

The Seascape Ecology Lab at Oregon State University will be hiring at least two postdoctoral scholars, a phytoplankton ecologist and seascape ecologist, to work on projects related to biodiversity and ecosystem functioning in US coastal waters. Work will be in support of NASA and NOAA funded efforts (e.g. <https://marinebon.org/us-mbon>) and may involve collaborative studies in the California Current, Arctic, Gulf of Mexico, and Great Lakes. While several data sets are amassed to support rapid product generation, independent lines of inquiry within the general lab scope will be supported.

Required qualifications:

- PhD in ecology, oceanography, computational biology, remote sensing or similar field;
- Strong computational skills and demonstrated scholarly accomplishment;
- Commitment to broadening participation of underrepresented groups in marine sciences.

The applicant should be willing to work unsupervised and collaborate as part of group projects, assist with supervision and mentoring of undergraduate and graduate students, and lead and contribute to scholarly products. In addition, it is expected that the applicant will also have experience with one or more of the following:

For the phytoplankton ecologist position:

- Integration of high frequency, high resolution data sets across multiple imaging and spectral instruments deployed in situ.
- Optical approaches to understanding biological properties of cells, community composition, or size distributions through inherent or apparent properties of sea-water, and/or modeling of primary production using bio-optical approaches;
- Gas tracer proxies of net community metabolism;
- Theoretical and experimental approaches to quantifying ecological interactions and population dynamics: e.g. species-specific growth, grazing, and primary production in the plankton.

For the seascape ecologist position:

- Integration of high frequency, high resolution data sets across multiple instruments deployed in situ or via remote sensing.
- Classification approaches using machine learning (e.g. probabilistic self-organizing maps, random forest, convolutional neural networks, t-SNE);
- Landscape and seascape approaches to quantifying habitat heterogeneity, extent, and fragmentation;
- Experience modeling or quantifying effect of habitat on species occupation, abundance, and behavior.

Positions are expected to last 18-24 months, with extension upon mutual agreement and availability of funding. Postdoctoral scientists are expected to co-create a mentorship and career plan with PI, and actively seek opportunities for continued education, professional development, and networking opportunities. The Seascape Ecology group values diverse perspectives and transdisciplinary approaches.

Please send letters of inquiry, curriculum vitae, and contact information of three references to PI Maria Kavanaugh (maria.kavanaugh@oregonstate.edu) with subject: POSTDOCTORAL SCHOLAR and either PHYTOPLANKTON ECOLOGIST or SEASCAPE ECOLOGIST. Successful applicants will apply by approx. December 31, 2024. Remote work: negotiable. Start date: flexible, but before May 01, 2025.