

Looking for a fun summer research opportunity?

Coastal Research Institute

*A partnership of LMU Seaver College of Science and Engineering
and The Bay Foundation*

Offering Paid Summer Internships

LMU's Coastal Research Institute (CRI) **Internship and Research Assistant Program** provides hands-on learning opportunities using applied science in restoration and research projects. This opportunity is available to Seaver College undergraduate students in Summer 2023 and work will continue during the following academic year. This program provides students with a \$2,500 summer scholarship to conduct research and work with CRI for a 6-week period during LMU's Summer Session I. Housing is available on a limited basis. Please note pre-requisite requirements for some individual research projects.

APPLICATION PROCESS

Students may apply by downloading and electronically filling out the Application Form pdf. Submit the form via email (as a pdf) with an attached current resume (also pdf) to:

CRI@lmu.edu

***Application forms and resumes are due by
5 PM (Pacific Time) on Friday, March 24, 2023***

Students may choose their interests from any of the following seven opportunities and need to confirm availability for Summer Session I in the Application Form. Students who are selected for the internship program from the pool of applicants are expected to commit a minimum of 25 hours per week up to a maximum of 30 hours per week on the research or restoration project. Selected students will likely be notified by March 28, 2023.

Questions about the Application Form or Internship and Research Assistant Program should be directed to: Lambert.Doezema@lmu.edu

Applications and resumes should be emailed as pdfs to: CRI@lmu.edu

** Note: Students are encouraged to submit applications early, if possible.*

INTERNSHIP AND RESEARCH ASSISTANT OPPORTUNITIES

1) Seagrass Ecology Research and Conservation - Dr. Bittick

Seagrasses are an important foundation species that help to mitigate climate change while providing habitat to numerous algae, invertebrates, and fishes. This project builds on previous work considering how multiple stressors, especially human-caused stressors, impact the productivity and ecosystem functioning of seagrass. Students will work on a variety of approaches to inform ongoing seagrass management and restoration. One approach is a systematic review analyzing previous studies to consider the impact of stressors on seagrasses of the genus *Zostera* and current approaches to conservation. Students will also conduct laboratory, field, and quality assurance work to consider the distribution and functioning of local *Zostera* meadows. Previous field or lab experience is helpful, but not required.



2) Harmful Algal Bloom Studies - Dr. Bratcher-Covino

Phytoplankton are known as the primary producers of the world's oceans. Harmful Algal Blooms (HABs) are caused by the rapid growth of phytoplankton species that may lead to a variety of detrimental effects, including shading out other organisms, lowering water oxygen levels, and producing toxins that can be harmful to wildlife and humans. This opportunity will involve applied science including developing research and quality assurance plans, scientific writing, fieldwork, and lab work to collect and analyze local phytoplankton and environmental samples to contribute towards a better understanding of HAB dynamics in Santa Monica Bay. Previous field or lab experience is helpful, but not required.



3) Marine Invertebrate Physiology Research – Dr. Vasquez

This research project aims to understand the stress tolerance of marine invertebrates to climate change stressors (changes in seawater temperature, salinity, oxygen, pH). Students will work on developing a protocol for assessing the effect of stressor exposure on physiological parameters of marine mussels. The ultimate goal is to determine the physiological capacity of marine organisms to deal with environmental stress that will be used to predict potential impacts of climate change. Previous field or lab experience is helpful, but not required.



INTERNSHIP AND RESEARCH ASSISTANT OPPORTUNITIES

4) Dune and Wetland Habitat Restoration – TBF Watershed Program

Beaches, dunes, and wetlands are important coastal habitats that provide many ecosystem services. These habitats have been degraded by past and current practices, reducing their extent and ecological condition. The Bay Foundation (TBF) works across Los Angeles County to restore and increase our understanding of these habitats through active restoration and environmental monitoring. This internship emphasizes field work, data collection, and data management across several project sites spanning the Santa Monica Bay (Zuma Beach to Palos Verdes). Thus, travel to and from these sites is required. Other activities will be based at LMU.

