

Paige Bianca Miller

Graduate Research Scholar
Odum School of Ecology
University of Georgia
Athens, GA 30605

Phone: (651) 767-2412
Email: paige.miller@uga.edu
Homepage: <https://paigemiller.github.io>

Education

B.A. Biology and Mathematics. Gustavus Adolphus College (Saint Peter, Minnesota). 2011-2015.

Ph.D. Disease Ecology. University of Georgia (Athens, Georgia). 2015-current.

Research Experience

Drake Lab Research Scholar, the University of Georgia, *current*. Using mathematical and statistical models for disease forecasting and intervention.

Whalen Lab Research Scholar, the University of Georgia, *current*. Analyzing contact network data to study human TB transmission in Uganda.

Public Health Intern, Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, 2015. Analyzed efficacy of behavioral interventions for promoting safe sex behavior among men who have sex with men (MSM) in the United States.

Drake Lab Undergraduate Research Assistant, the University of Georgia, 2014. Developed early warning signals for forecasting disease emergence and eradication thresholds for measles.

Park Lab Undergraduate Research Assistant, the University of Georgia, 2013. Developed models for the transmission and drug resistance emergence of heartworm in the Southern United States.

Bloch-Qazi Lab Undergraduate Research Assistant, Gustavus Adolphus College, 2012-15. Studied impacts of aging on reproduction in *Drosophila melanogaster*.

Presentations and Publications

Journal Articles

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

Mansergh G, PB Miller, JH Herbst, MJ Mimiaga, 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*.

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

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

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

Drake JM, Brett TS, Chen S, Epureanu B, Ferrari M, Marty E, Miller PB, O'Dea EB, O'Regan SM, Park AW, and Rohani P. Anticipating epidemic transitions with imperfect data. 2018. *PLoS computational biology*.

Miller PB, Zalwango S, Galiwango R, Kakaire R, Sekandi J, Steinbaum L, Drake JM, Whalen CC, Kiwanuka N. Tuberculosis spread in social networks: A cross-sectional study of TB in Kampala, Uganda. *Submitted to International Journal of Epidemiology*.

Presentations

Miller, PB. and A.W. Park. 2013. The Perfect Storm: Factors that lead to increased transmission and drug resistance emergence of heartworm in the United States. NIMBIOS Undergraduate Research Conference at the interface of Math and Biology, Knoxville, TN.

Miller, PB. and J.M. 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.

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

Miller PB and J.M. 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, Houck K, and J.M. Drake. 2018. Improving mathematical models for Tuberculosis: Age-structured models for TB in endemic regions. National Science Foundation Research Training Program Meeting. Arlington, VA.

Miller PB, Houck K, and J.M. Drake. 2018. Improving mathematical models for Tuberculosis: Age-structured models for TB in endemic regions. National Science Foundation Research Training Program Meeting. Arlington, VA.

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

Taube J, Miller PB, and J.M. Drake. 2019. Who infected whom? Creating a database of transmission trees for comparative outbreak analyses. Center for the Ecology of Infectious Diseases Annual Meeting. Athens, GA.

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

Grants & Awards

Infectious Disease Ecology Across Scales Small grant (\$1,000), 2018.

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

National Science Foundation, Graduate Research Fellowship (Honorable mention), 2015.

Gustavus Adolphus College Mansergh Award for Undergraduates in Public Health, 2015.

Gustavus Adolphus College Paul Rucker Diversity Scholarship, 2011.

Gustavus Adolphus College Charles Hamrum Award for Biology, 2014.

Gustavus Adolphus College Verna Leona Anderson Scholarship for Women in Leadership, 2014.

Gustavus Adolphus College Marguerite Pooley Hauber Scholarship for Women in Mathematics, 2012.

Service

Volleyball coach. Classic City Volleyball. 2017-current.

HIV testing volunteer, LiveForward, Athens GA, 2015-current.

Undergraduate student mentor, Women in Science Program, University of Georgia, 2015-current.

Professional Organizations

Sigma Xi

American Statistical Association

Last updated: October 10, 2019