Morgan State University’s
Patuxent Environmental & Aquatic Research Laboratory (PEARL)
Summer Internship Program 2020

Program Description

The internship program at the Patuxent Environmental & Aquatic Research Laboratory (PEARL) offers undergraduate students unique hands-on experiences in an environmental research setting. Students will gain knowledge on project design, fieldwork, laboratory research, and scientific writing. During the entire internship, each student will work exclusively under the guidance and supervision of a PEARL faculty researcher. PEARL interns will be involved in meaningful research during their internship and will present their research findings at the PEARL Internship Symposium at the end of the summer.

About the PEARL

The PEARL is located in St. Leonard, Maryland along the Patuxent River, a major tributary of the Chesapeake Bay. Research conducted at the state-of-the-art facility is designed to increase the understanding of coastal ecosystems so that they may be properly managed and protected. Much of PEARL’s research focuses on the Chesapeake Bay and its tributaries. PEARL maintains a 22,000 square foot laboratory and office building, a fleet of vehicles for field work including multiple research vessels, a private dock providing access to the Patuxent River, and a range of research and education laboratories. To read more about the PEARL’s history, please visit the “About PEARL” section at www.morgan.edu/pearl

Eligibility

This program is open to all undergraduate students. Applicants do not need to be a US citizen, but a social security number is required. Applicants must be accepted by a PEARL affiliated researcher.

Internship Advisor

Accepted interns will be working under the guidance of a faculty advisor. The advisor will direct interns in their daily work and schedule and provide guidance throughout the project. To choose an advisor, please review the “Potential Faculty Advisors” document included in this packet. Applicants are encouraged to contact one or more faculty from the PEARL prior to submitting an application to discuss their research interests to ensure compatibility.

Stipend and Boarding

Each intern will receive $450 per week for a total of 10 weeks (US$4,500 total). Limited on-site housing is available for $75 per week. To discuss housing arrangements, please contact Amanda Knobloch (amanda.knobloch@morgan.edu) for additional information concerning housing.
Internship Expectations

Hours

Interns are expected to work full-time (40 hours per week) with their advisor for 10 weeks during the summer months. In general, interns will start June 1, 2020, present their findings at the PEARL Internship Symposium on August 5, 2020, and end their internship on August 7, 2020. Once accepted, this timeframe may be adjusted as needed with permission from their advisor, the Internship Coordinator (Amanda Knobloch), and the PEARL Director (Scott Knoche).

Projects

An internship project will be designed under the guidance and supervision of a PEARL faculty researcher and will be completed by the end of the internship period. Findings will be presented at the PEARL Internship Symposium on August 5, 2020.

Orientation

An orientation and safety seminar will be given at the start of the internship. The safety seminar is required before laboratory and field work can be done. The orientation will provide important information pertaining to the summer internship program as well as provide an opportunity to meet other interns, faculty, and staff from the PEARL.

Any questions regarding the internship program before, during, or after the internship should be directed to Amanda Knobloch (amanda.knobloch@morgan.edu)
Potential Faculty Advisors
For more information about PEARL Faculty and Staff, please see the PEARL website.

- **Dr. Scott Knoche**, PEARL Director, Senior Research Economist
  - Research Interests:
    - Non-Market Valuation
    - Human Dimensions of Fish and Wildlife Management
    - Stated Preference Survey Methods
    - Survey Development and Methodology
    - Discrete Choice Analysis
  - Email: scott.knoche@morgan.edu

- **Dr. Chunlei Fan**, Associate Professor
  - Research Interests:
    - Biological oceanography
    - Coastal ecosystem processes and dynamics
    - Eutrophication and harmful algae blooms
  - Email: chunlei.fan@morgan.edu

- **Dr. Tom Ihde**, Research Assistant Professor
  - Research Interests:
    - Fisheries ecosystem modeling
    - Chesapeake Bay population ecology and dynamics
    - Stakeholder outreach and fishery management decisions
    - Fisheries data analysis in limited data situations
  - Email: thomas.ihde@morgan.edu

- **Dr. Ming Liu**, Oyster Genomics Researcher
  - Research Interests:
    - Oyster genetics and breeding
    - Oyster aquaculture
  - Email: ming.liu@morgan.edu

- **Dr. Elka Porter***, Assistant Professor, University of Baltimore
  - Research Interests:
    - Sediment-water interactions
    - Mesocosm experimentation
  - Email: eporter@ubalt.edu

*Dr. Porter is a professor at the University of Baltimore but spends her summers at the PEARL where she has built the Shear Turbulence Resuspension Mesocosm (STURM) facility. For more information about Dr. Porter, see here University of Baltimore profile: www.ubalt.edu/cas/faculty/alphabetical-directory/elka-t-porter.cfm
**How to Apply**

Applicants should fill out the registration form found on the PEARL website. Required documents should be emailed directly to Amanda Knobloch, however mailed physical applications will also be reviewed (see below for address information).

An application must be completed by the student and contain the following:
- Academic transcripts (unofficial are acceptable)
- Personal essay
- Two (2) letters of recommendation
- Intern Registration Form

**Essay**

As part of the application, each applicant is asked to submit a short personal essay (1500 word maximum) outlining past and present interests and academic and non-academic experiences. The essay should discuss special interests, academic and career plans, motives for applying for the PEARL Summer Internship Program, and how this experience will further the applicant’s educational and intellectual goals. Additionally, applicants are required to rank the potential advisors based on personal preference and include a brief explanation of their rankings with respect to their future academic and professional goals.

**Letters of Recommendation**

Each applicant should request two (2) letters of recommendation from science faculty at their college of university. Letters should address academic and research capabilities/potential. If the applicant is a rising sophomore and has not yet declared a major, one letter may be requested from a faculty member outside the sciences (for example, math or English).

To ensure excellent letters of recommendation, applicants are encouraged to send potential letter writers a one (1) page resume, a copy or draft of the application essay, and a copy of their transcript. Additionally, it is highly encouraged that applicants request letters of recommendation early and let their letter writers know the deadline for submission. Faculty letters of recommendation may be emailed to Amanda Knobloch (amanda.knobloch@morgan.edu) or mailed to the address below. Please advise letter writers to title the email “Letter of Recommendation – LAST NAME” to ensure letters are considered with the correct applicant.

*For full consideration, all application materials must be received by March 1st, 2020.*

Application materials should be submitted to Amanda Knobloch:

Via email (preferred): amanda.knobloch@morgan.edu
Via mail (acceptable): Amanda Knobloch
Morgan State University
Patuxent Environmental and Aquatic Research Laboratory
10545 Mackall Road
St. Leonard, MD 20685