

PhD Opportunity in Marine Fisheries Ecology

Evaluating climate impacts on Alaska marine ecosystems using size-based food web models

We are soliciting a PhD student to undertake research that advances our understanding of climate impacts on marine food webs and ecosystem-based fisheries management. The successful candidate will join the Integrated Marine Fisheries Lab at Oregon State University and participate in NOAA's Alaska Climate Integrated Modeling (ACLIM) and Gulf of Alaska Climate Integrated Modeling (GOACLIM) projects, supervised by Drs. Jon Reum (NOAA) and Cheryl Barnes (OSU).

Project scope: Alaska marine ecosystems are among the most productive in the world. They also support some of the largest fisheries, but are highly sensitive to climate change. This position will focus on the application of size-based ecological theory to better understand ecosystem dynamics and assess climate-related impacts. Core objectives are to develop size spectrum food web models using the "mizer" framework and evaluate effects of different fishing and climate scenarios on the Bering Sea and Gulf of Alaska. The student will adapt existing models (e.g., Reum *et al.* 2020) to address original research questions that explore, for example, environmental controls on marine food webs, climate-informed ecological forecasting, or management strategy evaluations under changing systems. Opportunities are also available for involvement in international modeling efforts such as FishMIP and participation in at-sea surveys in Alaska. The position is ideal for individuals who are interested in developing expertise in food web modeling and advancing climate-informed fisheries management.

Qualifications: Applicants with a master's degree (or non-US equivalent) in marine science, ecology, statistics, fisheries, or related field are preferred. The successful candidate will be proficient in technical writing, demonstrate familiarity with quantitative ecological methods (i.e., advanced statistics or ecosystem modeling), and have experience with coding in R.

Start Date: September 2024

Location: Hatfield Marine Science Center in Newport, OR. Commuting part-time from the Corvallis campus is possible. The student may also choose to reside in Seattle, WA and work from NOAA's Alaska Fisheries Science Center following completion of coursework at OSU.

Benefits: The position is fully funded for 2 yr. Annual stipend, tuition and university fees, healthcare coverage, travel support, and publication costs will be provided. Additional support will be secured through grants, scholarships, fellowships, and/or teaching assistantships.

To Apply: Email <u>a single pdf</u> to jonathan.reum@noaa.gov and cheryl.barnes@oregonstate.edu (subject: mizer PhD) with: 1) a cover letter describing your academic interests, relevant experience, and suitability for the position; 2) curriculum vitae; 3) unofficial transcripts; and 4) contact information for three references. **Application review will begin on May 6, 2024**. The position will remain open until filled.

We place considerable value on diversity, equity, and inclusion. Those with underrepresented and/or historically marginalized identities will be supported and are encouraged to apply.

