U.S. GO-SHIP Tracer Postdoctoral Fellowship

Application deadline: November 30th, 2022

U.S. GO-SHIP (Global Ocean Ship-based Hydrographic Investigations Program) is pleased to announce a two-year NSF-funded postdoctoral fellowships to foster participation in analysis and collection of tracer data within the U.S. GO-SHIP repeat hydrography program (http://usgoship.ucsd.edu). U.S. GO-SHIP is part of the international GO-SHIP program (http://www.go-ship.org). GO-SHIP collects highly accurate, full water column, multiple-parameter observations on trans-oceanic sections for investigation of large-scale physical and biogeochemical oceanographic processes relevant to climate (see http://www.go-ship.org/Bib.html for a list of publications). It re-occupies these sections approximately every 10 years.

The postdoc may reside at the institution of their U.S. GO-SHIP principal investigator supervisor during the fellowship or work remotely with the consent of their supervisor, although fellowships will be administered as subawards through the University of Washington.

Incumbents are expected to, but are not required to, participate as a tracer analyst on one leg of a U.S. GO-SHIP cruise (see https://usgoship.ucsd.edu/hydrotable/ for cruise list) during their fellowship. Tracers measured during these cruises include the chlorofluorocarbons, CFC-11 and CFC-12, and sulfur hexafluoride. Nitrous oxide is also being measured from the same water samples, and studies combining the tracers with N₂O are also possible. Possible opportunities in 2023 include a zonal transect along 32°S in the Indian Ocean (I05) and a meridional section nominally along 25°W in the North Atlantic Ocean (A16N). The proposed post-doctoral project should include analysis and interpretation of the GO-SHIP tracer datasets.

Interested applicants should identify and contact a mentor or mentors from the current list of principal investigators for the U.S. GO-SHIP tracer measurement program (University of Washington: M. Warner; NOAA-PMEL/CICOSE: R. Sonnerup; U. Texas Austin: D.-H. Min; U. Miami, RSMAS: R. Fine and J. Happell). In consultation with the chosen mentor, candidates should develop a one to two page research plan for a scientific investigation incorporating analysis of GO-SHIP tracer data, whether the data were previously collected (https://cchdo.ucsd.edu/) or obtained during the period of the fellowship. Analysis and closely-associated modeling or state estimation projects specifically utilizing US GO-SHIP tracer data are also considered, as are projects which combine GO-SHIP observations with other datasets.
Candidates must have received a Ph.D. in oceanography, earth sciences, applied math, or the physical, chemical, or biological sciences. Training in physical or chemical oceanography, biogeochemistry, and/or climate science is strongly preferred, along with strong quantitative, laboratory analysis, and/or modelling skills. An ability and interest to work across these disciplines is highly desirable.

The support is for 2 years including time at sea. Extension through support from the postdoc mentor is also possible, but not guaranteed. Postdoctoral support must be used within two years of the start date.

In addition to the research plan describing their proposed use of GO-SHIP tracer data, applicants should submit a curriculum vitae, a statement of research experience and interests, and a list of three references with their contact information, to Prof. Mark Warner (warner@uw.edu). Applications will be reviewed by a committee drawn from the U.S. GO-SHIP tracer principal investigators who have no conflict of interest with any of the applications. Remote (e.g. Zoom) interviews will ensue for short-listed candidates.

The deadline for applications is November 30th, 2022. Those received by this date will be given priority. After this date, until the position is filled, applications will be considered in the order in which they are received. Decisions will be made by December 31st, 2022.

The University of Washington is an AA/EOE.