

Carolyn L. Keogh

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EDUCATION

Odum School of Ecology, University of Georgia, *Athens, GA*
PhD in Ecology Advisor: Dr. James E. Byers **May 2016**
Emory University, *Atlanta, GA*
Bachelors of Science Biology, Environmental Studies **December 2007**

RESEARCH INTERESTS

- Marine ecology, including host-parasite interactions
 - Determinants of introduced species establishment and spread
 - Teaching in ecology and evolution
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POSITIONS HELD

Lecturer **January 2018 -- present**
Department of Environmental Science, Emory University
Summer Teaching Faculty **July - August 2021, 2022**
Shoals Marine Laboratory, Appledore Island, ME
Scientist in Residence Fellow **June-August 2019**
Shoals Marine Laboratory, Appledore Island, ME
Lecturer and Undergraduate Coordinator **July 2016 – December 2017**
Odum School of Ecology, University of Georgia
Postdoctoral Teaching Fellow **May 2016**
Odum School of Ecology, University of Georgia
Graduate teaching assistant; NSF Graduate Research Fellow **September 2009 – April 2016**
Odum School of Ecology, University of Georgia
Program Development Coordinator **December 2007 – August 2009**
Department of Environmental Science, Emory University

TEACHING AND MENTORING

Courses Taught

Emory University, Department of Environmental Science

- ENVS 131 Introduction to ENVS Field Studies
- ENVS 240/240L Ecosystem Ecology w/ Lab
- ENVS/BIOL 349L Biology of Invasions
- ENVS/BIOL 373 Marine Ecology
- ENVS 390 Seminar in Environmental Issues
- ENVS 442L Ecology of Emory w/ Lab
- ENVS 491 Service Learning in Environmental Science

University of Georgia, Odum School of Ecology

- ECOL 3500 Ecology
- ECOL 3300 Field course in Ecological Problem Solving
- ECOL 4900 Environmental Practicum

Shoals Marine Laboratory

- BIOSM 4990/MEFB 751 Research in Biology
- BIOSM 3340/MEFB 720 Marine Invasive Species

Graduate Teaching Assistantships**University of Georgia, Odum School of Ecology**

- Ecology Laboratory
- Graduate Teaching Seminar
- Ecological Basis of Environmental Issues Lab

Fall 2015, Spring 2016

University of Georgia, Department of Biological Sciences

- Principles of Biology II Lab

GRANTS, FELLOWSHIPS, AND AWARDS

Atlanta Global Research & Education Collaborative Grant - Community Science Collaboratory (Summer 2021 - present)

Emory Center for Faculty Development and Excellence Community Engaged Learning Grant (Spring 2021)

Georgia Climate Project Faculty Fellowship (Spring 2020 - Spring 2021)

Shoals Marine Laboratory Scientist in Residence Fellow (Summer 2019)

Emory Center for Faculty Development and Excellence Teaching Enhancement Fellow (Fall 2019-Spring 2020)

UGA Student Government Association Outstanding Professor (Spring 2017)

UGA Odum School of Ecology Dean's Award (May 2017)

UGA Outstanding Teaching Assistant Award recipient (Spring 2015)

University of Georgia Center for Teaching and Learning's Learning Technologies Grant in collaboration with Dr. Scott Connelly and Dr. James Porter (Fall 2014)

American Museum of Natural History Lerner-Gray Marine Research Grant (Spring 2015)

NSF - Graduate Research Opportunities Worldwide and the Japan Society for the Promotion of Science - collaboration with Dr. Gyo Itani and Dr. Osamu Miura, Kochi University, Japan (2014)

NSF - East Asia and Pacific Summer Institutes and Japan Society for the Promotion of Science – collaboration with Dr. Gyo Itani and Dr. Osamu Miura, Kochi University, Japan (Summer 2013)

American Malacological Society - Melbourne Carriker Student Research Award (Spring 2012)

Odum School of Ecology - Robert A. Sheldon Memorial Award (Spring 2012)

NSF - Graduate Research Fellowship (July 2011 - June 2014)

NOAA - Georgia Oceans and Human Health Initiative traineeship (July 2010-June 2011)

NSF - Research Experience for Undergraduates Fellowship, Shoals Marine Laboratory (Summer 2007)

PUBLICATIONS

Blakeslee, A.M., M. Ruocchio, C.S. Moore, **C. L. Keogh**. 2020. Altered susceptibility to trematode infection in native versus introduced populations of the European green crab. *Aquatic Invasions* 15(1): 177-195.

- Gehman, A.L., D.A. Satterfield, **C.L. Keogh**, A. Fritzche-McKay, S.A. Budischak. 2019. To improve ecological understanding, collect infection data. *Ecosphere* 10(6): <https://doi.org/10.1002/ecs2.2770>
- Keogh, C.L.**, O. Miura, T. Nishimura, J.E. Byers. 2017. The double edge to parasite escape: increased infection susceptibility in an invasive crab. *Ecology* 98(9): 2241-2247.
- Blakeslee, A.M., Y. Kamakura, J. Onufrey, W. Makino, J. Urabe, S. Park, **C.L. Keogh**, W. Miller, M. Minton, J.T. Carlton, O. Miura. 2017. Reconstructing the invasion history of the Asian shore crab, *Hemigrapsus sanguineus* (De Haan 1853) in the Western Atlantic. *Marine Biology* 164(3).
- Keogh, C.L.**, J.E. Byers, M.E. Sanderson. 2015. Local adaptation to parasite-mediated selective pressure: comparing three congeneric co-occurring hosts. *Oecologia* 180(1): 137-147.
- Blakeslee, A.M., **C.L. Keogh**, A.E. Fowler, B. Griffen. 2015. Assessing the effects of trematode infection on invasive green crabs in eastern North America. *PLOS One* 10(6): e0128674.
- Byers, J.E., A.J. Malek, L.E. Quevillon, I. Altman, and **C.L. Keogh**. 2015. Pattern and process of parasite infection decoupled over a small spatial scale. *Oikos* 124(11): 1511-1519.
- Blakeslee, A.M.H., A.L. Fowler, and **C.L. Keogh**. 2013. Marine invasions and parasite escape: updates and new perspectives. *Advances in Marine Biology*, ed. M. Lesser, 66: 87-169.
- Chaves, L.F., **C.L. Keogh**, A.M. Nguyen, G.M. Decker, G.M. Vazquez-Prokopec, and U.D. Kitron. 2011. Combined sewage overflow accelerates immature development and increases body size in the urban mosquito *Culex quinquefasciatus*. *Journal of Applied Entomology* 135: 611-620.
- Chaves, L.F., L.C. Harrington, **C.L. Keogh**, A.M. Nguyen and U.D. Kitron. 2010. Blood feeding patterns of mosquitos: random or structured? *Frontiers in Zoology* 7:3.
- Blakeslee, A.M.H., **C.L. Keogh**, J.E. Byers, A.M. Kuris, K.D. Lafferty, and M. E. Torchin. 2009. Differential escape from parasites by two competing introduced crabs. *Marine Ecology Progress Series* 393: 83-96.
- Chaves, L.F., **C.L. Keogh**, G.M. Vazquez-Prokopec and U.D. Kitron. 2009. Combined sewage overflow enhances oviposition of *Culex quinquefasciatus* Say (Diptera: Culicidae) in urban areas. *Journal of Medical Entomology* 46(2): 220-226.

Manuscripts in advanced preparation

- Keogh, C.L.**, O. Miura, T. Nishimura, J.E. Byers. Immune phenotype and energy allocation in invasive and native populations of a globally invasive shore crab – *in preparation for Aquatic Invasions*

PRESENTATIONS

- “How can hosts stay ahead in a host-parasite co-evolutionary arms race?” Carolyn L. Keogh. Shoals Marine Laboratory Rock Talk seminar series, *June 2019, Appledore Island, ME.*
- “Costs and benefits of parasite escape: immune defense trade-offs in the invasive shore crab *Hemigrapsus sanguineus*” Carolyn L. Keogh, Tomohiro Nishimura, Osamu Miura, James E. Byers, Society for Integrative and Comparative Biology Meeting, *January 3-7, 2016, Portland, OR. (Oral)*
- “Increased susceptibility to infection in invasive versus native populations of the shore crab *Hemigrapsus sanguineus*,” Carolyn L. Keogh, Tomohiro Nishimura, Osamu Miura, James E. Byers, Annual Benthic Ecology Meeting, *March 4-8, 2015, Quebec City, Canada. (Oral)*
- “Eco-immunology in an invasive species: consequences of parasite escape,” Carolyn Keogh, Tomohiro Nishimura, Osamu Miura, James E. Byers, University of Georgia EDGE Seminar, *Oct. 17, 2014 Athens, GA.*

- “Enemy release and immune defense trade-offs in the invasive shore crab, *Carcinus maenas*, in the northwestern Atlantic,” Carolyn L. Keogh, April M.H. Blakeslee, Blaine D. Griffen, James E. Byers, Annual Benthic Ecology Meeting, *March 20-23, 2013 Savannah, GA. (Oral)*
 - “Trematode diversity and local adaptation of host snails to trematode parasite attack,” Carolyn L. Keogh, Martha E. Sanderson, James E. Byers. Annual Benthic Ecology Meeting, *March 20-23, 2013 Savannah, GA. (Poster)*
 - “Differential Escape from Parasites in Two Competing Introduced Crabs,” April M.H. Blakeslee, Carolyn L. Keogh, Mark Torchin, Kevin D. Lafferty, Armand Kuris, James E. Byers. Annual Benthic Ecology Meeting, *March 10-13, 2010 Wilmington, NC. (Poster)*
 - “Correlates of Urban Mosquito Fitness: Combined sewage overflow streams and *Culex* oviposition choices,” Carolyn L. Keogh, Luis F. Chaves, Uriel D. Kitron, Annual Meeting of the Georgia Mosquito Control Association. *October 22, 2009 Athens, GA. (Oral)*
 - “Parasite Release in Two Competing Non-native Crabs,” Carolyn L. Keogh, April M.H. Blakeslee, James E. Byers Annual Benthic Ecology Meeting. *April 10, 2007 Providence, RI. (Oral)*
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LEADERSHIP AND SERVICE ACTIVITIES

Diversity and Inclusion Committee, Department of Environmental Science, Emory (Spring 2021 - present)
 Emory College Hightower Review Committee (Fall 2019 - present)
 Committee on the Environment, Emory University Senate (Fall 2019 – present; Chair, Fall 2020 - present)
 Research Committee, Department of Environmental Science, Emory (Spring 2018-present)
 Scholarship and Grants Committee, Department of Environmental Science, Emory (Spring 2018-present)
 Undergraduate Curriculum Committee, Department of Environmental Science, Emory (Spring 2018)
 Undergraduate Curriculum Committee (Chair), Odum School of Ecology
 WatershedUGA (UGA Campus-wide sustainability initiative) – content developer
 WiSci (UGA Women in Science organization) member
 “Gulf Coast Natural History training” content development and presentation, National Park Service
 Trails and Rails Program (Feb-March, 2014, 2015)
 EcoReach (Ecology teaching outreach), Odum School of Ecology (Fall 2010 – present)
 Graduate Representative, Odum School of Ecology (elected; Fall 2012 – Spr 2013)
 Graduate Program Committee representative, Odum School of Ecology (elected; Fall 2012)
 Translational Ecology BA development committee, Odum School of Ecology (Spr 2012 – Fall 2012)
 Undergraduate program committee, Odum School of Ecology (elected; Fall 2011-Spr 2012)
 Facilities committee representative, Odum School of Ecology (elected; Fall 2010 – Spr 2011)

ADDITIONAL SKILLS AND ACTIVITIES

Languages: English (native), French (proficient)

Reviewer for: Biological Invasions, Aquatic Invasions, Ecology Letters, Food Webs, ESA
 Teaching Issues and Experiments in Ecology, Marine Biology, Parasitology

Professional memberships: Ecological Society of America, Society for Integrative and Comparative Biology, American Malacological Society