

KATHERINE L. (HUDSON) GALLAGHER

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EDUCATION

University of Delaware

Ph.D., Oceanography

Lewes, DE

June 2017 – February 2022

Dissertation Title: Mechanisms driving the biological hotspot and facilitating food web connectivity within Palmer Deep Canyon

Advisor: Dr. Matthew Oliver

GPA: 4.0

Relevant Coursework: Biological Oceanography, Physical Oceanography, Geological Oceanography, Chemical Oceanography, Statistics for Marine Sciences, Environmental Field Robotics, Physiology of Marine Organisms

Northeastern University

Boston, MA

Bachelor of Science in Marine Biology, Magna Cum Laude

September 2012 – May 2017

Honors Distinction and Honors in the Discipline

GPA: 3.76

Relevant Coursework: Marine Biology, Ecology, Genetics & Molecular Biology, Organic Chemistry 1 & 2, Physics for Life Sciences 1 & 2, Calculus and Differential Equations for Biology Majors 1 & 2, Ecological Dynamics, Biostatistics

Northeastern University Three Seas Program

September 2014 – May 2015

Field, lab, and course work at Northeastern's Marine Science Center (Nahant, MA), the Smithsonian Tropical Research Institute (Bocas del Toro, Panama), and University of Washington's Friday Harbor Laboratories (San Juan Islands, WA)

Relevant Coursework: Oceanography, Marine Botany, Marine Invertebrate Zoology, Experimental Design & Marine Ecology, Diving Research Methods, Biology & Ecology of Fishes, Coral Reef Ecology, Biology of Corals, Tropical Terrestrial Ecology, Ocean & Coastal Processes, Marine Birds & Mammals, Marine Conservation Biology, Physiological and Molecular Marine Ecology

RESEARCH EXPERIENCE

Stony Brook University

Stony Brook, NY

NSF Postdoctoral Research Fellow –

February 2022 – February 2024

Institute for Advanced Computer Sciences and Ecology & Evolution

- Compiling, running, and optimizing Regional Ocean Modeling System (ROMS) simulations on Stony Brook University High Power Computing (HPC) clusters, SeaWulf and Ookami
 - Designing modeling experiments in the ROMS on the West Antarctic Peninsula
 - Analyzing ROMS output; satellite-based penguin diet estimates; penguin colony location, size, and reproductive success data in R and MATLAB
- ◆ Funded by the NSF Office of Polar Programs Postdoctoral Research Fellowship Program

University of Delaware College of Earth, Ocean, and Environment

Lewes, DE

Graduate Fellow – Ocean Exploration, Remote Sensing, and Biogeography (ORB) Lab

June 2017 – February 2022

- Examined the physical phenomena driving biological productivity and diversity within a submarine canyon along the West Antarctic Peninsula using interdisciplinary data sets (gliders, High Frequency radar, acoustics, penguin tags, ROMS, LISST-HOLO1, Imaging Flow CytoBot) from NSF projects CONVERGE (2015) and SWARM (2020)
- Prepared, deployed, and piloted Slocum Electric gliders for missions in the Mid- and South Atlantic Bights, the Pacific Ocean, and the West Antarctic Peninsula (Total Missions to date: 12; Missions as primary pilot: 3)
- Compiled, analyzed, and visualized glider, ROMS, and other oceanographic data in R

Palmer Station Long Term Ecological Research (LTER) Program

Palmer Station, Antarctica

Field Technician – Schofield Lab (C-019)

December 2019 – March 2020

- Collecting water samples and CTD profiles from a Niskin rosette in bi-weekly CTD and coupled acoustic and predator surveys in and around Palmer Deep Canyon
- Processing water samples for High Performance Liquid Chromatography (HPLC)
- Performing chlorophyll extraction, Fluorescence Induction and Relaxation (FIRE) analysis, and Imaging Flow CytoBot (IFCB) processing on water samples from bi-weekly surveys

Northeastern University Marine Science Center

Student Researcher – Field Robotics Lab

Nahant, MA

January 2016 – May 2017

- Conducted an independent research project under Dr. Mark Patterson for an Honors Thesis investigating stratification dynamics in northern Massachusetts Bay
 - ◆ Funded by the Beta Beta Beta Biological Honors Society Research Award and the Northeastern University Provost's Advanced Research/Creative Endeavor Award
- Designed, constructed, and deployed moorings with Onset HOB0 Water Temperature Pro V2 temperature loggers to visualize stratification dynamics in Nahant and Rockport, MA
- Constructed, programed, deployed, and collected video data using an OpenROV v2.8

Bermuda Institute of Ocean Sciences

Research Experience for Undergraduates (REU) Program Student Researcher –
Coral Reef Ecology and Optics Laboratory (CREOL)

St. George's, Bermuda

August – December 2016

- Analyzed the drivers of coral biodiversity on Bermuda's coral reefs across spatial and temporal scales using long-term ecological datasets
- Developed code in R programming environment to calculate traditional diversity indices (alpha, gamma, beta) and zeta diversity across spatial scales
- Utilized constrained and unconstrained ordination methodologies to visualize the drivers of diversity change

Woods Hole Oceanographic Institute

Research Assistant – Environmental Sample Processor (ESP) Lab, Anderson Lab

Woods Hole, MA

June 2015 – January 2016

- Aided in and prepared for deployment, groundtruth, and recovery cruises during the 2015 ESP field season
- Assisted in a joint ESP/Imaging Flow CytoBot (IFCB) experiment analyzing saxitoxin concentrations during the cell cycle of the harmful algae bloom-causing dinoflagellate, *Alexandrium fundyense*
- Prepared for and participated in the 2015 NOAA Cyst Cruise aboard the NOAA Ship *Henry B. Bigelow*
- Tested, maintained, and prepared ESPs for 2016 field season

Northeastern University Marine Science Center

Volunteer Research Assistant – Bracken & Hughes-Kimbrow Labs

Nahant, MA

September 2013 – April 2014

- Assisted with graduate student research focused on intertidal alga *Fucus* growth, nutrient uptake, and genetic diversity
- Prepared experiments to analyze the ecological interactions of *Heterosiphonia japonica* in local ecosystems

PUBLICATIONS

Peer Reviewed:

Hudson, K., Oliver, M.J., Kohut, J., Dinniman, M., Klinck, J., Cimino, M.A., Bernard, K.S., Statescewich, H., Fraser, W. (*in review at Marine Ecology Progress Series*). Subsurface Eddy Associated with Submarine Canyon Increases Quantities and Delivery of Simulated Antarctic Krill to Penguin Foraging Regions.

Hudson, K., Oliver, M. J., Kohut, J., Cohen, J. H., Dinniman, M., Klinck, J., Statscewich, H., Bernard, K., Fraser, W. (2022). Subsurface Eddy Facilitates Retention of Simulated Diel Vertical Migrants in a Biological Hotspot. *Journal of Geophysical Research: Ocean*, 127, 5. DOI: 10.1029/2021JC017482

Hudson, K., Oliver, M. J., Kohut, J., Dinniman, M., Klinck, J., Moffat, C., Statscewich, H., Bernard, K., Fraser, W. (2021). A Recirculating Eddy Promotes Subsurface Particle Retention in an Antarctic Biological Hotspot. *Journal of Geophysical Research: Oceans*, 126, e2021JC017304. DOI: 10.1029/2021JC017304

Shulman, I., Penta, B., Anderson, A., Moline, M. A., Oliver, M. J., Cohen, J. H., **Hudson, K.** (2020). Dynamics of bioluminescence potential and physical, bio-optical properties on the shelf and shelf-slope of the Delaware Bay. *Journal of Geophysical Research: Oceans*, 125, 9. DOI: 10.1029/2020JC016158

Hudson, K., Oliver, M. J., Bernard, K., Cimino, M. A., Fraser, W., Kohut, J., Statscewich, H., & Winsor P. (2019). Reevaluating the canyon hypothesis in a biological hotspot in the Western Antarctic Peninsula. *Journal of Geophysical Research: Oceans*, 124. DOI: 10.1029/2019JC015195

PRESENTATIONS

Gallagher, K., Lynch, H.J., Dinniman, M., Youngflesh, C., Che-Castaldo, C. *Pygoscelis* penguin colony locations and dietary compositions along the West Antarctic Peninsula could be driven by high retention and accumulation of simulated krill. Submitted to the American Geophysical Union Fall Meeting 2022.

Gallagher, K., Lynch, H.J., Dinniman, M. *Pygoscelis* penguin colony locations along the West Antarctic Peninsula could be driven by high retention and accumulation of simulated krill.. Stony Brook University Institute for Advanced Computer Sciences Five Year Review. Invited Talk. September 2022.

Gallagher, K., Lynch, H.J., Dinniman, M. *Pygoscelis* penguin colony locations along the West Antarctic Peninsula could be driven by high retention and accumulation of simulated krill. SCAR 2022 Open Science Conference. Virtual Meeting. August 2022.

Hudson, K., Lynch, H.J., Dinniman, M. *Pygoscelis* Penguin Response to Potential Prey Retention along the West Antarctic Peninsula. Stony Brook University Institute for Advanced Computer Sciences Research Day. Invited Talk. April 14 2022.

Hudson, K., Oliver, M. J., Kohut, J., Cohen, M.S., Dinniman, M., Cimino, M.A., Klinck, J., Statscewich, H., Bernard, K., Fraser, W. A. Subsurface Eddy Facilitates Retention and Increases Particle Delivery of Simulated Diel Vertical Migrants in a Biological Hotspot. Ocean Sciences Meeting 2022. Virtual Meeting. February 2022.

Hudson, K., Oliver, M. J., Kohut, J. H., Dinniman, M., Klinck, J., Moffat C., Statscewich, H., Bernard, K., Fraser, W. A. Recirculating Eddy Promotes Subsurface Particle Retention in an Antarctic Biological Hotspot. Ocean Sciences Meeting 2022. Virtual Meeting. February 2022.

Hudson, K., Oliver, M. J., Kohut, J., Dinniman, M., Klinck, J., Moffat, C., Statscewich, H., Bernard, K., Fraser, W. A. Recirculating Eddy Promotes Subsurface Particle Retention in an Antarctic Biological Hotspot. SCAR US Antarctic Science Meeting. Virtual Meeting. July 2021.

Hudson, K., Oliver, M. J., Kohut, J., Dinniman, M., Klinck, J., Moffat, C., Statscewich, H., Bernard, K., Fraser, W. Modeled DVM Increases Retention and Particle Delivery to Penguin Foraging Areas Near Palmer Deep Canyon. Integrating Climate and Ecosystem Dynamics (ICED) Krill Modeling Workshop. Virtual Meeting. May 2021.

Hudson, K., Oliver, M. J., Kohut, J., Cohen, J. H., Dinniman, M., Klinck, J., Statscewich, H., Bernard, K., Fraser, W. Subsurface Eddy Facilitates Retention of Simulated Diel Vertical Migrants in a Biological Hotspot. University of Delaware Graduate Student Government 10th Annual Graduate Student Forum. Virtual Meeting. April 2021.

Hudson, K., Oliver, M. J., Kohut, J., Dinniman, M., Cohen, J., Cimino, M.A., Klinck, J., Moffat, C., Statscewich, H., Bernard, K., Fraser, W. A subsurface eddy may drive the biological hotspot near Palmer Deep Canyon. WAP Science Extravaganza. Virtual Meeting. January 2021.

Hudson, K., M.J. Oliver, J. Kohut, M. Dinniman, J.M. Klinck, H. Statscewich, K. Bernard, W. Fraser. A Recirculating, Subsurface Eddy Increases Residence Times in an Antarctic Biological Hotspot. eLightning Talk & Virtual Poster. American Geophysical Union: 2020 Fall Meeting. Virtual Conference due to COVID-19. 1-17 December 2020.

Hudson, K., M.J. Oliver, J. Kohut, M. Dinniman, J.M. Klinck, H. Statscewich, K. Bernard, W. Fraser. A Closed, Subsurface Eddy Increases Residence Times within Palmer Deep Canyon. Virtual Poster. SCAR (Scientific Committee for Antarctic Research) 2020 Online. Virtual Conference due to COVID-19. 3-7 August 2020.

Hudson, K., M.J. Oliver, J. Kohut, J.M. Klinck*, & M. Dinniman. Diel Vertical Migration of Krill in a Subsurface Eddy may Promote Retention within Palmer Deep Canyon. Research talk. Ocean Sciences 2020, San Diego, CA. 18 February 2020.

*J. Klinck was the presenting author

- Hudson, K.,** M.J. Oliver, K. Bernard, M. Cimino, W. Fraser, J. Kohut, H. Statscewich, & P. Winsor. Using a coordinated glider fleet to investigate drivers of a biological hotspot in the Western Antarctic Peninsula. Research talk (10-minutes). 8th EGO Meeting & International Glider Workshop, New Brunswick, NJ. 22 May 2019.
- Hudson, K.,** M.J. Oliver, K. Bernard, M. Cimino, W. Fraser, J. Kohut, H. Statscewich, & P. Winsor. Re-evaluating the canyon hypothesis in a biological hotspot on the West Antarctic Peninsula. Research talk. University of Delaware College of Earth, Ocean, and Environment Graduate Student Symposium. 27 April 2019.
- Awarded Second Place Prize for Best Student Presentation
- Hudson, K.,** M.J. Oliver, K. Bernard, M. Cimino, W. Fraser, J. Kohut, H. Statscewich, & P. Winsor. Re-evaluating the canyon hypothesis in a biological hotspot on the West Antarctic Peninsula. Research talk (10-minutes). University of Delaware DENIN Symposium. 7 March 2019.
- Hudson, K.,** M.J. Oliver, K. Bernard, M. Cimino, W. Fraser, J. Kohut, H. Statscewich, & P. Winsor. Re-evaluating the canyon hypothesis in a biological hotspot on the West Antarctic Peninsula. Scientific poster. Polar-izing Your Science Impact Workshop, Newark, DE. 10 January 2019.
- Hudson, K.** & T. Noyes. Examining the drivers of long-term change in benthic biodiversity cross the Bermuda reef platform. Scientific poster. Ecological Society of America Annual Meeting 2017, Portland, OR. 10 August 2017.
- Hudson, K.** & M. Patterson. Alternative methods for observing stratification dynamics using remote sensing technologies on discrete and continuous time scales. Scientific poster. Benthic Ecology Meeting 2017, Myrtle Beach, SC. 14 April 2017.
- Hudson, K.** & M. Patterson. Alternative methods for observing stratification dynamics using remote sensing technologies on discrete and continuous time scales. Scientific poster. Northeastern University Research, Innovation, and Scholarship Expo 2017, Boston, MA. 13 April 2017.
- Hudson, K.** Determining drivers of biodiversity change: an REU co-op experience in Bermuda. Scientific poster. Northeastern University College of Science Co-op Expo, Boston, MA. 24 March 2017.
- Hudson, K.** Exploring the life cycle of ocean instrumentation: a co-op in the Environmental Sample Processor (ESP) lab. Northeastern University College of Science Co-op Expo, Boston, MA. 19 February 2016.

TEACHING & MENTORING EXPERIENCE

High School Women in Science and Engineering (WISE)

Instructor

Stony Brook, NY

Fall 2022 – Spring 2023

- Designed and taught short-course (5 – 10 sessions) to teach high school students about biological and physical oceanography
- Served as a mentor for independent research projects

CEOE Empathic Peers Offering Wisdom, Encouragement, and Resources (EmPOWER)

Lead Mentor for SMSP Lewes

Lewes, DE

Spring 2020 – 2021

- Acted as a resource and mentor for incoming graduate students during their first year in graduate school

Share Your Skills Graduate Student Organization

Member

Lewes, DE

Spring 2020 – 2021

- Designed and built presentations on R statistical and graphic basics
- Facilitated breakout room discussions on applying to graduate school

Northeastern University Husky Ambassadors

Member of Husky Development Committee

Boston, MA

January – April 2016 & January – April 2017

- Provided feedback on student-led campus tours
- Assisted in monthly organizational meetings and trainings

Bermuda Institute of Ocean Sciences

St. George's, Bermuda, October 2016

- Presented examples of ordination methodologies in R using vegan package
- Tutored students with ANOVA analysis in R

Northeastern University Marine Science Center

Nahant, MA

Teaching Assistant for Diving Research Methods

April 2016

- Supervised and assisted student SCUBA divers during diving sessions and demonstrated necessary skills
- Filled oxygen tanks and prepared tasks for student divers to complete while diving

Northeastern University Honors Program

Boston, MA

Enhancing Honors Mentor

September – December 2013

- Served as a mentor for incoming freshmen students in the honors program
- Facilitated discussions and group activities

Science Club for Girls

Cambridge, MA

Mentor Scientist

September – December 2012

- Taught an ocean science curriculum in an after-school program aimed at getting young girls interested and involved in science, technology, engineering, and math (STEM) fields

HONORS

NSF Office of Polar Programs Postdoctoral Research Fellowship

February 2022 - February 2024

University of Delaware Doctoral Fellowship

July 2020 – July 2021

2nd Place Student Talk at 2019 CEOE Graduate Student Symposium

April 2019

University of Delaware Woman of Promise 2019

April 2019

Patricia and Charles Robertson Graduate Fellow

June 2017 – February 2022

NSF Graduate Research Fellowship Honorable Mention

Spring 2017

Northeastern University College of Science Dean's List

Spring 2013, Spring 2014 – 2017

Northeastern University Dean's Scholarship

Fall 2012 – Spring 2017

AWARDS

Research Awards:

National Science Foundation Office of Polar Programs Postdoctoral Research Fellowship

February 2022

Amount: \$289,335

Length: 24 months

Title: *Pygoscelis* Penguin Response to Potential Prey Retention along the West Antarctic Peninsula

Number: 2138277

- Supported postdoctoral research at Stony Brook University from 2022-2024

Northeastern University Provost's Advanced Research/Creative Endeavor Award

Fall 2015

Amount: \$1,300

- Supported Honors Thesis research at Northeastern University from 2016-2017

Beta Beta Beta Biological Honors Society Research Award

Fall 2015

Amount: \$2,200

- Supported Honors Thesis research at Northeastern University from 2016-2017

Travel Awards:

University of Delaware College of Earth Ocean and Environment Stavros Howe Memorial Grant

May 2019

Amount: \$2,600

- Supported travel to AniMove 2019 Summer School

Rocky Mountain Biological Laboratory REU Travel Award

July 2017

Amount: \$1,000

- Supported travel to Ecological Society of America Annual Conference in 2017

Bermuda Institute for Ocean Sciences Educational Programs Travel Award

July 2017

Amount: \$1,000

- Supported travel to Ecological Society of America Annual Conference in 2017

Northeastern University Presidential Global Scholarship

Spring 2016

Amount: \$6,000

- Supported travel and housing at Bermuda Institute of Ocean Sciences in 2016

LEADERSHIP EXPERIENCE

CEOE Empathic Peers Offering Wisdom, Encouragement, and Resources (EmPOWER)

Lewes, DE

Steering Committee Chair

Spring 2020 – 2021

- Chaired inaugural CEOE EmPOWER Steering Committee, led Steering Committee meetings
- Recruited Peer Mentors and facilitated matching of mentor-mentee pairs
- Designed and facilitated department/campus based and college-wide stress relieving events, including virtual game and trivia nights
- Designed and facilitated professional development events, including workshops on imposter syndrome (chaired panel and breakout room discussions on 11/11/2020) and mental resilience and wellness (5/5/2021)

CEOE Lewes Graduate Student Association

Lewes, DE

Co-chair

Spring 2020 – Spring 2021

- Facilitated department-wide happy hours to build community between students and faculty
- Organized college-wide apparel orders and virtual graduate student symposium

CEOE Society for Women in Marine Sciences (SWMS) Chapter

Lewes, DE

Co-chair

Fall 2018 – Spring 2020

- Led group discussions on being a minority in marine sciences
- Organized fund raising events and collaborated with other university chapters on a workshop on science communication

Northeastern University Office of New Student Orientation

Boston, MA

Orientation Leader

May – August 2013

- Worked as a member of a team to serve as a resource for incoming students and families
- Led student groups through 2-day orientation to get acclimated to university

WORKSHOPS & COURSES TAKEN

Scientists Teaching Science

Summer 2022

Asynchronous online course

- Learned active-learning and inquiry-based techniques for teaching science, technology, engineering, and math (STEM) topics
- Learned how to design effective STEM courses

Delmarva SWMS Symposium: Diving into Science Communication

Cambridge, MD

Held at University of Maryland, Horn Point Laboratory

September 13-14 2019

- Participated in discussions on science communication and women in marine science
- Facilitated an outreach activity for 6-12 grade girls on physical oceanographic and coastal processes

AniMove Summer School 2019

New Haven, CT

Held at Yale University

June 2019

- Learned animal movement analysis techniques using R statistical analysis, including the move package
- Analyzed penguin movement data and presented on preliminary findings

Polar-izing Your Science Impact Workshop

Newark, DE

Held at University of Delaware

January 9 – 11 2019

- Learned science communication tools and techniques in the context of polar science and research

Marine Technology Society Glider School

Held at Rutgers University

New Brighton, NJ

June 12 – 16 2017

- Learned how to operate and pilot autonomous underwater Slocum gliders

OUTREACH EXPERIENCE

Delmarva SWMS Symposium: Diving into Science Communication

Cambridge, MD

One-time event on September 14, 2019 at University of Maryland, Horn Point Laboratory

- Facilitated an outreach activity for 6-12 grade girls on physical oceanographic and coastal processes using model ecosystems

DigiGirlz Day 2019

Georgetown, DE

One-time event on May 15, 2019 at Delaware Technical Community College – Georgetown Campus

- Facilitated activity demonstrating neutral buoyancy and glider ballasting procedures to middle school girls interested in STEM fields
- Facilitated a glider construction activity using SeaGlide kits for a small group

Milford Central Academy Science Night

Milford, DE

One-time event on January 18, 2018 at Milford Central Academy

- Facilitated activity demonstrating neutral buoyancy and glider ballasting procedures to K-12 students

University of Delaware Coast Day

Lewes, DE

Annual event at the University of Delaware Hugh R. Sharp Campus; participated on October 8, 2017, October 7, 2018, and October 6, 2019

- Presented lab research in 30-minute presentations in Global Visualization Lab
- Explained Slocum gliders and research conducted in Robotics Discovery Lab

Public Tours of University of Delaware Hugh R. Sharp Campus

Lewes, DE

50+ Tours conducted between June 2018 and February 2022

- Facilitated tours of Global Visualization Lab for members of the public (including local Boy and Girl Scout Troops, school groups, special interest groups, etc.)
- Described research activities, glider deployments, and public data sets

Delaware SeaGrant Climate Change Teacher Workshop

Lewes, DE

Annual event at the University of Delaware Hugh R. Sharp Campus; participated on June 26-28, 2018 and June 25, 2019

- Assisted teachers in data collection and presentations

National Ocean Sciences Bowl (NOSB) Volunteer

Boston, MA and Lewes, DE

Participated in Blue Lobster Bowl (2014, 2016-2017) and Chesapeake Bay Bowl (2018)

- Served multiple roles (Team Challenge Grader, Science Judge, Moderator, Scorekeeper) to facilitate NOSB competitions for competing students

AT-SEA EXPERIENCE

R/V Hadar, Palmer Station

Antarctica

December 2019 – March 2020: Bi-weekly CTD casts and water sampling for LTER C-019; Bi-weekly acoustic and predator surveys for LTER C-019 and Project SWARM

R/V Hugh R. Sharp, University of Delaware

Lewes, DE

April 26 – May 9, 2018: Member of science crew for InTro 2018 cruise (Chief Scientist: Dr. Brad Penta); responsible for zooplankton net sampling

R/V Joanne Daiber, University of Delaware

Lewes, DE

June 2017 – December 2018: Several day-long cruises to deploy and/or recover autonomous underwater vehicles
March 2019: Day-long cruise to test LISST-HOLO1 for deployment during Project SWARM

R/V Sea Dance, Bermuda Institute of Ocean Sciences

St. George's, Bermuda

September – November 2016: Several day-long cruises to collect water samples for DNA processing, ocean acidification, and nutrient testing; and deploy and/or recover underwater camera arrays

R/V Kraken, Northeastern University Marine Science Center

Nahant, MA

May – August 2016: Several day-long cruises to test and deploy moorings and OpenROV for Honors Thesis

NOAA Ship Henry B. Bigelow, NOAA

Newport, RI

November 9 – 19, 2015: Member of science crew for annual NOAA *A. fundyense* cyst cruise in the Gulf of Maine**R/V Tioga, Woods Hole Oceanographic Institute**

Woods Hole, MA

June 15 – 19, 2015: Deployment ESPjake and collection of *A. fundyense* samplesJuly 6 – 9, 2015: Collection of *A. fundyense* samples to groundtruth ESPjakeAugust 1 – 7, 2015: Collection of *Pseudo-nitzschia* samples

ORGANIZATIONS

American Geophysical Union

2020 – Present

Association of Polar Early Career Scientists

2020 – Present

Society for Women in Marine Sciences (SWMS)

2017 – Present

Stony Brook University Chapter: 2022 – PresentUniversity of Delaware Chapter: 2017 – 2022

Co-chair: October 2018 – 2019

UD CEOE Lewes Graduate Student Association

2017 – 2022

Co-chair: May 2020 – 2021

CEOE Empathic Peers Offering Wisdom, Encouragement, and Resources (EmPOWER)

2020 – 2021

Chair: Spring 2020 – Spring 2021

Lead Mentor SMSP Lewes: Spring 2020 – Spring 2021

Beta Beta Beta Biological Honors Society Chi Delta Epsilon Chapter

2014 – 2017

Northeastern University NUScience Magazine

2012 – 2017

President: January – April 2017

Editor-in-Chief: May – December 2014, January – May 2016

Editor: September 2013 – April 2014

Staff Writer: January – April 2013

Northeastern University Husky Ambassadors

2012 – 2017

Husky Development Committee: January – April 2016, January – April 2017

Programming Committee: September 2013 – April 2014

Northeastern University Marine Biology Club

2012 – 2017

President: 2013 – 2014

Northeastern University Honors Program

2012 – 2017

SKILLS

Laboratory: Opening and ballasting Slocum gliders, pipetting, dissections, culture maintenance, PAM fluorometry, light microscopy, water filtering, chlorophyll extraction, Fluorescence Induction and Relaxation (FIRE), Imaging Flow Cytobot processing**Field:** Deployment and recovery of Slocum gliders, sample collection via CTD/Niskin rosette, setting and retrieving traps/settling plates, population counts via quadrat/transect, species identification, organism tagging/measuring, water sampling and quality analysis, video surveying, sediment sampling via Craib corer**Computer:** Familiar with PC and Mac operating systems; adept at Microsoft Office, Image J, R (statistical analysis and programming); basic knowledge of Adobe Illustrator, ArcGIS

CERTIFICATIONS

- NAUI Advanced Open Water Diver
- Basic Mariner Training (course taken at SUNY: Maritime August 2022)
- First Aid/CPR/AED