

## **Postdoctoral Position in Marine Organic and Isotope Geochemistry, University of Miami**

A postdoctoral position is available in the Close Lab for Marine Organic and Isotope Geochemistry, part of the Rosenstiel School of Marine, Atmospheric, and Earth Science at University of Miami in Miami, Florida. The position is available for a start date between July 1, 2026 and September 1, 2026, although excellent candidates may be considered for a later start date. Consideration of applicants will begin immediately and close on June 1, 2026.

The position will be initiated for 1 year, with the intention of a 2-year duration, contingent upon first year performance. The postdoc will be mentored by Dr. Hilary Close and will work closely with project collaborators in the U.S. and internationally. The position is full-time (100% FTE), 12 months/year, and the salary will follow the University of Miami pay scales, matching year(s) of experience. The nature of the position is in-person.

### **Project description**

*Isotopic signatures of bacterial particle degradation.* The position is part of a collaborative project funded by the U.S. National Science Foundation, entitled “Collaborative Research: Hydrogen isotope analysis of amino acids as a novel tracer of microbial processes in marine particles” ([NSF 2446715](#)). The postdoctoral position in the Close Lab will focus on measurement and interpretation of natural-abundance nitrogen and carbon isotope ratios of individual amino acids (compound-specific isotopic analysis of amino acids, CSIA-AA) in size-fractionated marine particles. The successful candidate should have experience with natural-abundance stable isotope analysis, water column processes of organic matter production and degradation, and synthesis of oceanographic data. The candidate will be expected to assist with one-day student cruises for training and sample collection and may have opportunities to participate in longer shipboard field work.

### **Position expectations**

The postdoc will be expected to:

- Operate two mass spectrometry systems: a gas chromatograph-mass spectrometer (GC-MS) and a gas-chromatograph/elemental analyzer-isotope ratio mass spectrometer (GC-IRMS, EA-IRMS).
- Perform wet chemical preparation of environmental samples for amino acid and isotope analysis.
- Assist in training of graduate and/or undergraduate students in sample preparation and data analysis.
- Synthesize and interpret oceanographic and chemical data in the context of literature surveys.
- Advance collaborative research projects through meeting with collaborators, presenting research results, and contributing to manuscripts as first author and/or coauthor.
- Perform other duties as assigned.

### **Candidate requirements**

- Candidates are required to obtain a Ph.D. by the start date, in the fields of Marine Biogeochemistry, Organic Geochemistry, or a related field.
- The candidates must have at least one year of hands-on experience in organic and/or isotopic geochemical techniques and data handling and at least three years of hands-on experience in chemistry lab work.
- The candidates must have experience with first-author publication of research results and with supervising undergraduate students in laboratory techniques.

### **Additional considerations**

The following skills and experience will be favored in evaluation of candidates:

- Demonstrated track record of problem solving, critical thinking, creativity, and innovation.
- Demonstrated ability to work well both independently and in diverse, collaborative teams.
- Excellent written and verbal communication skills and demonstrated record or aptitude for resource development and sharing.
- Demonstrated scientific interest and curiosity in process-level investigation of mechanisms of the ocean's biological pump.
- Hands-on experience with natural-abundance compound-specific isotopic analysis.

### **Application Instructions**

Qualified candidates should contact Dr. Hilary Close ([hclose@miami.edu](mailto:hclose@miami.edu)) with a curriculum vitae and a description of their interest in the position, qualifications, and how the position relates to their career goals. After initial review, qualified candidates will be invited to submit application materials to the University of Miami employment portal.