

Education

Ph.D. University of Georgia, Ecology	<i>expected 2019</i>
M.S. Auburn University, Fisheries and Allied Aquacultures	2011
B.S. Michigan State University, LBS Microbiology and Immunology	2007

Scholarships, Honors and Awards

Odum School of Ecology Small Grant (\$871)	2015
Alabama Fisheries Association David Bayne Scholarship (\$500)	2009-2010
Auburn University Thesis and Dissertation Research Award (\$1000)	2008-2009
Michigan State University Undergraduate Research and Arts Forum Merit Award (\$50)	2007

Published Articles

- [1] R. B. **Kaul**, M. Evans, C. Murdock, and J. Drake. Spatio-temporal spillover risk of yellow fever in Brazil *Parasites & Vectors*, 11: 488, Aug. 2018. ISSN 1756-3305.
- [2] R. B. **Kaul**, A. M. Kramer, F. C. Dobbs, and J. M. Drake. Experimental demonstration of an Allee effect in microbial populations. *Biology Letters*, 12(4) Apr. 2016. ISSN 1545-7885.
- [3] S. M. O'Regan, K. Magori, J. T. Pulliam, M. A. Zokan, R. B. **Kaul**, H. D. Barton, and J. M. Drake. Multi-scale model of epidemic fade-out: Will local extirpation events inhibit the spread of white-nose syndrome? *Ecological Applications*, 25(3):621–633, Apr. 2015. ISSN 1051-0761.
- [4] J. M. Drake, R. B. **Kaul**, L. W. Alexander, S. M. O'Regan, A. M. Kramer, J. T. Pulliam, M. J. Ferrari, and A. W. Park. Ebola Cases and Health System Demand in Liberia. *PLOS Biology*, 13(1): e1002056, Jan. 2015. ISSN 1545-7885.
- [5] G. P. Horst, O. Sarnelle, J. D. White, S. K. Hamilton, R. B. **Kaul**, and J. D. Bressie. Nitrogen availability increases the toxin quota of a harmful cyanobacterium, *Microcystis aeruginosa*. *Water Research*, 54:188–198, May 2014. ISSN 00431354.
- [6] J. D. White, R. B. **Kaul**, L. B. Knoll, A. E. Wilson, and S. Orlando. Large variation in vulnerability to grazing within a population of the colonial phytoplankter, *Microcystis aeruginosa*. *Limnology and Oceanography*, 56:1714–1724, 2011.
- [7] O. Sarnelle, J. Morrison, R. **Kaul**, G. Horst, H. Wandell, and R. Bednarz. Citizen monitoring: Testing hypotheses about the interactive influences of eutrophication and mussel invasion on a cyanobacterial toxin in lakes. *Water Research*, 44(1):141–150, Jan. 2010. ISSN 00431354.
- [8] A. E. Wilson, R. B. **Kaul**, and O. Sarnelle. Growth Rate Consequences of Coloniality in a Harmful Phytoplankter. *PLoS ONE*, 5(1):e8679, Jan. 2010. ISSN 1932-6203.

Conference Presentations and Posters

- [1] R. B. Kaul, M. Evans, C. Murdock, and J. Drake. Predicting spatiotemporal risk of yellow fever using a machine learning approach. International Meeting on Emerging Diseases and Surveillance, November 2018.
- [2] R. B. Kaul, M. Evans, C. Murdock, and J. Drake. Spatiotemporal spillover risk of yellow fever in Brazil. Ecological Society of America, August 2018.
- [3] R. B. Kaul, G. Righi, and J. Drake. Noise-induced catastrophic change in ecology. Ecological Society of America, August 2017.

- [4] R. B. Kaul, and J. M. Drake. Assessing population viability in a changing world: evolutionary rescue and critical slowing down. 2nd ASM Conference on Experimental Microbial Evolution, August 2016.
- [5] R. B. Kaul, S. Bowden, L. Wachsmuth, E. Dolan, and J. M. Drake. Population biology of infectious diseases REU site: Math majors at the bench. Ecological Society of America, August 2015.
- [6] R. B. Kaul, A. Smith, and J. M. Drake. Development of deterministic and stochastic models for a t7 phage- *E. coli* system with vaccination strategy implementation. Ecology and Evolution of Infectious Diseases, May 2015.
- [7] R. B. Kaul, A. M. Kramer, F. Dobbs, and J. Drake. Allee effects: Scaling down to the microbial level. Ecological Society of America, August 2014.
- [8] R. B. Kaul, A. M. Kramer, F. Dobbs, and J. Drake. Allee effects in experimental microbial systems. American Society for Microbiology, June 2012.

Invited Seminars

- [1] Work, learn, and advance your science career. West Virginia State University, Biology Department, October 2017.
- [2] Bringing theory to life: Using microbial systems to explore ecological theory. Georgia College & State University, Biology Department, March 2017.
- [3] How does vaccine distribution affect the ability to control viral diseases. University of Arkansas at Little Rock, Biology Department, January 2015.

Professional & Leadership Activity

STEMzone STEM outreach event at football games

- Founder 2017
- Executive Committee 2018

Union of Athens Scientists

- Executive Committee 2017

Odum School of Ecology Graduate Student Organization

- Executive Committee Representative 2015-2017
- Webmaster 2015-2017
- Graduate Student Representative 2014-2015

Professional Societies

current

- UGA WiSci: Women in Science
- Ecological Society of America
- American Society for Microbiology

Teaching Experience

IDEAS Data Clinic, University of Georgia

2017

- Introduction to R two day boot camp
- Co-developed curriculum and interactive learning activities

Principles of Biology II, University of Georgia

2016, 2017, 2018

- Introduced 2 sections of science majors to ecological concepts
- Guided students through the scientific writing process

Survey of Life, Auburn University

2011 (Spring)

- Introduced 4 sections of non-science majors to scientific concepts
- Prepared and ran review for laboratory practical

Ecology, Auburn University

2009 (Spring, Fall)

- Lectured ecology laboratory sections, in addition to guiding students in a field setting
- Organized and ran review sessions for lecture component of class
- Guided students through the scientific writing process
- Received high student evaluations and requested to return by department