

AMELIA L. RITGER

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<https://ameliaritger.netlify.com/>

EDUCATION

- 2018 – present **University of California, Santa Barbara**
Ph.D., Ecology Evolution and Marine Biology
Advisor: Gretchen Hofmann
- 2011 – 2015 **Dartmouth College**
B.A., Biology; Anthropology modified with Environmental Studies
GPA: 3.66/4.0, *cum laude*

PROFESSIONAL EXPERIENCE

Research

- 2016 – 2018 **Research Assistant**
Dr. Daniel Kronauer – Rockefeller University (New York, NY)
- 2015 – 2016 **James B. Reynolds Scholar**
Caribbean Marine Biological Institute (Curacao, Dutch Antilles)
- 2014 **Junior Research Scholar**
Mentor: Jessica V. Trout-Haney
Dr. Kathryn L. Cottingham – Dartmouth College (Hanover, NH)
- 2014 **CCMI Research Experience for Undergraduates (REU) Intern**
Dr. Thomas K. Frazer – Central Caribbean Marine Institute (Little Cayman, British West Indies)
- 2014 **Dartmouth Biology Foreign Study Program (FSP) student**
Dr. Ryan Calsbeek, Dr. Matthew Ayres, and Dr. Celia Chen (Costa Rica and Little Cayman, BWI)
- 2013 **Lab and Field Assistant**
Dr. Seth D. Dobson – Caribbean Primate Research Center (Cayo Santiago, Puerto Rico)
- 2012 – 2013 **Sophomore Science Scholar**
Mentor: Samuel B. Fey
Dr. Kathryn L. Cottingham – Dartmouth College (Hanover, NH)

Mentorship

- 2021 – 2022 **Zoe Fung** (UC Santa Barbara): *Investigating the influence of interacting environmental mosaics on an abundant intertidal snail*
Faculty Research Assistance Program, UCSB (Santa Barbara, CA)
- 2021 – 2022 **Doris Lius** (UC Santa Barbara): *Leveraging Marine Science Datasets for Integrated and Interactive K-12 Learning*
- 2021 **Aanchal Garg** (UC Santa Barbara): *Investigating the influence of interacting environmental mosaics on an abundant intertidal snail*
- 2021 **Kayla Caplin** (Paul D Schreiber High School): *The Influence of the Strawberry Anemone (Corynactis californica) on Purple Urchin Foraging Behavior*
Research Mentorship Program, UCSB (Santa Barbara, CA)

- 2020 – 2021 **Ellyse Anderson** (UC Santa Barbara): *Will you be my neighbor? Ecological interactions between a corallimorph and kelp forest critters on the benthos*
EEMB Senior Honors Program, UCSB (Santa Barbara, CA)
Faculty Research Assistance Program, UCSB (Santa Barbara, CA)
- 2020 **Carlyn Hamel** (Pacific Ridge High School): *The Effects of *Corynactis californica* on the Foraging Behavior of Purple Urchins at Various Starvation States*
Research Mentorship Program, UCSB (Santa Barbara, CA)
- 2019 **Xavius Boone** (UC Davis): *Urchin Starvation State May Amplify the Positive Interaction Between *Corynactis californica* and *Macroalgae**
Ocean Global Change Biology REU, UCSB (Santa Barbara, CA).
Current status: Ph.D. graduate student (San Diego State University)

Teaching

- 2022 **Graduate teaching assistant**
ES 60: Applied Ecology (UC Santa Barbara)
- 2014 **Undergraduate teaching assistant**
BIOL 27: Animal Behavior (Dartmouth College, Hanover, NH)

FELLOWSHIPS & AWARDS

- 2021 UCSB Ecology, Evolution, and Marine Biology Storke Award
- 2018 National Science Foundation Graduate Research Fellowship Program
- 2015 James B. Reynolds Scholarship for Foreign Study
- 2014 Central Caribbean Marine Institute Research Experience for Undergraduates
- 2014 Dartmouth Undergraduate Research Grant
- 2012 Dartmouth Sophomore Science Scholarship

RESEARCH GRANTS

- 2021 Schmidt Family Foundation Research Accelerator Award (\$8,000)
- 2020 UCSB Associated Students Coastal Fund Major Grant (\$15,740)
- 2019 UCSB Graduate Students Association Travel Grant (\$200)
- 2015 James B. Reynolds Scholarship for Foreign Study (\$20,000)

PUBLICATIONS

Published

Trout-Haney, J.V., **Ritger, A.L.**, Cottingham, K.L. 2021. Benthic cyanobacteria of the genus *Nostoc* are a source of microcystins in Greenlandic lakes and ponds. *Freshwater Biology* 66: 266-277.

Ritger, A.L., Fountain, T.C., and Pierotti, M.E.R. 2020. Evidence for selectivity in the invasive lionfish (*Pterois volitans/miles*). *Journal of Experimental Marine Biology and Ecology* 524: 151311.

Chandra, V., Fetter-Pruneda, I., Oxley, P.R., **Ritger, A.L.**, McKenzie, S.K., Libbrecht, R., Kronauer, D.J.C. 2018. Social regulation of insulin signaling and the evolution of eusociality in ants. *Science* 361(6400): 398-402.

Ritger, A.L., Curtis, A., and Chen, C.Y. 2018. Bioaccumulation of mercury and other metal contaminants in invasive lionfish (*Pterois volitans/miles*) from Curaçao. *Marine Pollution Bulletin* 131: 38-44.

PRODUCTS

Shiny app – Marine Biodiversity Observation Network (<https://ameliaritger.shinyapps.io/mbon-shiny-app/>)

Shiny app – Ocean Acidification Classroom Resource (<https://ameliaritger.shinyapps.io/intertidal-oa-education/>)

MEETING PRESENTATIONS

- 2021 *Monitoring ocean acidification in California rocky intertidal habitats.*
102nd Annual Meeting of the Western Society of Naturalists (Virtual). Poster.
- 2019 *Intraspecific variation in a clonal corallimorph alters purple urchin foraging behavior.*
100th Annual Meeting of the Western Society of Naturalists (Ensenada, Mexico). Poster.
- 2017 *Patterns of Mercury bioaccumulation in invasive lionfish (Pterois volitans/miles) from Curacao.*
13th International Conference on Mercury as a Global Pollutant (Providence, RI). Talk.
- 2015 *Friend or foe? Prey fish perception of predatory lionfish.*
Karen E. Wetterhahn Science Symposium (Hanover, NH). Poster.

PUBLIC EDUCATION & OUTREACH

- 2019, 2021 Judge, Santa Barbara County Science and Engineering Fair. UCSB (Santa Barbara, CA; virtual)
- 2020 Interview a Scientist, Sci-Section Radio Show (radio/streaming/online)
- 2020 Science communicator, Transitional Kindergarten class. Hollister Elementary School (Goleta, CA)
- 2019 Science communicator, World Oceans Day Festival. Santa Barbara Museum of Natural History Sea Center (Santa Barbara, CA)
- 2016 Oral presenter – *To Eat or Not to Eat? The diet of the Curacao lionfish and the woes of field research.* Caribbean Marine Biological Institute (Curacao, Dutch Antilles)
- 2014 Oral presenter – *Friend or foe? Prey fish perception of predatory lionfish.* Central Caribbean Marine Institute (Little Cayman Island, BWI)

PROFESSIONAL SERVICE

University and Departmental service

- 2019 – 2022 UCSB EEMB Graduate Student Symposium Committee
- 2019 – 2022 UCSB EEMB Diversity, Equity, Inclusion and Wellness Committee
- 2020 – 2021 UCSB American Association of University Women (AAUW) Mentorship Program
- 2020 – 2021 UCSB Associated Students Bike Shop Building Committee

Reviewer for scientific publications

Ecology, Ethology

Reviewer for grant proposals

NOAA/MARFIN