

Stephan A. Bitterwolf

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Education

Present - Fall 2016	University of California, Santa Cruz Ocean Sciences (PhD) GPA: 3.93/4.0	Advisor: Dr. Michael Beck
Fall 2017 - Fall 2014	Moss Landing Marine Laboratories Marine Science (M.S.) Physiological effects of nitrate, light, and intertidal position on the red Seaweeds <i>Mazzaella flaccida</i> and <i>Mazzaella splendens</i> . GPA: 3.96/4.0	Advisor: Dr. Michael Graham
Spring 2013 - Fall 2009	University of the Virgin Islands Marine Biology (B.S.) Temporal comparison of coral disease and community structure in Brewers Bay, St. Thomas, USVI. GPA: 3.90/4.0	Advisor: Dr. Marilyn Brandt

Research Experience

Sept. 2017 - June. 2017	Graduate Researcher – NSF International Research Experiences for Students Interuniversity Institute of Marine Sciences, Eilat, Israel Quantified zooxanthellae (<i>Symbiodinium</i>) cell densities and clade composition (A-D) in Eilat's corals, sand, and reef water via cell counts and genomic DNA quantification on qPCR instrument. Advisor: Dr. Mike Beck & Dr. Oren Levy
Fall 2017 - Fall. 2014	Graduate Researcher – NSF Graduate Research Fellowships Program Moss Landing Marine Laboratories, Moss Landing, CA Conducted laboratory and field experiments to determine the effects nitrate concentration, light intensity, and intertidal position have on the size, survival, and pigment content of two intertidal seaweeds (<i>Mazzaella flaccida</i> and <i>Mazzaella splendens</i>). Advisor: Dr. Mike Graham, Dr. Nick Welschmeyer, & Dr. Jason Smith
May. 2013 - Sept. 2011	Undergraduate Researcher – MARC Fellow University of the Virgin Islands, St. Thomas, USVI Conducted a temporal comparison of coral disease and community structure in Brewers Bay, St. Thomas, USVI between 1982 and 2012. Advisor: Dr. Marilyn Brandt
Summer 2012	Undergraduate Researcher – Summer Student Fellow Woods Hole Oceanographic Institution, Woods Hole, MA Utilized echosounder and CTD data to determine depth distribution and abundance of <i>Squalus acanthias</i> (Spiny Dogfish) in Massachusetts Bay over a four-year timespan (2008 – 2012). Advisor: Dr. Jesus Pineda & Dr. Victoria Starczak
Summer 2011	Undergraduate Researcher – MARC Fellow Hawai'i Institute of Marine Biology (HIMB), Kane'ohe, HI Conducted a temporal comparison of coral disease and community structure around Coconut Island, HI after a genera-specific disease had decimated local coral populations. Advisor: Dr. Greta Aeby & Dr. Marilyn Brandt

Summer 2010 | **Undergraduate Researcher – MIMES REU**
South Carolina Department of Natural Resources, Charleston, SC
Conducted a life history update on the overfished Black Sea Bass by aging >1,000 otoliths, adding this data to a larger database, and performing statistical analyses.
| Advisor: Dr. Marcel Reichert & Dr. Joseph Ballenger

Teaching Experience

Present
- Aug. 2013 | **Science & Mathematics Tutor**
Santa Cruz, CA
Instructing students in Algebra I & II, Statistics, and Life Sciences.

Summer 2013 | **Participant, Science Teacher Enrichment Program**
National Tropical Botanical Gardens, Kauai, HI
Participated in daily lectures & laboratory exercises and designed inquiry based lesson plans.

Spring 2013
- Fall 2010 | **Teaching Assistant, Science 100**
University of the Virgin Islands
Taught laboratory sessions on fundamental science principles, organized field trips, and graded exams.

Conferences Presentations

2017 Oral presentation
Phycological Society of America, Monterey, CA
Physiological effects of nitrate, light, and intertidal position on the red Seaweeds Mazzaella flaccida and Mazzaella splendens.

2013 Oral presentation
Benthic Ecology Meeting, Savannah, GA
Coral community structure change of Brewers Bay, St. Thomas, USVI after a 30-year period.

2013 Poster presentation
Association for the Sciences of Limnology & Oceanography Meeting, New Orleans, LA
Abundance and vertical distribution of Squalus acanthias, Spiny Dogfish, at Stellwagen Bank: daily and interannual patterns from 2008 – 2012.

2012 Poster presentation
Annual Biomedical Research Conference for Minority Students, San Jose, CA
Coral community structure change of Brewers Bay, St. Thomas, USVI after a 30-year period.

2011 Poster presentation
Annual Biomedical Research Conference for Minority Students, St. Louis, MO
Coral disease prevalence of Coconut Island: a temporal study between 2007-2008 and 2011.

Outreach & Community Service

2017 – 2016 Educator at Expanding Your Horizons (Hartnell Community College)

2017 – 2016 Mentor of Community College Students (Moss Landing Marine Laboratories)

2017 Career Day Speaker on Marine Biology (Seaside Middle School)

2017 – 2014 Open House Seaweed Educator (Moss Landing Marine Laboratories)

2015 – 2014 Open House Advertising Committee Chair (Moss Landing Marine Laboratories)

2015 – 2014 Student Body Treasurer (Moss Landing Marine Laboratories)

2014 Career Day Speaker on Marine Biology (Harden Middle School)

2013 – 2011 Volunteer Fine Jewelry Instructor (Rare Earth Studio)

Grants and Awards

Jun. 2017 Communicating Oceanographic Research Effectively Outreach Award, UCSC
Apr. 2016 Myers Trust Fellowship, MLML
Apr. 2016 WAVE Award, MLML
Apr. 2015 NSF Graduate Research Fellowship
Jun. 2013 Science Teacher Enrichment Program Certificate, National Tropical Botanical Gardens
May 2013 Barnett Frank Class Award (male senior with the highest GPA)
May 2013 Outstanding Senior Award, Marine Biology Department, UVI
May 2013 Dean's Award, College of Science and Mathematics, UVI
Apr. 2012 1st place, Spring Research Symposium, UVI
Nov. 2011 Outstanding Poster Award, ABRCMS National Meeting
May 2011 Minorities Access to Research Careers (MARC) Fellowship
May 2011 Barnett Frank Class Award (male sophomore with the highest GPA), UVI
Aug. 2010 LaVerne E. Ragster Scholarship, UVI

Work Experience

Aug. 2015 – Sep. 2014 Dive Boat Captain, Silver Prince Diving Charters, Monterey CA
Sep. 2014 – Jun. 2014 Dive Boat Captain, Z Tourz and Fathom Five, Kauai HI
Jan. 2014 – Nov. 2013 Sail Boat Captain, Tribal Day Sails, USVI
Jan. 2014 – Jan. 2007 First Mate and Naturalist, Vandor Day Charters, USVI

Certifications

2017 Scientific Diver, UC Santa Cruz, CA
2013 US Coast Guard Master 100-ton, Captain School, USVI
2013 First Aid & CPR, Captains School, USVI
2009 Master Scuba Diver, SeaTrek, BVI

Skills

Data Visualization & Statistical Software: JMP 10, ArcGIS, and Microsoft Office Suite
Graphic Design: Adobe Photoshop, Adobe Illustrator, Adobe Indesign, and FinalCut Pro
Programming Language: Java (Basic) and HTML