

ANNA S. HEASLEY

Curriculum Vitae

email: aheasley@mlml.calstate.edu · Phone: +1 (724) 730-4940

EDUCATION

AUGUST 2020 – PRESENT

M.S., MARINE SCIENCE, *Moss Landing Marine Laboratories, San Jose State University*

JUNE 2016 – DECEMBER 2019

B.S., BIOLOGY, *Slippery Rock University, Honors College*

Minor: Marine Science

GPA: 3.89

SUMMER 2018

MARINE SCIENCE, *Chincoteague Bay Field Station, Wallops Island VA*

GPA: 4.00

RELEVANT COURSES

2020

Marine Ecology, Scientific Diving, Geological Oceanography

2019

Ecology, Statistics, Microbiology, Evolution, Plant Physiology, Oceanography, PPG Aquarium Internship, Environmental Problems

2018

Animal Physiology, Vertebrate Anatomy, Biochemistry I, Marine Biology, Marine Ecology, Marine Mammals, Coastal Hazards and Sustainability, Organic Chemistry II, Genetics

2016-2017

Principles of Biology, Zoology, Genetics, Botany, General Chemistry I and II, Physics I, Organic Chemistry I, Calculus I

RESEARCH INTERESTS

ANIMAL PHYSIOLOGY

I am interested in the general physiology and autecology of invertebrates and how these have evolved over time.

MARINE INVERTEBRATE RESPONSES TO CLIMATE CHANGE

I am also interested in studying the physiological and behavioral changes that invertebrates undergo while under stress related to changing ocean conditions (i.e. warming, acidification, etc.)

RESEARCH EXPERIENCE

SPRING 2019

DOSE-DEPENDENT DISRUPTIVE EFFECTS OF MELATONIN IN *PHAGOCATA GRACILIS*, Slippery Rock University, Slippery Rock, PA

The aim of this research was to understand at what dose melatonin, a natural hormone with antioxidant effects, disrupts the planarian species *Phagocata gracilis* ability to regenerate lost extremities.

SUMMER 2019

QUANTIFICATION OF ANTHROPOGENIC HYDROCARBON INPUTS AND BIOACCUMULATION IN EASTERN OYSTERS (*CRASSOSTREA VIRGINICA*) WITHIN THE LAFAYETTE RIVER, VA, National Science Foundation REU -- Old Dominion University, Norfolk, VA

In this project, I worked under Dr. Rodger Harvey and Dr. Margaret Mulholland and together we analyzed alkane hydrocarbons present in a branch of the Elizabeth River (known as the Lafayette River) and Eastern Oysters. In a time-series experiment of exposure to environmental conditions within the Lafayette River, I quantified bioaccumulation of alkane hydrocarbons in Eastern Oysters. I presented this research to the Ocean, Earth and Atmospheric Sciences Department at Old Dominion University following my study.

SUMMER 2018

COASTAL HAZARDS OF CHINCOTEAGUE ISLAND, VA: STORM HISTORY AND PROJECTED SEA LEVEL RISE, Shippensburg University at Chincoteague Bay Field Station, VA

This research was conducted using mapping software, models, and property value databases to demonstrate the impact of future tropical storms for Chincoteague Island, VA. The findings of this study were presented in a poster at the 50th anniversary of the Chincoteague Bay Field Station, VA.

WORK EXPERIENCE

AUGUST 2017 – DECEMBER 2019

FISH LAB ASSISTANT, *Slippery Rock University, Slippery Rock, PA*

In the fish lab, I worked with Dr. Simon Beeching to maintain his research tanks. It was my job to feed and acclimate fish, clean tanks, and maintain pumps and filters.

DECEMBER 2017 – MAY 2019

MICROBIOLOGY LAB ASSISTANT, *Slippery Rock University, Slippery Rock, PA*

In the microbiology lab, I worked under Dr. Steven Strain and my responsibilities consisted of making media for lab sections and maintaining an aseptic laboratory.

DECEMBER 2018 – APRIL 2019

INTERN FOR PPG AQUARIUM, *Pittsburgh Zoo and PPG Aquarium, Pittsburgh, PA*

I shadowed and assumed the responsibilities of the aquarist in charge of the Open Ocean exhibit. This exhibit consisted of open ocean species found in the Indo-Pacific as well as the touch tank with various Indo-Pacific ray species. I prepared diets for and target fed various shark species, moray eels, a Queensland grouper, and the rays. In addition, I did tactile training with the zebra sharks and helped cultivate the nubribanch species *Berghia stephanieae* used to decrease the invasion of aiptasia in the exhibits.

FALL 2017 – SPRING 2018

TUTOR, *Slippery Rock University, Slippery Rock, PA*

I tutored for various biology courses including introductory biology and botany.

2013 – SUMMER 2017

LIFEGUARD, *Wilmington Borough and Butler County, PA*

In addition to regular lifeguarding duties, I taught private and group swim lessons for children.

SCIENTIFIC RESEARCH SKILLS AND CERTIFICATIONS

- Extracting total lipids
- GC-MS/FID
- Aquaria maintenance (backwashing sand filters, maintaining skim filters, acclimating fish, basic aquaria plumbing)
- Microscopy
- Experimental Design
- Using statistical software such as Minitab and Excel
- Making media for microbiology labs
- PADI certified scuba diver
- Emergency First Response certified

ACTIVITIES, VOLUNTEERISM, AND AWARDS

- AmeriCorps Civic Action Fellow through San Jose State University Research Foundation
- Member of biology honorary club: Tri-Beta
- Secretary for Student Union of Multicultural Affairs
- Note Taker for SRU's Office of Disabilities

- **Mentoring new biology students through the Honors College**
- **Blood drive coordinator**
- **Mentoring students through the Global Ambassador Program and Jump Start**
- **Volunteering for local fundraising and community building events**
- **Scholarships:** Rock Opportunity (2016—2019), SRU Achievement award (2016—2019), PASSHE AT&T Scholar (2018), Mercer County Antique Power Association (2017), Hilcorp Future Leaders of America (2017), Rotary District 7280 (2017), Crisci Memorial (2016), PA Bar Association (2016), Lawrence County Realtors Association (2016), Wilmington Area Education Foundation (2016), Wilmington High School Alumni (2016), Burger King Scholar (2016), Junior Miss Self Expression scholarship (2015)