

Maddie J. Housh

Curriculum Vitae

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EDUCATION

- 2013 – 2017 **University of California Santa Barbara (UCSB)**, Santa Barbara, CA
Bachelor of Science in Aquatic Biology, *cum laude* & Departmental Honors, GPA 3.60
- 2015 **University of Queensland**, Queensland, Australia, August – November
Marine Biology & Terrestrial Ecology, University of California Education Abroad Program (UCEAP)

FELLOWSHIPS & AWARDS

- 2017 **Dean Bazzi Memorial Scholarship**, College of Letters & Science, Department of Ecology
Evolution & Marine Biology (EEMB), UCSB
- 2017 **Distinction in the Major**, College of Letters & Science, EEMB, UCSB

PROFESSIONAL & RESEARCH EXPERIENCE

- 2017-present **Laboratory Technician**
Hofmann Lab, Department of Ecology, Evolution & Marine Biology, UCSB
Primary Investigator: Dr. Gretchen Hofmann
- 2016-2017 **Undergraduate Laboratory Assistant**
Hofmann Lab, UCSB
Primary Investigator: Dr. Gretchen Hofmann
Worked under the supervision of PI Gretchen Hofmann and Ph.D. students in performing laboratory maintenance, assisting with experiments, and analyzing data.
- 2016 **Undergraduate Researcher**
University of Queensland, Australia, Marine Biology and Terrestrial Ecology, UCEAP
Instructors: Dr. John Hall and Dr. Ian Tibbetts
Participated in lectures, laboratory and field studies, and conducted two independent research projects at Moreton Bay research station on Stradbroke Island, and at Heron Island Research Station on the Great Barrier Reef.
- 2015 **Undergraduate Intern**
Sustainability Department, UCSB
Advisor: Mark Rousseau
Maintained logs of energy and water usage in the UCSB dorms, designed informational posters, and organized events to help raise awareness for sustainability at UCSB.

2012 **Student Researcher**
British Columbia Marine Mammal Studies, Broadreach Program, Bamfield Marine Sciences Centre,
British Columbia
Instructors: Abbie Moyer and Andrew Quincy-Spees
Participated in a 3-week long educational, research, and camping experience on Vancouver Island,
earning academic credits.

MENTORSHIP

2018 Avery Desantis, Undergraduate Researcher, UCSB, 2 months

2018 Ocean Global Change Biology REU students, UCSB, 1 month

GRANTS IN SUPPORT OF RESEARCH

2016 **Undergraduate Research & Creative Activities (URCA)**
College of Letters & Science, UCSB
"Investigating transgenerational effects in the purple urchin, Strongylocentrotus purpuratus"
(\$750)

PRESENTATION OF RESEARCH

2017 **Undergraduate Research Colloquium**
College of Letters & Science, UCSB
Poster. *"Investigating transgenerational effects in the purple urchin, Strongylocentrotus purpuratus"*

OUTREACH & INFORMED EDUCATION

2018 **Science educator**, World Oceans Day Festival, June 9, 2018
Sponsored by the Hofmann Laboratory in collaboration with the Santa Barbara Museum of
Natural History, Santa Barbara, CA

2017-2018 **Science educator**, Family Ultimate Science Exploration (FUSE), Center for Science and
Engineering Partnerships (CSEP), UCSB

2014 **Docent**, Snowy Plover Docent Program, Coal Oil Point Reserve, Goleta, CA

SERVICE

2013 – 2014 **Club Secretary**, The Wildlife Society, UCSB

SKILLS & CERTIFICATIONS

Laboratory - Determination of pH of seawater using Shimadzu UV-1800 spectrophotometer
- Determination of total alkalinity in seawater via open-cell titration using Mettler
Toledo model T50 titrator, following standards set by Professor Andrew Dickson, Scripps
Institution of Oceanography

- DNA and RNA extraction
- Gel electrophoresis
- Marine invertebrate culturing (urchins)
- Microscopy (compound, dissection)
- ImageJ
- PCR
- Methylation Sensitive Amplified Polymorphism (MSAP) sequencing

Field

American Academy of Underwater Sciences (AAUS) Scientific Diver

UCSB, March 2017

Certifying Dive Safety Officer: Eric Hessell

Certification includes CPR, First Aid, Rescue Diver, and NAUI Nitrox

RELEVANT COURSEWORK

Biology of Fishes
 Biometry
 Ecology
 Evolution
 General Biology

General Chemistry
 Genetics
 Ocean Waves
 Organic Chemistry
 Organic Chemistry Lab

Processes in Oceans
 Science Writing
 Statistics