Postdoctoral Fellowship

Molecular biogeochemistry of dissolved organic phosphorus production, composition, and bioavailability.

Applications are invited to fill a full-time, 3-year position in the Oceanography Department at the University of Hawaii at Manoa (K. C. Ruttenberg, Honolulu, HI), in collaboration with the Dept. of Earth and Environmental Science at Columbia University and Lamont-Doherty Earth Observatory (LDEO), (S. T. Dyhrman, Palisades, NY), to study the molecular biogeochemistry of dissolved organic phosphorus (DOP).

We are looking for postdoctoral candidates with a strong background in microbial and/or nutrient biogeochemistry, with interest in addressing processes at the interface of biogeochemistry and microbial oceanography. The primary institutional home of the successful candidate will be in the nutrient biogeochemistry lab of Ruttenberg, in the Oceanography Department at the University of Hawaii at Manoa (UHM), with opportunities for cross-training in microbial oceanography with Dyhrman at Columbia University-LDEO. The project supporting this postdoctoral position is a collaboration between Ruttenberg and Dyhrman, and integrates transcriptome profiling, LCMS, and enzyme assays with the primary research goal of characterizing DOP molecular weight distribution, composition and bioavailability as a function of phytoplankton physiology and the N:P ratio of the (natural or culture) growth medium. This research will use a combination of field sample analysis, laboratory biogeochemistry, and culture work at both UHM and LDEO.

The successful candidate will have professional development opportunities including, but not limited to, mentoring students, attending international meetings, participating in outreach events and, grantsmanship training. If desired, there is the opportunity to participate in teaching of courses at UHM.

Applicants should have a doctoral degree in Biological or Chemical Oceanography, Microbial Biogeochemistry, or a related field, and a record of scientific research publications in scholarly journals. Candidates are expected to have a broad understanding of ocean biogeochemistry and nutrient cycling. Preference will be given to candidates who have expertise in phosphorus biogeochemistry, phytoplankton physiology, and experience working with transcript or metabolite (LCMS) datasets. Applicants would ideally be comfortable working with large datasets in R or python.

The position is for 36 months, commencing from Sept. 1, 2018. Renewal of the position for years 2 and 3 is subject to performance and availability of funds. Applications should be emailed to Dr. Kathleen Ruttenberg (kcr@hawaii.edu) as a single PDF document, and must include a cover/motivation letter outlining experience and expertise relevant to the project, a comprehensive Curriculum Vitae, a short research statement, and the names and contact information of three professional referees. Applications will be considered starting July 1, 2018, and continue until a suitable applicant is chosen.