

Ph.D. Positions on Estuarine carbon and nutrient cycling in Mobile Bay, Alabama (University of South Alabama and Dauphin Island Sea Lab)

Overview: We are seeking a couple of outstanding Ph.D. students to lead a study of the abiotic and biotic factors controlling carbon and nutrient cycling dynamics in a river-dominated, tidal river delta and estuary. The students' dissertations will involve: (1) spatiotemporal assessment of the patterns and pace of changes in carbon and nutrients in tidal rivers and bays of coastal Alabama and the processes driving change using historical and current datasets; (2) mechanistically linking changes in carbon and nutrient loading to the bay to changes in water and habitat quality metrics such dissolved oxygen, pH, water clarity, and biological communities; (3) training in the use and application of field observations, lab experiments, and numerical ecosystem modeling to address research questions; and (4) working with project collaborators at the Mobile Bay National Estuary Program, The Nature Conservancy, Alabama Department of Conservation and Natural Resources, US EPA, NOAA, and academic partners to build resilience for important estuarine species to environmental stressor trends and variability.

The students will be enrolled in the Marine Sciences Ph.D. program housed in the [Stokes School of Marine and Environmental Sciences](#) at the University of South Alabama (USA) and conduct field and lab work from campus and the nearby [Dauphin Island Sea Lab \(DISL\)](#). Students will be based in the [Lehrter lab](#), which maintains research laboratories at both USA and DISL, and currently hosts one postdoc, several research technicians, and numerous graduate and undergraduate researchers.

Qualifications: Applicants must have an MS degree in oceanography, limnology, or other related disciplines (e.g., freshwater or marine ecology, soil science, environmental chemistry, physical sciences, etc.). We will only consider applicants with a BS degree if they have proven relevant experience. A solid working knowledge of coastal ecosystems, experience with limnological and oceanographic methods in field and lab work, and understanding of experimental design and statistics are required. The preferred candidate will also have previous experience collaborating with natural resource agencies. Prior publication experience is a big plus. Excellent English writing and verbal communication skills are essential. Ph.D. positions are open to both US citizens and international candidates.

Salary: The project includes an annual stipend, plus tuition remission and health care benefits. Four years of guaranteed funding is available with additional funding likely available through a combination of teaching and research assistantships.

Start Date: August 15th (start of Fall semester), 2025. A summer start date in May or June may be possible, if desired.

To apply: Please submit your application here: [Ph.D. Positions on Estuarine carbon and nutrient cycling in Mobile Bay, Alabama](#). Review of applicants will begin February 1st, 2025, but the position will remain open until a suitable candidate is found.

Please note that submitting an application includes filling out a short survey, submitting a brief letter outlining research interests and experiences, and uploading a curriculum vitae and unofficial transcripts (both undergraduate and graduate, compiled into one file). After reviewing all applicants, we will ask for reference letters from top candidates. Finalists will be

notified and instructed to submit a formal application, including reference letters, to the USA Graduate School.

About us: USA and DISL have a long history of excellence in marine ecology and biogeochemistry. We have outstanding faculty and teaching and research facilities that support over 90 graduate students in our School. Total student enrollment at USA is over 14,000 of which approximately 5,000 are graduate and professional students. This is an exciting place to learn and conduct research! We are located in the Mobile-Tensaw River delta (aka America's Amazon) and are just 45 minutes to DISL with access to Mobile Bay and the Gulf of Mexico. The city of Mobile and its metropolitan area are attractive areas and rank highly for livability based on culture, recreation, and affordability.

USA is an equal opportunity employer. The University's Equal Employment Opportunity (EEO) policies ensure that the University has adequate procedures and practices in place to guard against and prohibit discrimination on the basis of race, color, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, religion, age, genetic information, disability, protected veteran status, or any other applicable legally protected basis. The University's leadership and management is dedicated to this policy with respect to recruitment, hiring, placement, promotion, transfer, training, compensation, benefits, employee activities, access to facilities and programs and general treatment during employment.

We will not be able to respond to queries about the status of applications, but general questions about the Stokes School of Marine and Environmental Sciences graduate programs can be directed to our Graduate Student Program Manager, Ashley Martin (ashleymartin@southalabama.edu). If you experience problems while filling out the application, please email Allison Fletcher (afletcher@southalabama.edu).