

Research Interests

Broad interests in marine molecular genetics. Ideal research setting is reef systems with a focus on coral resilience, coral symbiosis, and the human impact on reef ecosystems.

Education

B.Sc. in Environmental Science and Geography

May 2020

University of Maryland, Baltimore County/Baltimore, MD

Cumulative GPA: 3.4/4.0, **Major GPA:** 3.6/4.0, **Deans List:** Fall 2019 & Spring 2020

Relevant Coursework: Marine & Environmental Biotechnology, Watershed Science & Management, Environmental Science Lab & Field Research, Advanced Applications for GIS, Ecohydrology, Ecology, Geomorphology, Biological Statistics, Calculus

Professional Experience

Lab Technician

January 2021-Current

Institute of Marine and Environmental Technology/Baltimore, MD

- ✦ **Position Summary:** Preparing algal strain cultures, processing samples for analysis

Seasonal State Park Ranger

June 2020-December 2020

Maryland DNR, Patapsco Valley State Park/Halethorpe, MD

- ✦ **Position Summary:** Monitoring and mitigating pollution into local water resources while facilitating stewardship habits by park patrons

Research Assistant

May 2020-Current

U.S. Forest Service, Baltimore Field Station/Baltimore, MD

PI: Dr. Nancy Sonti

- ✦ **Research Focus:** Updating and analyzing Baltimore's GIS map of the hundreds of civic groups contributing to environmental stewardship citywide

Undergraduate Laboratory Research Assistant

June 2017-May 2020

Biology Department, UMBC/Baltimore, MD

PI: Dr. Stephen Miller

- ✦ **Research Thesis:** Increasing Inorganic Carbon Uptake in *Chlamydomonas reinhardtii* by Overexpressing Carbon Sequestering Genes

Research Assistant and Audio Transcriber

April 2019-October 2019

The Cary Institute of Ecosystem Studies/Millbrook, NY

PI: Dr. Amanda Phillips

- ‡ **Research Focus:** Interviewing and studying Baltimore City resident's perceptions on green stormwater infrastructure

Volunteer Student Researcher

November 2016-March 2017

Baltimore City Community College/Baltimore, MD

PI: Dr. Amrita Madabushi & Kathleen Berlyn

- ‡ **Project Focus:** Identification and PCR analysis of microbes in three sampled Baltimore Harbor watershed sites and their implication on water waste sources.

Conservation Intern

June 2016-August 2016

National Aquarium/Baltimore, MD

- ‡ **Internship Focus:** Exploring conservation through experiences with species monitoring, ecological research, environmental education, policy, and citizen science

Presentations

Increasing Inorganic Carbon Uptake in *Chlamydomonas reinhardtii* by Overexpressing Low CO₂ Inducible Protein, LCI1

Poster Presentation, February 22nd, 2018,

2nd place award in presentation category

Emerging Researchers National Conference

Overexpression of Two Carbonic Anhydrase Enzymes to Amplify Algal Cell Growth

Poster Presentation, August 8th, 2018

18th Summer Undergraduate Research Fest

Baltimore Harbor Watershed Microbial Assessment

Poster presentation, November 1st, 2017

Deans award in biotechnology category

5th Annual Biotech Symposium

Skills and Additional Training

Molecular Biology/Microbiology – bacterial cloning, DNA extraction & purification, designing primers and constructs, restriction digests, gel electrophoresis, PCR, protein extraction, western blot, spectrophotometry, cytometry (basic)

Environmental Science – soil, trace gas, and hydrologic sampling, excel data keeping, GPS navigation & point collection, environmental education

General Research – algal cultivation, human research certified, photography and digital editing

Computer – Microsoft Office, 50wpm, text transcription, ArcGIS, QGIS, R (basic), Python (introductory), Github (intermediate)

Languages – English (primary), Spanish (basic)

Maryland Boating License
Boating Safety Course, Maryland DNR/Maryland

July 2020

Open Water Diver Certification
PSAI SCUBA course, up to 66ft/18m

October 2019

References

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