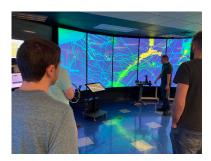
OCEAN EXPLORATION COOPERATIVE INSTITUTE | EXPLORING THE NATION'S BLUE FRONTIER

OCEAN EXPLORATION TRUST | UNIVERSITY OF NEW HAMPSHIRE | UNIVERSITY OF RHODE ISLAND UNIVERSITY OF SOUTHERN MISSISSIPPI | WOODS HOLE OCEANOGRAPHIC INSTITUTION



Dive into the **Bridge to Ocean Exploration (B2OE) Program** with the Ocean Exploration Cooperative Institute (OECI) at the **University of Rhode Island's (URI) Graduate School of Oceanography (GSO)!** Dip your toes into the multidisciplinary world that is ocean science with opportunities in video/data engineering, media asset management, technology asset management, applied coral science, and multimedia production.







The OECI (https://web.uri.edu/oeci/) is a unique consortium of top oceanographic institutions: URI, Woods Hole Oceanographic Institution (WHOI), University of New Hampshire (UNH), the University of Southern Mississippi, and the non-profit, Ocean Exploration Trust. They work together to push the boundaries of ocean exploration with research and innovation in remotely-operated and autonomous vehicle operations, virtual engineering connectivity, and ocean science communication and engagement.

A core mission of the OECI is to inspire future generations of ocean scientists and engineers, and foster Blue Economy workforce development. The B2OE Program is an experiential learning program key to advancing this mission. Currently, the OECI is recruiting **up to 10 students** to create a 5th B2OE Cohort and participate in this **PAID**, **part-time program**. Potential, student project pathways may include:

Computer science/programming
Ocean exploration data science
Ocean engineering and robotics
Deep sea biology
Virtual environments and 3D models
Science communication and video production

Project Pathway Breakdown- Computer Programming (Python/eDNA Pipeline)

- The project seeks to recruit a student to enhance a Python Snakemake analysis pipeline, initially developed by the Beinart lab, for querying environmental DNA (eDNA) datasets. This pipeline facilitates the meta-analysis of publicly available eDNA datasets, enabling high-throughput analyses to assess the distribution and diversity of specific organisms of interest. For instance, the current Snakemake pipeline was developed to identify a particular microbe in marine sediment eDNA datasets on a global scale, but the methodology can be applied to study various organisms across publicly available eDNA datasets. Given the rapid increase in eDNA data production by NOAA and other researchers worldwide, this tool holds significant potential for exploration of global biodiversity across diverse marine ecosystems, including the deep ocean. The existing Snakemake pipeline requires refinement to be suitable for public use. The student intern will enhance the existing workflow by extending the pipeline to support batch processing of multiple datasets in a single run and to automatically integrate results. If time allows, the student will also work on incorporating automated figure generation into the pipeline to facilitate streamlined visualization of global diversity patterns and distribution for the target organisms.
- Useful coursework/experience requested for this project pathway:
 - Seeking students who have completed at least 1 year at CCRI
 - Candidates should have Python proficiency. Experience with Snakemake and data visualization is a plus.
 - Suggested courses:
 - Computer literacy, including familiarity with programming languages (e.g. Python, Matlab), markup languages (HTML, XML), operating systems (e.g. Linux) and data structures/algorithms
 - Introduction to Software Engineering, Programming Concepts, Database Design & Management, Technical Math

Benefits to B2OE Program participation:

- Up to \$17/hour equivalent (paid via two stipends, one in early March 2026, and the other in late May 2026)
- Exposure to cutting-edge ocean science, engineering, and media production technologies and best practices within the OECI
- Collaboration with OECI personnel; field trips to tour URI, WHOI, and other facilities, as well as local industry (if/when possible)
- Opportunity to remotely participate in NOAA Okeanos Explorer and EV Nautilus expeditions
- Peer-to-peer interaction to build communication skills
- Information exchange and networking opportunities with industry professionals during a virtual Blue Economy Career Awareness Fa

In addition to the above mentioned part-time experience, additional program requirements and expectations include:

- Time commitment of up to 10h/week (December 2025- May 2026)
- Potential for onsite and/or tele-work
- Weekly tag-ups with mentors to gauge project progress and answer questions (mentors are also available via email for questions, etc. at any time)

- Participation in OECI student events, including Lunch and Learn networking events and a virtual Blue Economy Career Awareness Fair
- Final project summary report and presentation
- Participation in pre- and post-experience 360° evaluation

Eligibility:

- U.S. Citizenship (or F-1, J-1 visa status if applicable)
- Currently enrolled CCRI students (undergraduate/associate's degree, and/or workforce certificate)
- Degree, major, or intent to major in a field relevant to the OECI's mission; these can include, but are not limited to: STEM (science, technology, engineering and math), computer science, media production and graphic design, communications, education, and/or business operations/administration

B20E Program Timeline/Key Dates:

- Interested CCRI students must complete the <u>OECI B2OE online application</u> by on or before 11:59 pm ET, October 26, 2025.
 - In addition to this application, interested individuals will also be required to submit their current resume or curriculum vitae (CV), with 3 professional references listed (who can speak to the applicant's character and professional and/or academic background- this can be a professor, advisor, teacher, community member, work supervisor, mentor, etc.).



- Potential participants will be **notified by November 7, 2025, for a virtual interview.** Applications will be reviewed and analyzed based on merit and relevant experience.
- Final selections on or before November 21, 2025; candidates will be notified of their status.
- An anticipated program start date, with an on-site orientation at URI's Graduate School of Oceanography campus in Narragansett, RI, will be on or before December 10, 2025.

Questions? Please contact Holly Morin (holly morin@uri.edu)