

Samantha J. George

(352) 317-0824 | samantha.george@duke.edu | Durham, NC

Education

Duke University, Durham, NC

August 2022 – December 2025

A.B. Nicholas School of the Environment

Majors in Environmental Science and Policy, Marine Science and Conservation; Minor in English

Honors Thesis: (In progress) Investigating the physiological impacts of environmental stressors on eastern oysters, *Crassostrea virginica* (Advisor: Dr. Juliet Wong)

Research Experience

Bonaventura Research Fellow in the Wong Lab

May 2025 – August 2025

Duke University Marine Lab, Beaufort, NC

Advisor: Dr. Juliet Wong

- Understand the physiological impacts of the presence of pea crabs in eastern oysters
- Utilize molecular techniques to determine genetic trends in heat-stressed oysters

Independent Student Researcher in the Wong Lab

August 2024 – December 2024

Duke University Marine Lab, Beaufort, NC

Advisor: Dr. Juliet Wong

- Measured oyster stress response via respiration rates under increasing temperatures and the expression of stress-responsive genes through RNA sequencing
- Analyzed data detailing the relationship between increasing ocean temperatures and Eastern Oyster health to aid in predicting the impacts of climate change

Student Researcher

August 2024 – December 2024

Duke University Marine Lab, Beaufort, NC

Advisor: Dr. Dan Rittschof

- Built upon previous research to uncover the biological origin of invasive blue crabs in the Mediterranean via haplotype mapping of the mitochondrial protein-coding gene COI
- Used bioinformatic software to visualize relationship between blue crabs of known biological origin with invasive crabs of unknown origin
- Presented findings at the Western Society of Naturalists Annual Meeting in Portland, OR

DukeEngage Research Fellow

May 2022 – August 2022

Universidad EARTH, Limón Province, Costa Rica

Advisor: Dr. Ada Gregory

- Performed daily fieldwork in both small-scale vegetable farms and industrial farms
- Developed sustainable development plan to increase revenue and production of farms
- All work completed in Spanish

Awards and Fellowships

Bonaventura Research Fellowship (\$2,000), 2025

Rachel Carson Scholarship (\$5,500), 2023

Skills & Certifications

Lab-Based: PCR, DNA Extraction and Purification, Gel Electrophoresis, General Lab Safety and Procedures

Computer: Microsoft Office, RStudio, Adobe Creative Suite

Certifications: Red Cross CPR, First Aid, AED

Oral & Poster Presentations

Sun, H., George, S. Rittschof, D., Schultz, T., Moran, M., Darnell, Z., Bilgin, R. 2024 “Blue crab (*Callinectes sapidus*) COI haplotype analysis of origins of invasives in the Mediterranean.” *Western Society of Naturalists Annual Meeting*, Portland, OR, Poster presentation

Teaching Experience

MARSCI 205: Marine Megafauna Course Assistant

Spring 2025

Duke University, Durham, NC

- Assist with planning lectures and course materials
- Create, edit, and grade student papers and exams

Work Experience & Outreach

May 2025 – August 2025

Program Manager for Community Science Initiative, Duke University Marine Lab, Beaufort, NC

- Led K-12 summer STEM programming, including weekly camps with beach clean-ups, drone tutorials, and introductions to field research

August 2024- May 2025

Work Study with Community Science Initiative, Duke University, Beaufort & Durham, NC

- Provide weekly science-based enrichment in Carteret and Durham County public schools
- Lead classes in coastal resilience and importance of conservation, emphasizing the universality of science

August 2023- May 2025

Volunteer for Duke Campus Farm, Duke University, Durham, NC

- Aid in weekly planting, harvesting, and maintenance at one-acre campus far

