

BRYCE BARBEE

Brown University | bryce_barbee@brown.edu

RESEARCH INTERESTS

Behavioral Ecology · Behavioral Syndromes · Mutualisms · Signals · Community Ecology

EDUCATION

- Ph.D. Brown University; Providence, RI
Ecology, Evolution and Organismal Biology
PI: Dr. Eleanor M. Caves
2024 - Current
- Ph.D. University of California, Santa Barbara; Santa Barbara, CA
Ecology, Evolution and Marine Biology
PI: Dr. Eleanor M. Caves
2022 - 2024
- B.S. University of California, Los Angeles; Los Angeles, CA
Ecology, Behavior, and Evolution
Departmental Highest Honors
GPA: 3.79
2018 - 2022

PUBLICATIONS (*co-first author)

- Smith L., **Barbee B.**, Layton J., Velasco B., Fong C., Barber P. H., and P. Fong. Trait-based ecology detects changes in macroalgal communities following disturbance events. *(In review)*
 - Fong CR., Smith L., **Barbee B.**, Layton J., Velasco B., Barber P. H., and P. Fong. Combining functional traits with long-term monitoring data hindcasts changes in community functioning of seaweed communities on tropical reefs in response to multiple disturbances. *(In review)*
2. **Barbee B.**, and N. Pinter-Wollman. 2022. Nutritional needs and predation risk combine to shape foraging decisions in ants. *Current Zoology* 69:747-755.
<https://doi.org/10.1093/cz/zoac089>
 1. **Barbee, B.E.***, Lin, M.K.R.* , Min, I.A.* , Takenami, A.M.* , Philson, C.S., and D.T. Blumstein. 2022. Nutrient enrichment alters risk assessment in giant clams. *Journal of*

FEATURED ARTICLES

Argentine ants will do anything for sugar, but they won't do this. Holly Ober. UCLA Newsroom Article.

PRESENTATIONS (*presentors)

10. Barbee B.*, and EM Caves. Exploring how individual behavioral variation shapes marine cleaning mutualisms. Ecological Society of America, Long Beach, CA, August 6, 2024 - Oral
9. Barbee B.*, and EM Caves. Exploring how individual behavioral variation affects service quality in marine cleaning mutualisms. Southern California Animal Behavior conference, Los Angeles, CA, February 25, 2024 - Oral
8. Barbee B.*, and EM Caves. Exploring how individual behavioral variation affects service quality in marine cleaning mutualisms. UCSB EEMB Graduate Student Symposium, Santa Barbara, CA, February 9, 2024 - Oral
7. Barbee B.*, and EM Caves. Exploring how individual behavioral variation affects service quality in marine cleaning mutualisms. Society for Integrative and Comparative Biology, Seattle, WA, January 5, 2024 - Oral
6. Barbee B.*, Green P., and Caves E. Exploring signaling behaviors involving predatory 'clients' during marine cleaning mutualisms. UCSB EEMB Graduate Student Symposium, Santa Barbara, CA, March 18, 2023 - Oral
5. Smith L., Barbee B.*, Layton J.*, Velasco B., Fong C., Barber P. H., and P. Fong. Trait-based ecology detects changes in macroalgal communities following disturbance events. Ocean Sciences Meeting, Virtual, March 2, 2022 - Oral
4. Smith L., Barbee B.*, Layton J.*, Velasco B.*, Fong C., Barber P. H., and P. Fong. Trait-based ecology detects changes in macroalgal communities following disturbance events. The Diversity Project UCLA Symposium, Los Angeles, CA, August 13, 2021 - Oral
3. Barbee B.*, and N. Pinter-Wollman. Nutritional needs and predation risk combine to shape foraging decisions in ants. Animal Behavior Society Conference, Virtual, August 4, 2021 - Oral
2. Barbee B.*, and N. Pinter-Wollman. Nutritional needs and predation risk combine to

shape foraging decisions in ants. UCLA Undergraduate Research Week, Los Angeles, CA, May 24-28, 2021 - Oral

1. Barbee B.*, Najm G., and N. Pinter-Wollman. The effects of individual behavior on collective behavior in social spiders. UCLA SPUR Poster Session, Los Angeles, CA, August 15, 2019 - Poster

FELLOWSHIPS AND GRANTS

National Science Foundation Graduate Research Fellowship. 2024-2027 (\$138,000)

UCSB Academic Senate Faculty Research Grant. Exploring the dynamics of cleaning interactions involving giant sea bass in temperate marine ecosystems. 2023-2024 - PI: Caves. (\$10,000)

HONORS AND AWARDS

2024	National Science Foundation Graduate Research Fellow
2023	Aquarium of the Pacific African American Scholar
2022	UCSB Chancellor's Fellowship
2021	Association for the Sciences of Limnology and Oceanography Multicultural Program/Ocean Sciences Meeting Travel Funding (ASLOMP/OSM)
2021	The Diversity Project Summer REU
2018-2022	UCLA Dean's Life Science Scholar
2018-2022	Howard Hughes Medical Institute Pathways Program

COMMUNITY OUTREACH

2024	Long Beach Unified School District Podcast · Spoke on the LBUSD podcast about my path in marine science, STEM involvement in high school, and what graduate school entails
2024	CDFW African American Roots, Resilience, and Prosperity: Academic Perspectives on Understanding and Protecting Natural Resources · Presented my research to the California Department of Fish and Wildlife and community attendees as a part of a CDFW community outreach initiative
2024	Hughes Middle School/Aquarium of the Pacific Skype a Scholar · Presented my current research and past experiences that guided my career path as a marine scientist

- 2023 SEA the Future · Led marine biology focused workshops and field trips with local middle school students
- 2023 GradGuide Leadership Board · Served as secretary of a graduate student led club with the goal of helping undergrads navigate the grad school process
- 2021 UCLA Diversity in STEM Documentary · Took part in a documentary focused on diversity in UCLA STEM

TEACHING

University of California, Santa Barbara

- Spring 2024 Guest Lecture, Behavioral Ecology
- Spring 2024 Teaching Assistant, Behavioral Ecology
- Winter 2023 Teaching Assistant, Principles of Evolution
- Fall 2023 Teaching Assistant, Invertebrate Zoology

MENTORING

Undergraduates -

- *Brown University*
 - Guided Research: Anna Amha (2024-present)
- *University of California, Santa Barbara*
 - Independent research: Colin Gregory (2023-present)
 - Guided research: Vanessa Koopman (California Alliance for Minority Participation fellow, 2023-2024), Michela Gunther (2024-present), Alex Lau (2024), Delaney Pineda (2024)

Programs -

- 2023 - 2024 DIVERsity in Diving · Mentoring diverse students throughout the process of becoming a scientific diver and joining a marine research lab
- 2023 LSAMP/CAMP Mentor · Mentored an undergraduate student through summer research in our lab and both poster and oral presentations
- 2019 - 2022 Howard Hughes Medical Institute (HHMI) Pathways Program Mentor · Mentored a younger undergraduate of my same major and research

focus through finding research opportunities

ACADEMIC SERVICE

Manuscripts Reviews

The American Naturalist (co-reviewed)

CERTIFICATIONS

AAUS SCUBA / Advanced Rescue Diver

CPR

REFERENCES

Dr. Eleanor Caves

PhD Advisor

Caves Research Lab

eleanor_caves@ucsb.edu

Dr. Noa Pinter-Wollman

Undergraduate Research Advisor

Pinter-Wollman Research Lab

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