Alaina Rose Weinheimer

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EDUCATION

M.Sc. in Marine Microbiology

October 2016 - March 2018

Max Planck Institute for Marine Microbiology/University of Bremen Bremen, Germany

B.S. in Biology

Schreyer Honors College, Pennsylvania State University

Aug 2012 - May 2016

University Park, PA

Minors: Microbiology, Marine Science, Environmental Inquiry

Study Abroad: Tropical Ecology and Coastal Biology in Curação, 2014.

GPA: 3.91 on 4.0 Scale, Major GPA: 3.90

GRANTS / AWARDS/HONORS

Travel Grant, Schreyer Honors College, \$350	October 2015
Doris N. McKinstry Scholarship, Eberly College of Science, \$25,983	July 2015
Aldine Lucille Cech Honors Scholarship, Eberly College of Science, \$2,000	July 2015
Phi Kappa Phi National Honors Fraternity inductee	April 2015
Undergraduate Research Grant, Pennsylvania State University, \$1,000	August 2014
Undergraduate Research Grant, Pennsylvania State University, \$1,000	August 2013
Academic Excellence Scholarship, Schreyer Honors College, \$16,000	August 2012
Berks County Conservation District Scholarship grand prize winner, \$4,000	April 2012

RESEARCH & TEACHING EXPERIENCE

Lab Rotation II, *Microbial Genomics and Bioinformatics Research Group*, May 2017 – June 2017 Bremen, Germany

 Performed cluster analyses on biosynthetic gene clusters belonging to metagenomic-assembled genomes from TARA Oceans samples

Lab Rotation I, Microsensors Group, Bremen, Germany

March 2017 - May 2017

- Measured pH profiles of the coralline algae Lithamnion glaciale exposed to prolonged, continuous darkness
- Cultivated bacteria growing on the surface of L. glaciale

Teaching Assistant, MICRB 415, University Park, PA

January 2016 – present

Course: General Virology, Microbiology 415 (MICRB 415)

Professor: Dr. Moriah Szpara

Research Assistant, *Dr. Mónica Medina Lab*, University Park, PA August 2015 – April 2017

- Analyzed microbial diversity and dynamics associated with strains of Symbiodinium
- Assessed the impact of salinity on the composition of the coral microbiome as part of the Global Coral Microbiome Project

Research Assistant, Dr. Iliana Baums Coral Lab, University Park, PA August 2013 – May 2016

- Genotyped *Orbicella faveolata* larvae and *Acropora cervicornis* larvae and parent individuals, eggs, for separate compatibility
- Extracted DNA from *Acropora palmata* samples
- Extracted RNA from Acropora cervicornis samples
- Thesis research

Summer Intern, *Harbor Branch Oceanographic Institute,* Fort Pierce, FL May 2015 – July 2015 Mentor: Joshua Voss, PhD

- Compared the microbiomes of Montastraea cavernosa colonies along the St. Lucie Inlet freshwater discharge gradient
- Photographed images along transect lines in Geyer Bank, McGrail Bank, and Bright Bank; Montastraea cavernosa sample processing; species identification for annotation aboard the R/V Manta

Research Assistant, Dr. Amanda Demopoulos Lab

April 2015 - May 2015

U.S. Geological Society, Gainesville, FL

 processed deep sea sediment from push cores for macrofaunal and meiofaunal analyses aboard the first leg of the E/V Nautilus 057 cruise in the Gulf of Mexico

NSF Research Experiences for Undergraduates, Marine

May 2014 – August 2014

Microbiology Intern

Mote Marine Laboratory, Sarasota, FL

Mentor: Kim Ritchie, PhD

- Analyzed the effects of ocean acidification on calcification rates, microbial communities, respiration and photosynthetic rates, of six different genotypes of Acropora cervicornis, staghorn coral
- Thesis research

FIELD EXPERIENCE

E/V Nautilus Cruise 057, Gulf of Mexico (2015)

R/V Manta Cruise, Gulf of Mexico (2015)

Global Coral Microbiome Project Field Expedition, Colombia (2015)

POSTERS/PRESENTATIONS

Weinheimer, A., Voss, J., *Muddy waters: the blue and browns of discharge water on coral surface microbial communities*. Scones and Scholarship Series, Schreyer Honors College, State College, Pennsylvania. October 6, 2015. (**Presentation**).

Weinheimer, A., Voss, J. *Muddy waters: the blue and browns of discharge water on coral surface microbial communities*. FAU Harbor Branch Oceanographic Institute Summer Intern Symposium, Fort Pierce, Florida, July 30, 2015. (**Presentation**.)

Weinheimer, A., Baums, I., Devlin-Durante, M., *Identifying compatibility between Acropora cervicornis individuals using larval ratios.* Pennsylvania State University Undergraduate Research Exhibition, State College, Pennsylvania. April 2015. Pennsylvania State University. (**Poster**)

Weinheimer, A., Graham, C., Muller, E., Ritchie, K., *Finding resilient genotypes of staghorn coral for coral-reef restoration*. Mote Marine Laboratory Research Experiences for Undergraduates, July 2014. (**Poster**)

Weinheimer, A., Muller, E., Ritchie, K., *Finding resilient genotypes of staghorn coral for coral-reef restoration*. Mote Marine Laboratory Research Experiences for Undergraduates, Sarasota, Florida. June 2014. (**Proposal Presentation**)

Weinheimer, A., Baums, I., Devlin-Durante, M., *Identifying compatibility between Orbicella faveolata individuals using larvae ratios*. Pennsylvania State University Undergraduate Research Exhibition, State College, Pennsylvania. April 2014. (**Poster**).

OUTREACH

Invertebrate Animal Day, The Friends School, State College, PA

December 18, 2015

Educational blog: Sea Gazing, seagazing.wordpress.com

January 2015-present

Presentation, Women in STEM Day, University Park, PA

January 2015

Blog post: ""Chicken Pox" of the Sea -- Corals Can Get Sick Too." Weinheimer, A., September 14, 2015 Pusey, S., Collins, A., No Bones, Smithsonian National Museum of Natural History. http://nmnh.typepad.com/no_bones/2015/09/chicken-pox-of-the-sea.html

CERTIFICATIONS

NAUI Advanced SCUBA certified, 12/30/14-present NAUI Nitrox Certified, 11/9/2015-present AAUS Scientific Diver, in-training

ACTIVITIES/LEADERSHIP

Science LionPride, *Pennsylvania State University*

Fall 2012 – present

- Alumni Relations Director Spring 2014 Spring 2015
- Historian Chair, Fall 2013 Spring 2014

- Eberly College of Science Climate and Diversity Committee student representative, Fall 2012-present
- Eberly College of Science tour guide, Fall 2012 present

Nittany Divers, *Pennsylvania State University*

- Social Chair, Spring 2015 - present

Fall 2014-present

COMMUNITY SERVICE

IFC/Panhellenic Dance Marathon (THON), *Pennsylvania State University* Fall 2013 – present

- Donor Alumni Relations committee member Fall 2014 Spring 2015
 - THONvelopes co-chair, counted and distributed solicitation letters for pediatric cancer patient treatment and research funding
- Rules and Regulations committee member Fall 2013 Spring 2014
 - Four Diamonds Recycling Effort co-chair of the committee, in charge of advocating and organizing the collection of recyclables for my committee

Monarch FTK, Pennsylvania State University

Fall 2013 – present

- Special Events Executive, Spring 2014-Spring 2015
 - Organized all Monarch fundraisers for THON and club social activities