



Smithsonian

Environmental Research Center

Internship with the Coastal Disease and Global Change Ecology Labs

Start Date: ASAP

Length: up to 4 months

Schedule: Full-time, 40 hours/week.

Stipend: \$730/week, including housing

Location: This position is in collaboration with the [Coastal Disease Ecology](#) and [Global Change Ecology Laboratories](#) at the [Smithsonian Environmental Research Center](#) (SERC) in Edgewater, Maryland as well as the [Gnanadesikan Lab](#) at the [Johns Hopkins University](#) in Baltimore, Maryland. The primary location for conducting the research will be at SERC, which is a research center of the Smithsonian Institution, located on the western shore of Chesapeake Bay, approximately 10 miles south of Annapolis. The 2,650-acre SERC campus contains a laboratory and office complex, as well as educational and waterfront facilities.

Description: We are seeking 2-3 interns to work to conduct research on a Smithsonian- funded project to explore the role of bacterial microbiomes in rapid adaptation to changing coastal conditions for multiple marine invertebrates. The project will primarily consist of laboratory work, conducting molecular genetic lab work to generate metagenomes of microbiomes from oysters and blue crabs from the Chesapeake Bay. In addition, the intern will have the opportunity to participate in lab and fieldwork associated with other ongoing projects in both the [Coastal Disease](#) and [Global Change Ecology](#) Labs. In addition to working with the three PIs on this project (Drs. Katrina Lohan, Genevieve Noyce, and Anand Gnanadesikan), interns will also be working closely with Leone Yisrael, a PhD student at Johns Hopkins University.

Learning objectives:

The intern will learn:

- molecular genetic lab techniques, including DNA extraction and enrichment protocols for bacterial metagenomes
- analysis of metagenomic data in R
- eco-evolutionary concepts concerning how symbioses affect ecosystem processes and rapid adaptation in coastal environments

Please send resume and letter of interest to Katrina Lohan at lohank@si.edu.