

Postdoctoral Scholar Position: Lidar Remote Sensing of Marine Plankton

Name of College/Department: College of Agricultural Sciences - Department of Botany and Plant Pathology

Location: Oregon State University – Corvallis, Oregon

Open and close dates:

Open: September 23, 2026. Close: November 15, 2026

Preferred position start date:

March 2027 (but negotiable)

Summary: (1.0 FTE; 12-months) The Behrenfeld lab studies phytoplankton ecology and physiology using tools ranging from laboratory experiments, field studies, remote sensing, modeling, and theory. The lab is currently seeking a Postdoctoral Scholar to work on remote sensing retrievals of ocean plankton properties using light detection and ranging (Lidar) observations. Field data sets to be investigated will be based largely on airborne measurements with a High Spectral Resolution Lidar (HSRL). Potential geophysical retrievals of interest may include, but are not limited to, water column profiling of phytoplankton biomass, active stimulation of phytoplankton chlorophyll fluorescence, diel vertical migration (DVM) of marine nekton, and quantification of particulate backscattering coefficients through the use of water Raman signals. The selected Postdoctoral Scholar will be expected to support and potentially participate in the 2027 CoSense field campaign in the eastern Mediterranean Sea. More broadly, work conducted by the selected Postdoctoral Scholar is envisioned as providing new insights on lidar applications for characterizing ocean ecosystems in preparation for the future launch of an ocean-optimized satellite lidar mission.

The position provides a competitive stipend and health insurance for up to two years, subject to satisfactory performance (<https://gradschool.oregonstate.edu/postdocs>).

Required Qualifications:

1. PhD in a life science/computational field, completed by start of position.
2. Demonstrated productivity, capacity for independent research, and intellectual creativity.
3. Be eligible for postdoctoral scholar support at OSU (see <https://gradschool.oregonstate.edu/postdocs/appointment-and-recruitment>).

Preferred Qualifications:

1. Research experience with lidar or other airborne remote sensing, bio-optics, plankton ecology and physiology, numerical modeling.
2. Computer programming skills (e.g., Python, R, Matlab, Java, C/C++, etc) and analytical techniques (e.g., PCA/EOF, GAM, machine learning, time-series approaches, etc) for analysis of large field data sets.
3. Excellent oral and written communication skills.

Application Process: Please provide **a single PDF** (include your surname and first initial in the file name) that includes a 1-page cover letter, a full CV, and names and contact information for three references. Applications and inquiries may be sent by email with subject line “PD scholar” to:

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