TITLE: Postdoctoral Research Associate

DEPARTMENT: School of Marine Sciences

DATE: July 2023

**REPORTS TO: Associate Professor**

**Purpose:**

The University of Maine School of Marine Sciences seeks applicants for two 2-year postdoctoral researcher positions. The postdocs will work under the supervision of UMaine faculty member Dr. Lisa Kerr. For more information on ongoing research in Dr. Kerr’s lab see: https://gmri.org/commitments/science/quantitative-fisheries-research-lab/

The research will focus on climate integrated modeling to inform fishery resource decision making in a changing Northeast U.S. shelf ecosystem. The successful candidate will be expected to conduct climate-integrated fisheries modeling focused on New England groundfish. The work will involve: 1) conducting a comprehensive review of climate impacts on focal groundfish stocks, 2) examination of relationships between climate, oceanographic processes, and key aspects of groundfish stock dynamics, 3) integration of climate information into stock assessment models, and 4) application of management strategy evaluation to test alternative approaches to account for climate change impacts within the fisheries decision-making process. The postdoc will be expected to participate in stakeholder and regional fisheries management meetings and will interact with representatives from industry, federal and state scientific agencies, fishery management councils, and non-governmental organizations. To learn more about this work see: <https://github.com/Northeast-Climate-Integrated-Modeling>.

**Essential Duties & Responsibilities:**

* Model development for and application of management strategy evaluation, including:
  + Development of operating models
  + Modeling fleet dynamics
  + Performance testing of climate informed stock assessments and management strategies.
* Fitting stock assessments and broadly contributing to stock assessment processes and participation in stock assessment meetings.
* Managing code in the Github platform
* Synthesis of results in project reports and manuscripts.
* Presentation of results to stakeholder audiences
* Develop and maintain professional relationships that reflect courtesy, civility, and mutual respect.
* Build productive relationships with internal and external constituencies.
* Commit to organizational improvement by identifying opportunities to improve, and recommending possible alternatives for a situation.
* Perform other reasonably related duties as assigned.

**Knowledge & Skills Qualifications:**

**Required:**

* A completed PhD degree by date of hire in a relevant discipline, such as Fisheries Science, Marine Fisheries Ecology, Applied mathematics, Statistics, or other related field that demonstrates a strong quantitative background.
* Experience fitting population dynamics models to data for fisheries stock assessment and application of simulation testing frameworks like Management Strategy Evaluation.
* Knowledge of fisheries management, and understanding of the management process in the U.S.
* Demonstrated experience and fluency in statistical/modeling programming languages (e.g. R, Template Model Builder).
* Experience working in high performance computing environment is preferred.
* Strong written and oral communication skills, as evidenced through publications in the peer-reviewed scientific literature and presentations to a variety of audiences
* Demonstrated ability to work independently and as part of a team
* Applicants must be currently authorized to work in the United States on a full-time basis

**Supervisory Responsibility:** None.

**Work Environment:** The position will be based at the Gulf of Maine Research Institute. The postdoctoral researcher will work with their supervisor to define their scope of work, a work plan, and key milestones**.**

**Work Year:** Full-time, fiscal year.

**Work Schedule:** Normal University of Maine business hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Due to the nature of the position, work beyond regular hours (to include evenings and weekends) will be necessary to meet the requirements of the position. The employee shall establish regular office hours and in consultation with the supervisor, adjust the work schedule as appropriate.

**Position Type:** Soft Money Grant funded.Contingent on funding and successful performance.

**Schedule for Evaluation:** In Accordance with UMPSA Agreement.

Appropriate background checks are required.

All UMS employees are required to comply with applicable policies and procedures, as well as to complete applicable workplace related screenings, and required employee trainings, such as Information Security, Safety Training, Workplace Violence, and Sexual Harassment.