

# Jason Baer

1721 Reed Ave  
San Diego, CA 92109

Phone: (904) 528-8874  
jlbaer@eckerd.edu

---

## EDUCATION

**University of California San Diego/ San Diego State University** Expected Graduation: May 2023  
**Joint Doctoral PhD Candidate in Cell and Molecular Biology**

- GPA: 4.0

**Eckerd College** May 2017  
**Bachelor of Science: Double major in Marine Science (Biology track) and Spanish Language**

- Graduation with High Honors
- GPA: 3.97/4.0

---

## PUBLICATIONS

**2017 – The Eckerd Scholar** – The Effects of Copper on *Acropora cervicornis* Genotypes

**2016 – Eckerd College Ford Forum** – A Global Partnership: Sustainability in Higher Education

---

## INTERNSHIPS

**Interuniversity Institute for Marine Sciences** Eilat, Israel  
**Research Intern** June–Aug 2017

- Mentor: Dr. Baruch Rinkevich
- Research project on developing maintenance strategies for small coral colonies in the Eilat coral nursery, primarily through the use of grazers such as sea urchins.
- Examined development of *Stylophora pistillata* chimera larvae and methods for regeneration, settlement and metamorphosis.
- Utilized AAUS scientific diving to carry out regular nursery maintenance, *in situ* biodiversity assays, larval collection and monitoring populations of threatened Red Sea corals.
- Responsible for all laboratory techniques including confocal microscopy, fragmentation and PCR.

**Mote Marine Lab** Sarasota, FL  
**Collaborating Research Intern** Jan–May 2017

- Mentors: Dr. Cory Krediet and Dr. Emily Hall
- Research project aimed at analyzing the effects of ocean acidification conditions on *Aiptasia* through simulating several climate change predictions in the lab.
- Responsible for growing and providing live *Aiptasia* anemones used in the experiment, and all routine husbandry following the initiation of the experimental trial.

**Eckerd College** St. Petersburg, FL  
**Research Intern** September 2016–May 2017

- Mentor: Dr. Cory Krediet
- Research project aimed at investigating the global genetic diversity of the tropical sea anemone *Aiptasia*.
- Research project aimed at identifying and characterizing microbial communities associated with *Aiptasia*.
- Responsible for all molecular and microbiological techniques including PCR, DNA extraction and purification, sequence analysis, broth and media preparation, plating and husbandry of the anemones.

**NOAA Hollings Marine Lab  
Research Intern**

Charleston, SC  
May 2016-August 2016

- Mentor: Dr. Cheryl M. Woodley
- Research project aimed at determining differences in response to the marine toxicant copper among various nursery-reared genotypes of the threatened coral *Acropora cervicornis* for use in improving restoration practices.
- Developed novel procedures for live-cell staining in corals, as well as productive new methods for quantitatively analyzing overall coral health.
- Identified thresholds of toxicity to copper in a threatened coral species and provided evidence that intraspecific variation exists and can be quantified.
- Findings led to publication in the *Eckerd Scholar* – [The Effect of Copper on Acropora cervicornis Genotypes](#).

---

**EXPERIENCES AND SKILLS**

**Honors and Awards**

- NSF Graduate Research Fellowship Program Honorable Mention 2018, 2020
- NOAA Hollings Scholarship Recipient 2015-2017
- Eckerd College Ford Scholarship Recipient 2015-2017
- Phi Beta Kappa Peter Pav Scholarship Recipient 2014
- Scientific Equipment and Furniture Association Scholarship Recipient 2016
- Eckerd College Nomination for Writing Excellence Award 2016
- Phi Beta Kappa National Honors Society
- Sigma Delta Pi Spanish National Honors Society
- Eckerd College Dean's List Every Semester 2013-2017
- Natural Science Collegium Senate Member
- First Place Winner of the Florida Suncoast Essay Contest

**Presentations**

- Poster presentation of “Coral Reef Arks: An Innovative Solution for Mitigation of Coral Reef Damage” at Ocean Sciences Meeting in San Diego, California (February, 2020).
- Presenter of an annual seminar to the MESA program at SDSU discussing potential careers in marine engineering (March 2019 – Present)
- General Chemistry I and II Teaching Assistant (March 2016 – May 2017) – Partnered with Dr. Polina Maciejczyk of the Eckerd College Chemistry Department and taught/facilitated General Chemistry I and II lectures and laboratories, including nuclear chemistry, equilibrium, and molecular geometry.
- Poster presentation of research project on identifying genetic markers in *Aiptasia*, and oral presentation of research project on *Investigating Genotype Vigor in Acropora cervicornis* at the Eckerd College Student Research Symposium (April 2017).
- Poster presentation of research project *Investigating Genotype Vigor in Acropora cervicornis* at the Association for the Sciences of Limnology and Oceanography meeting “Mountains to the Sea” in Honolulu, HI (February 2017).
- Presentation of the Eckerd College Service Learning Program at the Florida Campus Compact Conference in Tampa, FL (November 2016).
- Presentation of NOAA summer research at the Eckerd College Marine Science Student Symposium (October 2016).
- Presentation of summer research at the Hollings Student Research Symposium at NOAA Headquarters in Silver Spring, MD (August 2016).

## Work Experience

- Graduate Teaching Assistant for Upper-Division Microbiology Laboratory at SDSU (August 2018 – Present)
- General Chemistry and Organic Chemistry Tutor at Eckerd College (August 2016 – May 2017).
- Chemistry Stockroom Senior Assistant at Eckerd College (August 2014 – May 2017). Included duties such as laboratory set up, solution and mixture preparation, chemical and equipment inventory, and instrument maintenance (NMR refill and lower laboratory instrument setup).
- CrossFit Instructor at Eckerd College (January 2015 – December 2016).
- Group and Private Swim Lessons Manager at Highlands Swim and Tennis Club (May – August 2015).
- SCUBA Instructor, Dive Guide and Divemaster at Waterbugs Dive Center in Chiclana de la Frontera, Spain (Summer 2013 and 2014).

## Professional/ Leadership Development

- Attendee of the ComSciCon scientific communication workshop in San Diego, CA (July 2019)
- Presenter at the Gordon Research Conference for Applied and Environmental Microbiology in South Hadley, Massachusetts (July 2019)
- Participant at the week-long NOAA Hollings Scholarship Conference in Silver Spring, MD (May 2015).
- Independently planned and executed an accredited independent study course to Peru and Bolivia which studied the diversity of several highland plants across regional and temporal scales (January 2017).
- Co-organized a Nobel Prize Brunch as a leader of the Scientific Outreach Club (SOC) at Eckerd College (April 2017).
- Participant of the Eckerd College Leadership and Self-Development Practicum (January 2014), a four-week intensive training course aimed at boosting leadership skills, organizational skills, and business proficiency. Teams were engaged in several seminars, projects, and full-time retreats that prepared us for positions in leadership, improved our formal interaction skills, and helped us construct powerful and persuasive attitudes towards success.

## Skills and Certifications

- American Academy of Underwater Sciences (AAUS) Scientific Diver
- Proficiency in R, Python and MatLab coding languages
- Proficient Spanish Speaker (Bilingual)
- PADI Divemaster
- CPR/AED for Professional Rescuers and Health Care Providers and Responding to Emergencies First Aid

## Service Experience

- Marine Science Instructor at the Ocean Discovery Institute, San Diego, CA (October 2018- Present)
- Volunteer Diver at the Coral Restoration Foundation in Key Largo, FL (2014-2017).
- Dive for Debris Volunteer Diver in Tampa Bay, FL (2015-2017).
- Volunteer Teacher at Nature's Academy in Fort DeSoto, FL (2016-2017).

## References

- Dr. Polina Maciejczyk – Professor of Chemistry at Eckerd College
  - [maciejpb@eckerd.edu](mailto:maciejpb@eckerd.edu)
- Dr. Cory Krediet – Assistant Professor of Marine Science and Biology at Eckerd College
  - [krediecj@eckerd.edu](mailto:krediecj@eckerd.edu)
- Dr. Cheryl Woodley – Principal Investigator at the National Center for Coastal Ocean Science (NCCOS)
  - [cheryl.woodley@noaa.gov](mailto:cheryl.woodley@noaa.gov)
- Dr. Baruch Rinkevich – Principal Investigator at Marine Sciences University of Haifa, Israel
  - [buki@ocean.org.il](mailto:buki@ocean.org.il)
- Dr. Forest Rohwer – Principal Investigator at San Diego State University
  - [frohwer@gmail.com](mailto:frohwer@gmail.com)