

Reid S. Brennan

Graduate Group in Ecology
University of California, Davis
1 Shields Ave.
Davis, CA 95616

Email: rsbrennan@ucdavis.edu
Phone: 530-752-2473

Education

Ph.D., Ecology, University of California, Davis 2012-present
Advisor: Dr. Andrew Whitehead
Dissertation: The genomic and physiological basis of adaptive divergence within and among killifish in the genus *Fundulus*
Affiliate Member: Center for Population Biology
Bachelor of Science, University of Dayton 2006-2009
Biology Major, Chemistry Minor

Research and Professional Experience

Graduate Student Researcher, University of California, Davis 2012-Present
Supervisor: Dr. Andrew Whitehead
The mechanistic basis of adaptive divergence within and among species of killifish
Graduate Student Researcher, Louisiana State University 2010-2012
Supervisor: Dr. Andrew Whitehead
The mechanistic basis of adaptive divergence within and among species of killifish
Herpetology Intern, Cincinnati Zoo and Botanical Gardens 2008
Feeding preferences of the mangrove salt marsh snake, *Nerodia clarkii compressicauda*.
Research Assistant, Greis Lab, University of Cincinnati 2007
Supervisor: Dr. Ken Greis
Development of novel large scale proteomic assays

Publications

- Reid S. Brennan**, Ruth Hwang, Michelle Tse, Nann Fangue, Andrew Whitehead. (2016). Local adaptation to osmotic environment in killifish, *Fundulus heteroclitus*, is supported by divergence in swimming performance but not by differences in excess post-exercise oxygen consumption or aerobic scope. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 196, 11-19.
- Reid S. Brennan**, Fernando Galvez, Andrew Whitehead. (2015). Reciprocal osmotic challenges reveal mechanisms of divergence in phenotypic plasticity in the killifish *Fundulus heteroclitus*. *The Journal of Experimental Biology*, 218(8), 1212-1222.
- B. C. Carstens, **Reid S. Brennan**, V. Chua, C. V. Duffie, M. G. Harvey, R. A. Koch, C. D. McMahan, B. J. Nelson, C. E. Newman, J. D. Satler, G. Seeholzer, K. Posbic, D. Tank, J. Sullivan. (2013) Model Selection as a Tool for Phylogeographic Inference: An Example From the Willow *Salix melanopsis*. *Molecular Ecology*, 22(15) 4014-4028.
- Genevieve M. Kozak, **Reid S. Brennan**, Emma Berdan Rebecca C. Fuller, Andrew Whitehead. (2013) Functional and population genomic divergence within and between two species of killifish adapted to different osmotic niches. *Evolution*, 68:63-80.
-

Grants and Awards

National Science Foundation Doctoral Dissertation Improvement Grant- \$18,040	2016
Henry A. Jastro Research Fellowship, UC Davis Graduate Group in Ecology- \$2,100	2016
UC Davis Graduate Group in Ecology Fellowship	2015
Henry A. Jastro Research Fellowship, UC Davis Center for Population Biology- \$1,600	2015
Daphne and Ted Pengelley Award in Evolutionary Biology, UC Davis Center for Population Biology- \$1,500	2014
Henry A. Jastro Research Fellowship, UC Davis Graduate Group in Ecology-\$1,388	2014
UC Davis Graduate Group in Ecology Fellowship	2014
Henry A. Jastro Research Fellowship, UC Davis Graduate Group in Ecology-\$1,882	2013
George Maier Foundation Grant- \$1,000	2013
Economic Development Assistantship, Louisiana State University- \$50,000	2010-2012
Louisiana State University Biology Graduate Student Association Grant- \$300	2011
John J. Comer Ecological Undergraduate Research Award, University of Dayton	2009

Presentations

Reid S. Brennan and Andrew Whitehead. 2016. Physiological and genomic adaptations to salinity in populations of killifish, *Fundulus heteroclitus*, following a marine to freshwater habitat shift. Evolution. Austin, TX, USA.

Reid S. Brennan, Fernando Galvez, Andrew Whitehead. 2014. Reciprocal osmotic challenges reveal mechanisms of divergence in phenotypic plasticity in the killifish *Fundulus heteroclitus*. American Physiological Society Comparative Approaches to Grand Challenges in Physiology. San Diego, CA, USA.

Reid S. Brennan, Fernando Galvez, Shujun Zhang, Andrew Whitehead. 2013. Mechanisms of local adaptation to osmotic environment in the killifish *Fundulus heteroclitus*. Ecological and Evolutionary Genomics Gordon Research Conference, Biddeford, ME, USA.

Teaching Experience

Teaching Assistant	2015
Comparative Genomics BIS181, Department of Microbiology and Molecular Genetics, University of California-Davis	
Teaching Assistant	2012, 2014
Introductory Biology BIS2B, Department of Ecology and Evolution, University of California-Davis	
Teaching Assistant	2013, 2014, 2015
Teaching Assistant, Genetics and Society, Department of Science and Society, University of California-Davis	
Guest Lecturer	2013, 2014
"Conservation Genetics"	
Genetics and Society, Department of Science and Society, University of California-Davis	
Lead Teaching Assistant	2015
Introductory Biology BIS2A Department of Ecology and Evolution, University of California-Davis	
Teaching Assistant	2013
Introductory Biology BIS2A, Department of Ecology and Evolution, University of California-Davis	

Professional Society Memberships

Society for the Study of Evolution
American Physiological Society

Service

Mentor, Graduate Academic Achievement and Advocacy Program	2015-2016
EnvironmentMentors: Science Education program for high school students	2013-2014
Undergraduate Mentorship: Have mentored 5 undergraduate students for a minimum of 1 quarter/semester	2010-Present
Student Representative: Ecology Graduate Group Admission Committee.	2014
Organizational Committee, UC Davis Center for Population Biology Workshop: Questions and methods in ecological genetics	2015
Reviewer: Journal of Fish Biology, Evolution, Molecular Ecology	