PB, Whalen CC, Noah Kiwanuka, and JM Drake. 2019. Tuberculosis transmission and social network structure: A case study in Kampala, Uganda and simulations on structured networks. Epidemics. Charleston, SC.

Miller PB, Whalen CC, and JM Drake. 2019. Can social network patterns explain male-bias in TB cases? Center for the Ecology of Infectious Diseases Annual Meeting. Athens, GA.

Miller PB. 2018. Data visualization in R and producing professional quality graphics. R Ladies Meeting. Athens GA.

Miller PB, Houck K, and JM Drake. 2018. Age-targeted interventions for TB in endemic regions. National Science Foundation Research Training Program Meeting. Arlington, VA.

Miller PB and JM Drake. 2017. Spatial pattern formation of an infectious disease on the verge of elimination. Odum School of Ecology Graduate Student Research Symposium, Athens, GA.

Miller PB and JM Drake. 2016. Forecasting infectious diseases with early warning signals. MIDAS Symposium, Reston, VA.

Miller PB. and JM Drake. 2015. Using the power ratio as an early warning statistic for predicting emerging infectious disease outbreaks. National Science Foundation, Emerging Researchers National Conference, Washington D.C.

Miller PB. and G Mansergh. 2015. Effects of Brief Messaging about Undiagnosed Infections Detected through HIV Testing among Black and Latino Men who have Sex with Men in the United States. Celebration of Creative Inquiry, Gustavus Adolphus College.

Grants & Awards

Infectious Disease Ecology Across Scales Grant ($1,000) *2018*

ARCS Foundation, Graduate Research Scholarship (Honorable mention) *2017*

National Science Foundation Graduate Research Fellowship ($102,000) *2016*

Gustavus Adolphus College Award for Outstanding Student in Public Health *2015*

Graduate coursework

Population Ecology

Probability and Statistics I & II

Applied Linear Regression

Time Series Analysis

Machine Modeling

Multi-scale modeling

Bayesian Statistics

Fundamentals of Disease Ecology I & II

IDEAS Collaborative Research Capstone

Service

Journal refereeing: American Journal of Epidemiology, Current Bioinformatics, Proceedings of the National Academy of Sciences (co-reviewer), Nature Scientific Data (co-reviewer)

Mentoring: Sunishka Thakur (Women in Science Program, 2015-2016), Kennedy Houck (Population Biology of Infectious Diseases REU Program, 2018), Julianna Taube (Population Biology of Infectious Diseases REU Program, 2019), Culzean Kennedy (Student Research Program at UGA, 2020) and Cody Reynolds, Vanessa Lewis, Jessica Wenclawiak, Olivia Thomas, Tommy Bui (Coronavirus working group, 2020)

Outreach: HIV testing volunteer (LiveForward, 2015-current), Treasurer (Odum School of Ecology Graduate Student Organization, 2016-2017), Head coach and board member (Classic City Volleyball Club, 2017-current.)

Affiliations

Coronavirus Working Group, University of Georgia

Infectious Disease Ecology Across Scales Program, University of Georgia

Center for the Ecology of Infectious Diseases, University of Georgia

Epidemiology in Action Research Group, University of Georgia

R Ladies Group, Athens GA

Modeling Infectious Disease Agent Study (MIDAS) Network

Last updated: December 11, 2020