M.S. STUDENT ASSISTANTSHIP

Impacts of Climate Change on Blue Crab Life History and Population Dynamics

The University of Southern Mississippi
Ocean Springs, MS

We seek a highly motivated student with interests in crustacean biology, climate change, and marine fisheries to fill a funded M.S. assistantship in the laboratory of Dr. Zachary Darnell at The University of Southern Mississippi's Gulf Coast Research Laboratory in Ocean Springs, MS, beginning in June 2024.

Our current work in this research area focuses on impacts of rising temperatures on growth, maturation, and reproductive output of female blue crabs. The selected student will assist with ongoing laboratory experiments rearing crabs throughout the life cycle under a range of thermal regimes and field sampling quantifying blue crab abundance, distribution, and reproductive effort, while developing their own thesis research project that contributes to our understanding of how this economically and ecologically important species will respond to a changing climate. Depending on the specific research topic pursued by the student, methods may include field sampling, laboratory and/or field experiments, and analyses of existing long-term datasets.

The student selected for this position will pursue an M.S. degree in the Division of Coastal Sciences within the School of Ocean Science and Engineering. The assistantship will begin in June 2024 and includes tuition and a stipend of $22,800 per year (increasing to $23,400 after completion of the comprehensive exam).

The Division of Coastal Sciences is a research and graduate education unit within the School of Ocean Science and Engineering (SOSE). SOSE offers graduate and undergraduate degree programs in Coastal Sciences, Hydrographic Science, Marine Biology, Marine Science, and Ocean Engineering, and a certificate program in Uncrewed Maritime Systems. The faculty and staff of SOSE leverage its location on the Gulf Coast and expertise in marine and coastal science and engineering to address challenges facing coastal and marine environments. SOSE has significant research infrastructure and facilities across four principal sites spanning the Mississippi Gulf Coast: the NASA Stennis Space Center, the Gulf Park Campus at Long Beach, the Roger F. Wicker Center for Ocean Enterprise at the Port of Gulfport, and the Gulf Coast Research Laboratory in Ocean Springs. This position will be located in Ocean Springs at the Gulf Coast Research Laboratory, a marine laboratory featuring comprehensive research programs in coastal and marine biological sciences. Research program support includes state-of-the-art laboratory facilities and instrumentation; a fleet of small and large research vessels; the GCRL Museum collection; facilities at the Center for Fisheries Research and Development (CFRD) and Thad Cochran Marine Aquaculture Center (TCMAC); and the NSF I/UCRC Science Center for Marine Fisheries. Ocean Springs is known for its beauty, natural resources, and arts community. It is home to galleries, restaurants, and schools that are ranked among the best in the state.

Interested students should contact Dr. Zachary Darnell (zachary.darnell@usm.edu). Please include a cover letter describing your interests and career goals, a copy of your CV, unofficial undergraduate transcripts, and contact information for three professional references. Review of applicants will begin immediately. For full consideration, submit all materials prior to January 1, 2024.