

Will H. Ryan, PhD

Post-doctoral scholar // University of Alabama at Birmingham
Department of Biology // wryan@uab.edu

Education:

College of the Canyons, Valencia CA	Biology	Undergraduate
University of California, Santa Cruz CA	Cell Biology	Undergraduate
California State University, Northridge CA	Env. Biology	B.S. 2007
California State University, Northridge CA	Biology	M.S. 2010
Florida State University, Tallahassee FL	Biology	Ph.D 2017

MS Thesis: Ecological consequences of phenotypic plasticity in the colonial marine hydrozoan, *Hydractinia symbiolongicarpus*. (CSUN, advisor: Steve Dudgeon)

Dissertation: The role of seasonal and geographic temperature variation in the life cycle of the clonal sea anemone *Diadumene lineata* (Verrill). (FSU, advisor: Tom Miller)

Professional Experience:

2017 – current	Postdoctoral Scholar	University of Alabama at Birmingham Mentor: Dr. Stacy Krueger-Hadfield
2011- 2017	Teaching Assistant	Florida State University Courses: General Ecology, Ecology Lab, Marine Biology, Advanced Invertebrate Zoology, Plant Biology, Introductory Biology Lab and Experimental Biology.
2010- 11	Vivarium Technician	Worcester Polytechnic Institute, Worcester, MA
2010 – 11	Biology Teacher	Worcester Think Tank, Worcester MA Develop curriculum for and teach animal biology and evolution courses at a private secondary school.
2008-09	Teaching Associate/Graduate Assistant	California State University, Northridge Courses: Introductory Biology Lab, Marine Biology, Design and Analysis of experiments and Biometry
2006-09	Research Assistant	California State University, Northridge Mentor: Dr. Steve Dudgeon

Grants:

2018 UAB Postdoctoral Career Enhancement award	\$1,500
2017 Mote graduate research fellowship, FSU	
2016 PADI Foundation Grant in Aid of Research	\$6,000
2015 Edith and Lamar Trott Award, FSU	\$2,000
2015 East Asia Pacific Summer Institute, NSF and JSPS	\$10,000
2015 Ecological Society of America Centennial project grant	\$3,000
2013 Gramling Award in Marine Biology, FSU	\$6,000
2013 PADI Foundation Grant in Aid of Research	\$3,000
2013 FSU Coastal Marine Lab Graduate Scholarship	\$1,000
2011 Robert B. Short scholarship in Zoology, FSU	\$600

Awards:

2016 New England Biolabs Passion in Science Award for Art and Creativity
2016 Beneath the Waves film festival – 1st place entry (hosted at the Benthic Marine Ecology meeting)
2014 NESCent evolution film festival – 1st place entry
2014 Benthic Ecology Meeting Society 3rd place student presentation
2013 FSU Outstanding Teaching Assistant Award
2010 Biology department outstanding graduate research award, CSUN
2010 1st place presentation – CSUN student research and creative works symposium
2009 2nd place presentation– CSUN student research and creative works symposium
2008 1st place presentation– Sigma Xi Research Society graduate research symposium

Professional Associations:

FSU Ecology and Evolution Research Discussion Group (Secretary 2012-13)
CSUN Marine Biology Graduate Student Association (President 2009-10)
CSUN Biology, Ecology and Evolution Reading Group (Treasurer 2009-10)
American Biology Teacher
Evolution Society of America
Western Society of Naturalists

Invited Presentations:

Ryan WH. 2017. How does the environment influence the balance of asexual and sexual reproduction in a clonal sea anemone? Mote endowment working group, FSU Coastal Marine Laboratory, St. Teresa, FL.

Ryan WH. 2017. What can a globally invasive sea anemone teach us about the evolution of clonality? Department of Biology, University of Alabama, Birmingham.

Ryan WH. 2016. Intraspecific variation in plasticity drives life history variation across the species range of a common, exotic sea anemone. Mote endowment working group. ANERS, Eastpoint, FL.

Ryan WH. 2016. Why do we tell such drab stories about such colorful people (in science). New England BioLabs Passion in Science Awards symposium. Ipswich, MA

Ryan WH. 2015. Hot fission and cold sex: Latitudinal patterns of reproductive plasticity in a wide spread sea anemone, *Diadumene lineata*. Meeting of the FSU Coastal Marine Lab scientific advisory board. Tallahassee, FL

Conference Presentations:

Ryan WH. 2017. Temperature dependent fission rate plasticity drives changes in spatial genetic structure across latitude in a clonal sea anemone. **Western Society of Naturalists**, Pasadena (presentation).

Ryan WH and Krueger-Hadfield SA. 2017. Linking spatial and genetic population structure with mating system variation across the North American range of the red alga *Chondrus crispus*. **Southeastern Phycological Congress**, Wilmington, NC (poster)

Ryan WH. 2017. The evolution of clonality in seasonal seas: the influence of temperature on geographic patterns of life cycle diversity in the sea anemone *Diadumene lineata*. **Evolution Society**, Portland OR (presentation)

Ryan WH. 2016. What can a globally invasive sea anemone teach us about the evolution of clonality? **Western Society of Naturalists**, Monterey CA (presentation)

Ryan WH. 2016. Intraspecific variation drives life history variation across the species range of a common, exotic sea anemone. **Benthic Marine Ecology**, Portland, ME (presentation)

Ryan WH. 2016. Intraspecific variation drives life history variation across the species range of a common, exotic sea anemone. **Southeastern Ecology and Evolution Conference**, Tallahassee FL (presentation)

- Ryan WH. 2016. Comparing latitudinal patterns of reproductive plasticity between a native and exotic coastline in the sea anemone, *Diadumene lineata*. **American Society of Naturalists**. Asilomar, CA (presentation)
- Ryan WH. 2015. Local adaptation in life history strategy across a latitudinal gradient in an exotic sea anemone. **Southeastern Ecology and Evolution Conference**. Athens, GA (presentation)
- Ryan WH and Gornish ES.. 2014. A toolbox for initiating and managing long-term data collections. Moderator and Organizer of symposium. **Ecological Society of America**. Sacramento, CA.
- Ryan WH. 2014. Different things are different in different places: a tale of sexual plasticity in a widespread sea anemone. **Natural Science Graduate Student Symposium**. Tallahassee, FL (presentation)
- Ryan WH and Miller TE. 2014. Different things are different in different places: a tale of sexual plasticity in a widespread sea anemone. **Benthic Marine Ecology**. Jacksonville, FL (presentation)
- Ryan WH and Miller TE. 2013. Temperature dependent body size and fission rate plasticity in the globally invasive sea anemone, *Haliplanella lineata*. **Benthic Marine Ecology**. Savannah, GA (poster)
- Ryan WH and Miller TE. 2013. Temperature dependent body size and fission rate plasticity in the globally invasive sea anemone, *Haliplanella lineata*. **Southeastern Ecology and Evolution Conference**. Clemson, SC (poster)
- Ryan CA and Dudgeon SR. 2010. Heritability of plasticity in the hydrozoan *Hydractinia symbiolongicarpus*. **Society for Integrative and Comparative Biology**. Seattle, WA (presentation)
- Ryan CA and Dudgeon SR. 2009. Intra-specific competition as an agent of morphological selection. **Western Society of Naturalists**. Monterey, CA (presentation)
- Ryan CA and Dudgeon SR. 2009. Intra-specific competition as an agent of morphological selection. **Evolution Society**. Moscow, ID (presentation)
- Ryan CA, Dudgeon SR, Cameron BB and Grosberg RK. 2008. Characterizing colony form in colonial Hydrozoans. **Benthic Marine Ecology**. Providence, RI (presentation)
- Ryan CA, Dudgeon SR, Cameron BB and Grosberg RK. 2007. Characterizing colony form in colonial Hydrozoans. **Western Society of Naturalists**. Ventura, CA (presentation)
- Ryan CA and Dudgeon SR. 2007. Comparing image analysis techniques in hydrozoans. **Benthic Marine Ecology**. Atlanta, GA. (poster)

Published papers:

- Ryan WH**. Seasonal patterns and geographic variation in temperature dependent fission rate plasticity in a clonal sea anemone. *The American Naturalist*. 191(2): .
- Burgess S, **Ryan W**, Blackstone N, Edmunds P, Hoogenboom M, Levitan D and Wulff J. What can modular marine invertebrates tell us about variation in metabolic scaling? *Invertebrate Biology* 136(4): 456 – 472.
- Ryan WH**, Gornish ES, Christenson L, Halpern S, Henderson S, Lebuhn G and Miller TE. 2017. Initiating and managing long-term data with amateur scientists. *The American Biology Teacher*. 79(1): 28-34.
- Scholl JP, **WH Ryan** and J Mutz. 2016. Animating the primary literature for students and other curious people. *The Bulletin of the Ecological Society of America*. 97(2): 192-199
- Ryan WH** and Kubota S. 2016. Morphotype distribution of the sea anemone *Diadumene lineata* in Tanabe Bay, Wakayama: a comparison with Uchida (1936) after 80 years. *Publications of the Seto Marine Biological Laboratory* 44: 1-6.
- Pastore AI, Prather CM, Gornish ES, **Ryan WH**, Ellis RD and Miller, TE. 2014. Testing the competition-colonization trade-off with a 32 year study of saxicolous lichen community. *Ecology* 95: 306-15

Papers in review:

- Olsen K, **Ryan W**, Kosman E, Moscoso J, Levitan D, Winn A. Mating systems in the sea. In review at *Marine Biology*.

Outreach activities:

- 2014 - current Founder of ECOMotion studios, collaboration between artists and scientists to create entertaining educational animations about basic biological concepts and primary literature // www.ECOMotion.com
- 2015 - 16 Co-organizer of the 2016 Southeastern Ecology and Evolution Conference held at Florida State University
- 2015 - 16 Subject of CPALMS “perspectives” video series, a collection of short documentaries made for K-12 instructors featuring “experts” discussing primary research findings and methods
- 2015 - 16 Volunteer curriculum developer and instructor for an afterschool biology enrichment program at Shanks Middle School in Quincy, FL
- 2014 Co-organizer of the Wild and Scenic film festival held at Florida State University

Professional References:

Dr. Steve Dudgeon	MS Thesis Advisor	CSU Northridge	818 677 - 7322
Dr. Tom Miller	PhD Advisor	FSU	850 644 - 9823
Dr. Stacy Krueger-Hadfield	Postdoc mentor	UAB	205 934 - 6034