

Tina A. Barbasch

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Education

Boston University (USA)	Marine Ecology and Animal Behavior	PhD	2020
Cornell University (USA)	Biology	B.A.	2009

Appointments

2021 – present	NSF Postdoctoral Research Fellow University of Illinois, Urbana-Champaign (PI Alison Bell)
2020 – 2021	Postdoctoral Associate Lecturer Boston University (PI Peter Buston)
2013 – 2020	PhD Student Boston University (PI Peter Buston)
Feb-Jul 2013	High School Science Teacher Peace Corps, Liberia
2010 – 2012	Environmental Educator Peace Corps, Morocco
Jun-Jul 2009	Research Assistant Case Western Reserve University (PI Michael Benard)

Fellowships, Awards, and Honors

2021	National Science Foundation Postdoctoral Research Fellowship in Biology	\$138000
2021	Belamarich Award for Outstanding Thesis in Biology	
2020	Biology Department Outstanding Teaching Fellow Award Nomination	
2019	Boston University Biology Department Travel Award	\$500
2018	Boston University Women's Guild Award	\$1000
2018	Warren McLeod Annual Fellowship	\$30000
2018	National Science Foundation Doctoral Dissertation Improvement Grant	\$11995
2017	Graduate Research Abroad Fellowship	\$11496
2016	Graduate Student Organization Travel Award	\$500
2016	National Science Foundation Travel Award	\$1000
2014	Warren McLeod Summer Fellowship	\$10000
2013	National Science Foundation Graduate Research Fellowship	\$90000
2013	Dean's Fellowship	\$10000
2009	Phi Beta Kappa Society	
2009	Golden Key International Honor Society	

Publications

* = undergraduate author

In print

Pacaro, M., **Barbasch, T.**, Rogers, M., Chavez, J., Buston, P., & Majoris, J. (2023). Nocturnal parental care and the role of parents in hatching their eggs in the clown anemonefish. *Ethology*.

Barbasch, T.A., DeAngelis, R., Rhodes, J., and Buston, P.M. 2022. Parental Care. In V. Laudet and T. Ravasi (Eds.), *Evolution, Development and Ecology of Anemonefish: A model organism for marine science*. CRC Press.

Rotjan, R.D., Ray, N.E., Cole, I., Castro, K.G., Kennedy, B.R.C., **Barbasch, T.**, Lesneski, K.C., Scavo Lord, K., Bhardwaj, A., Edens, M., Karageorge, I., Klawon, C., Druh-Needleman, H., McCarthy, G., Perez, R., Roberts, C., Trumble, I.F., Volk, A., Torres, J., and Morey, J. 2022. Shifts in predator behavior following climate induced disturbance. *Proceedings of the Royal Society B*, 289: 20221431.

Finnerty, J.R., Lord, K.S., **Barbasch, T.**, Laman, R.*, Hakam, L.*, Perez, R.*, Jenkins, H.*, Fortunato, B.J.*, Lockwood, C.*, Bianco-Caron, D.*, and Stewart, N.L. First report of the Southern Gulf Coast Toad (*Incilius valliceps* Wiegmann), Common House Gecko (*Hemidactylus frenatus* Duméril and Bibron), Schmidt's Black-Striped Snake (*Coniophanes schmidtii* Bailey), and Cozumel Whiptail (*Aspidoscelis cozumela* Gadow), on Turneffe Atoll, Belize. *Caribbean Herpetology*, 81: 1-14.

Rueger, T., Bhardwaj, A.K., Turner, E., **Barbasch, T.A.**, Trumble, I., Dent, B., and Buston, P.M. 2022. Vertebrate growth plasticity in response to variation in a mutualistic interaction. *Scientific reports*, 12: 1-8.

Barbasch, T.A., Branconi, R., Pacaro, M.* and Buston, P.M. 2021. Negotiations over offspring care: a test of alternative hypotheses in the clown anemonefish. *Behavioral Ecology*, 32: 1256-1265.

Barbasch, T.A., Rueger, T., Srinivasan, M., Jones, G.P., Wong, M.Y.L., and Buston, P.M. 2020. Substantial plasticity of reproduction and parental care in response to local resource availability in a wild clownish population. *Oikos*, 129: 1844-1855.

Barbasch, T.A., Alonzo, S.H., and Buston, P.M. 2020. Power and punishment influence negotiations over parental care. *Behavioral Ecology*, 31: 911-921.

Branconi, R., **Barbasch, T.A.**, Francis, R., Srinivasan, M., Jones, G. and Buston, P.M. 2020. Ecological and social constraints promote social evolution in the clown anemonefish. *Nature Communications Biology*, 3: 1-7.

Barbasch, T.A. and Buston, P.M. 2018. Plasticity and personality of parental care in the clown anemonefish. *Animal Behaviour*, 136: 65-73.

Rueger, T., **Barbasch, T.A.**, Wong, M.Y.L., Srinivasan, M., Jones, G.P., and Buston, P.M. 2018. Reproductive control via the threat of eviction in the clown anemonefish. *Proceedings of the Royal Society B*, 285: 20181295.

Seymour, J.R., **Barbasch, T.A.**, and Buston, P.M. 2018. Lunar cycles of reproduction in the clown anemonefish *Amphiprion percula*: individual-level strategies and population-level patterns. *Marine Ecology Progress Series*, 594: 193-201.

Barbasch, T.A. and Benard, M.F. 2011. Past and present risk: exposure to predator chemical cues before and after metamorphosis influences juvenile wood frog behavior. *Ethology*, 117: 367-373.

In review

Barbasch, T.A., Behrens, C., McLain, M., Arredondo, E., Bell, A.M. 202X. A distinct neurogenomic response to a tradeoff between social challenge and opportunity in threespined sticklebacks (*Gasterosteus aculeatus*). *Biology Letters*, in revision.

In preparation

Barbasch, T.A., Buston, P.M., and Alonzo, S.H. 202X. Negotiations under duress: the threat of punishment between parents results in greater overall care. Target: *Behavioral Ecology*

Reviewing

Proceedings of the Royal Society B (x1)	Coral Reefs (x1)
Animal Behaviour (x2)	Vie et Milieu, Life and Environment (x1)
Behavioral Ecology (x2)	Acta Ethologica (x1)
The American Naturalist (x1)	Functional Ecology (x1)

Invited Seminars

2021	“How Do Parents Respond to Changing Ecological and Social Environments: Insights from a Coral Reef Fish with Biparental Care” Evolution, Ecology, and Behavior Colloquium, University of Illinois Urbana Champaign
2021	“Parental Care in Changing Social and Ecological Environments” Biology Department Seminar Series, Mount Holyoke College
2017	“Sex, Power, and Negotiations in the Clown Anemonefish” Hazel Leonard Dick Symposium on Interdisciplinary Approaches to Gender, Simmons College
2015	“Negotiations over Parental Care in the Clown Anemonefish” Hazel Leonard Dick Symposium on Interdisciplinary Approaches to Gender, Simmons College

Conference Presentations

Oral presentations

2022	“Mechanisms Underlying the Conflict Between Courtship and Aggression in Threespined Stickleback (<i>Gasterosteus Aculeatus</i>)” International Society for Behavioral Ecology – Stockholm, Sweden
2021	“Negotiations Over Parental Care: A Test of Alternative Hypotheses in the Clown Anemonefish” Society for Integrative and Comparative Biology Virtual Conference
2020	“Power and Punishment Influence Negotiations Over Parental Care” Animal Behavior Society Virtual Conference – Allee Competition Symposium
2019	“Local Environment Influences Reproduction, Parental Care, and Larval Traits in the Clown Anemonefish” Animal Behavior Society – Chicago, IL.

- 2019 “Local Environment Influences Reproduction, Parental Care, and Larval Traits in the Clown Anemonefish”
Evolution – Providence, RI.
- 2016 “Plasticity and Personality of Parental Care in the Clown Anemonefish”
International Society for Behavioral Ecology – Exeter, UK.

Poster presentations

- 2014 “Negotiations Over Parental Care in the Clown Anemonefish”
International Society for Behavioral Ecology – New York City, NY.

Teaching Experience

Instructor of record

- 2021 Marine Biology, Boston University

Postdoctoral associate lecturer

- 2021 Systems Physiology, Boston University
2020 Biology, Boston University

Teaching fellow

- 2020 Theoretical Evolutionary Ecology, Boston University – Nominated for Biology Department Outstanding Teaching Fellow Award
- 2018 Theoretical Evolutionary Ecology, Boston University
- 2018 Coral Reef Dynamics, Boston University
- 2017 Coral Reef Dynamics, Boston University
- 2013 Marine Biology, Boston University

Guest lectures

- 2022 “Theory and the Evolution of Biological Interactions” – Behavioral Ecology, University of Illinois Urbana Champaign
- 2018 “Density Dependent Growth in Discrete Time” – Theoretical Evolutionary Ecology, Boston University
- 2018 “Power and Punishment Influence Negotiations Over Parental Care” – Theoretical Evolutionary Ecology, Boston University
- 2017 “Negotiations Over Parental Care in the Clown Anemonefish” – Behavioral Ecology, Boston University
- 2015 “Hot Topics in Marine Biology: Behavioral Negotiations in a Dynamic Coral Reef Environment” – Marine Biology, Boston University
- 2014 “Hot Topics in Marine Biology: Behavioral Negotiations in a Social Reef Fish ” – Marine Biology, Boston University

Mentoring

* = senior thesis

University of Illinois Undergraduate Access and Achievement Program (AAP)

2022 – present Victoria Abuwa (University of Illinois Urbana Champaign)

University of Illinois Summer Research Training Program

2022 – present Bethany Carswell (Veterinary Medicine, University of Illinois Urbana Champaign)

Boston University Undergraduate Research Opportunities Program (UROP)

2018 – 2020 Madison Pacaro* (Boston University)

2018 – 2020 Michaela Rogers* (Boston University)

2017 – 2019 Sadie Thompson* (Boston University)

2015 – 2016 Alex Ascher* (Boston University)

2014 – 2016 Linda Wong (Boston University)

2014 – 2016 Jarrod Moore (Boston University)

2013 – 2015 Cara Martone* (Boston University)

Summer Undergraduate Research Fellowship (SURF) program

2015 Braiam Rosado (Universidad del Turabo, Puerto Rico)

Science Club For Girls (SCFG)

2014 – 2016 Jameelah Julien (Boston Latin High School)

Field Research Assistants

2022 Eric Arredondo (University of Illinois Urbana Champaign)

2018 Michaela Schniedewind (Boston University)

Outreach Activities

2022 Volunteer for Genome Day, Institute for Genomic Biology (IGB), University of Illinois Urbana Champaign

2021 Education volunteer for Science Night, South Side Elementary School, Champaign, IL

2021 Created materials for Project Diversify (<https://projectbiodiversify.org/tina-barbasch>)

2019 Supervised coral reef snorkeling sessions for 19 local secondary school girls as part of the Mahonia Na Dari Marine Environment Education Program, Kimbe, Papua New Guinea

2019 Science Fair Judge, Cove Elementary School

2018 Climate Change Panel Speaker, Cambridge Ringe and Latin High School

2018 Prepared educational materials for the Marine Environmental Education Program at the Mahonia Na Dari field station, Kimbe, Papua New Guinea

2016 Published a “data nugget” (<http://datanuggets.org/2016/10/raising-nemo/>)

2013 – 2016 Coordinator and teacher for Biology Inquiry and Outreach with Boston University Graduate Students (BIOBUGS)

Additional Skills

SCUBA: Rescue Diver (PADI), Scientific Diver (American Academy of Underwater Sciences)

Fieldwork: Kimbe Bay, Papua New Guinea (May - Aug 2017; May - Sept 2018; Nov - Dec 2019)

Software: R, MATLAB, Mathematica, LaTeX

References

- Alison Bell Professor (Postdoc Advisor)
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