



Morgan State University
Patuxent Environmental and Aquatic Research Laboratory (PEARL)
2026 Summer Internship Program

Please complete this document and email to PEARL-Internship@morgan.edu.
Be sure to attach your resume and unofficial transcript(s)

Due by March 1, 2026 for best consideration

Incomplete applications will not be considered

Personal Information

Full Name: _____
First Middle Initial Last

Email Address: _____

Home/Permanent Address: _____
Number & Street Apartment #

City State Zip Country

Cell Phone: _____

College or University Information

Name of School: _____

Student's School Address: _____
Number & Street Apartment #

City State Zip Country

Major: _____

Minor (if applicable): _____

Fall 2026 Class Year: _____ Freshman _____ Sophomore _____ Junior _____ Senior
 _____ Recent Graduate

Expected Graduation Date (MM/YYYY): _____

Current GPA: _____

Housing Information

Do you require housing? Note: The PEARL facility is NOT in Baltimore, but is located in St. Leonard, MD, 80 miles south of the Morgan State main campus in Baltimore.

_____ Yes, I require housing to participate in this program.

_____ No, I live locally in Southern Maryland and do not need housing.

_____ No, I have another housing option that does not require me to stay in PEARL housing.

Research Projects

The potential research projects for 2025 Summer Interns are listed below. Please select three that you are most interested in. ***Please only select three projects.*** Note: projects may deviate from the listed descriptions based on the needs of the mentor(s).

_____ Aquaculture Project 1: Developing Better Oyster Production Techniques for Aquaculture

Project Description: Interns will have the opportunity to work on oyster spawning, feeding experiments, sampling for genetic analyses, and designing and testing gear. Interns will also learn basic day-to-day operations in a shellfish hatchery.

Involves: Labwork, fieldwork, data analysis, boat time

Mentors: Dr. Ming Liu, Brittany Wolfe-Bryant

_____ Aquaculture Project 2: Introduction of Soft-Shell Clams to Maryland Aquaculture

Project Description: Interns will have the opportunity to work on soft-shell clam spawning, heat stress tests, sampling for genetic analyses, and designing and testing gear. Interns will also learn basic day-to-day operations in a shellfish hatchery.

Involves: Labwork, fieldwork, data analysis, boat time

Mentors: Dr. Ming Liu and Brittany Wolfe-Bryant

_____ Biogeochemistry Project 1: Carbon Cycling in Tidal Marshes and Oyster Aquaculture Facilities

Project Description: Interns will conduct fieldwork and lab work analyses to determine concentrations and composition of carbon in water samples taken from tidal marshes and oyster aquaculture facilities. Interns will learn how to collect water samples in the field and how to analyze them on several instruments in the Biogeochemistry Laboratory.

Involves: Labwork, fieldwork, data analysis, boat time

Mentor: Dr. Amanda Knobloch

Additional projects listed on Page 4

_____ Biogeochemistry Project 2: Water Quality Monitoring Using High Frequency Sondes

Project Description: Interns will work with the PEARL Water Quality Monitoring Network of YSI Multiparameter Water Quality Monitoring Sondes. Interns will have the opportunity to clean, calibrate, and deploy water quality sondes as well as conduct data analysis and data quality assurance/quality control measures.

Involves: Labwork, fieldwork, data analysis, boat time

Mentor: Dr. Amanda Knobloch

_____ Fisheries Project: Blue Crab Survey

Project Description: Interns will gain experience as field biologists for the summer, monitoring the Chesapeake Bay's blue crab population. Experiences will include collection, management, and analysis of environmental and catch data from a long-term scientific survey. Previous experience with R or RStudio statistical software will be helpful.

Involves: Boat time, fieldwork, data analysis

Mentor: Dr. Tom Ihde

_____ Ecology Project: Training AI to Indicate Ecosystem Status

Project Description: Interns will use a variety of field techniques to develop surveys that indicate ecosystem status. Students will work closely with Dr. Michael Cyrana (Johns Hopkins University [JHU]), as well as Dr. Tom Ihde (PEARL) and staff members of JHU's Applied Physics Lab staff in the development of ecological indicators and training of Artificial Intelligence algorithms.

Involves: Fieldwork, labwork, boat time, data analysis

Mentors: Dr. Michael Cyrana (Johns Hopkins University), Dr. Tom Ihde

_____ Economics Project: Recreational Angler Spending Related to the Harvest Fishery for Blue Catfish

Project Description: Interns will support data analysis, report writing, and the development of infographics on recreational angler spending related to the harvest fishery for blue catfish in Chesapeake Bay waters.

Involves: Data analysis, report writing

Mentors: Dr. Scott Knoche, Dr. Kehinde Ojo

PEARL Summer Internship

- This internship will provide students with the opportunity to work on a research project with a faculty mentor(s), attend professional development opportunities, visit other scientific facilities (schedule permitting), and network with peers and researchers.
- The Morgan State PEARL is located in St. Leonard, MD within the grounds of Jefferson Patterson Park and Museum (JPPM), not in Baltimore. Interns will be working on site at a field station located in a rural area. Interns selected for housing at the facility will be living in historic buildings on JPPM grounds.
- This internship begins June 1, 2026 and ends August 7, 2026 and is a full time position. If you are aware of any travel or any circumstances that would require you to start later, end earlier, or take time off during the internship, please list them below:

- You are expected to participate fully in the daily operation of the laboratory to which you are assigned:
 - Attend any lab meetings, professional development sessions, posted seminars
 - Conduct research as outlined by your mentor
 - Participate in the Final Intern Symposium at the end of the internship
- This internship is open to US citizens and permanent residents who are enrolled as undergraduates in colleges and universities in the United States. Applicants who have graduated in the past two years are also eligible to apply (Graduation Date of May 2024 or later).
- Interns will comply with all safety and security procedures set forth by the Morgan State University PEARL.

I represent and warrant that I have read and fully understand the foregoing statements, and that I seek employment under these conditions and agree to the above conditions. I attest to the accuracy of the information provided.

Printed Name

Signature

Additional Materials

To complete your application, you must submit the following to PEARL-Internship@morgan.edu

- This application form
- Resume
- Unofficial Transcripts
- Personal Statement of Interest (not to exceed 500 words)