



## **Research Associate II—Marine Mammal Acoustic Technician**

The Cooperative Institute for Marine and Atmospheric Studies (CIMAS) of the University of Miami invites applicants for a Research Associate II position in Marine Biology and Fisheries.

We seek a research associate to join our group and work as a marine mammal acoustic technician in the NOAA Southeast Fisheries Science Center's Protected Resources and Biodiversity Division in Miami, FL. Research in the marine mammal laboratory at SEFSC is focused on assessing the distribution, seasonal density, and abundance of marine mammal stocks in the Gulf of Mexico, southeastern US waters of the North Atlantic, and the Caribbean. The incumbent shall primarily assist in managing acoustic data collected during field operations including ship-based acoustic surveys and long-term acoustic moorings, real-time and post-processing of acoustic data including detecting, classifying, and localizing marine mammal vocalizations, develop abundance estimates for deep diving marine mammal species, and participate in acoustic data collection during ship-based stock assessment surveys. The researcher may spend extended periods of time at sea on large vessels collecting passive acoustic data from towed arrays and sonobuoys, including leading the acoustic surveys, ensuring quality control of data and metadata, and maintaining equipment. These efforts shall focus on data collection and analysis associated with the Atlantic Marine Assessment Program for Protected Species (AMAPPS) and Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) ship-based surveys.

The incumbent will utilize a solid foundation in passive acoustic data collection and analysis techniques. Beneficial experience can include work in noise estimation, acoustic filtering, environmental data analyses, and habitat modeling. Familiarity with large data sets is essential.

Responsibilities include:

- Participate in and lead passive acoustic data collection and management during large-vessel surveys up to 60 days duration.
- Maintain acoustic hardware and software, including inventory, setup, and breakdown for surveys
- Maintain and conduct QA/QC of MS Access and SQLite databases and acoustic recordings collected from ship-based surveys and moored instrument deployments
- Enter analysis results into Tethys metadata database and provide support for maintenance of hard copies of acoustic recordings
- Analyze acoustic recordings in real-time and post-processing, including manual and automated detection, classification, and localization of marine mammal calls from towed arrays and sonobuoys to support stock assessments
- Detect and classify biological and anthropogenic noise sources to identify Gulf of Mexico and North Atlantic Ocean marine mammals to species
- Create and manually review long-term spectral averages in Triton

- Manage and analyze large datasets efficiently.
- Efficiently use a variety of acoustic analysis techniques and software, such as Matlab, R, Triton, XBAT, and PAMGUARD
- Exchange information routinely in an appropriate manner using good oral and written communication skills.
- Work on several projects simultaneously, set priorities to achieve project goals and deadlines.
- Write reports and present findings in scientific settings including in peer-reviewed publications.
- Participate in meetings and training workshops
- Attend and present scientific results at scientific meetings as required

Candidates for this position should have a minimum of a Bachelor's degree in Biology, Oceanography, or related field, and a minimum of two years (three or more preferred) of demonstrated experience in (1) detection, classification, and localization of marine mammal calls from acoustic recordings, including real-time and post-processing experience, (2) NOAA stock assessment passive acoustic survey methodologies, including localization and acoustic tracking of deep-diving odontocete species such as sperm whales and beaked whale using Pamguard and the ability to accurately classify large whale and delphinid call types to species, (3) participating in and leading field surveys using towed arrays and sonobuoys including assuring quality control of raw acoustic data and metadata databases, and maintaining specialized acoustic hardware and software, (4) using Pamguard, Triton, SQLite, MS Access, MS Excel, and other specialized passive acoustic software, as well as basic statistical and data management skills, (5) the ability and desire to work as part of a collaborative team, including during extended (up to 60 days) large vessel surveys, and (6) excellent problem solving and critical thinking skills, good organizational skills and the ability to plan daily duties.

The position will be located at the NOAA Southeast Fisheries Science Center Protected Resources and Biodiversity Division located in Miami, FL.

Apply on line at: [www.miami.edu/careers](http://www.miami.edu/careers). Curriculum Vitae and the contact information for 3 people who can provide letters of recommendation are required.

The University of Miami is an Equal Opportunity Employer - Females/Minorities/Protected Veterans/Individuals with Disabilities are encouraged to apply. Applicants and employees are protected from discrimination based on certain categories protected by Federal law. Click [here](#) for additional information.