



Greetings,

We are looking for early career scientists with experience in physical or chemical oceanography (hydrography) who would be interested in participating in **December 2021 - March 2022** (dates to be finalized) on the GO-SHIP (<https://usgoship.ucsd.edu> and <http://www.go-ship.org>) decadal re-occupation of the hydrographic section **A13.5 in the Atlantic Ocean** as **co-Chief Scientist**. (This 2021-2022 cruise is actually a re-occupation following a truncated A13.5 in 2020, due to COVID-19.)

Deadline for applications (see below for details): May 31, 2021

PARTICULARS:

- We will be sailing on the **NOAA Ship Ronald H. Brown**
- Chief Scientist – Dr. Denis Pierrot (NOAA/AOML) denis.pierrot@noaa.gov
- 45 days, departing from Cape Verde and returning to Cape Town (South Africa).

DUTIES:

Pre-cruise: Assist Chief Scientist with pre-cruise planning as needed. Attend pre-cruise meeting if feasible, and by teleconference if not.

At sea: Co-Chief will be scientist-in-charge on one 12-hour watch, opposite the Chief Scientist with the following responsibilities: ensuring the CTD watch runs the CTD console and completes routine forms and tasks for each station; mentoring students assigned to the watch; deciding sampling levels for each parameter in accordance with the chief scientist; organizing the CTD watch and assisting with water sampling (directing operations (sample cop) and/or obtaining water parameter samples (e.g. salinity, nutrients); and assisting in at-sea data reviews and documentation. (See¹ below)

Post-cruise: Assist the Chief Scientist with cruise report preparation and review of data, quality codes, and documentation.

A13.5 will provide an excellent opportunity to work at sea and the co-Chief Scientist will have the opportunity to become familiar with and/or extend their knowledge of Atlantic oceanography.

SUPPORT: Salary support for academic co-Chief Scientists will be negotiated, and is typically supplied via subawards from UCSD/SIO to the participant's institution (see² below). It typically covers time at-sea, in port, on travel, and several weeks of preparation. Travel will be paid by

UCSD/SIO.

WHO CAN APPLY: The co-Chief positions are considered stepping-stones for early career scientists, and are open to high-level scientists/technicians, with PhDs or equivalent experience. No at-sea experience is necessary, although it can be a plus. The Chief Scientist will provide training on board. Although preference may be given to those with ongoing research in the Atlantic Ocean, all are welcome to apply. If there are multiple qualified applicants for these positions, final selection will be made by the U.S. GO-SHIP Executive Council, in consultation with the Chief Scientist and Principal Investigators.

HOW TO APPLY: To join us for a fantastic experience in this highly exciting region of the Atlantic Ocean, email letters of application to Lynne Talley (ltalley@ucsd.edu) as well as the Chief Scientist Denis Pierrot (denis.pierrot@noaa.gov).

Please provide your CV, a brief summary of your research interests and experience and include the name and email address of a reference. **DEADLINE: May 31, 2021**

The cruise is long and will likely pass through challenging weather with rough sea conditions at some point. We therefore recommend that those who apply be reasonably confident that they can handle such conditions. Candidates should think carefully before applying if they are prone to motion sickness, and should be free of pre-existing conditions requiring medical care that could flare up during a long period far from ports.

¹ **Further details on cruise activities:** (Blogs from some previous cruises can be found on <http://usgoship-p062017.blogspot.com> or <https://i07n.wordpress.com/blog/>.) Station stops are planned every ~55 kilometers (closer over steep topography and near coasts), where we lower a CTD/rosette to measure the temperature, salinity, oxygen, currents and other dynamics from just below the sea surface to approximately 10 meters above the ocean bottom. During each of these stations we also collect up to 24 water samples for measurement of various water properties, including a number of oceanic CO₂-related parameters (dissolved organic and inorganic carbon, alkalinity, pH, pCO₂), along with dissolved CFCs and sulfur hexafluoride (SF₆), dissolved oxygen, salinity and nutrients. While the ship is both underway and on-station we continuously pump surface seawater through sensors for temperature, salinity, and partial pressure of CO₂; operate standard meteorological sensors; operate a shipboard Acoustic Doppler Current Profiler; and collect along-track bathymetric data. We also deploy floats and drifters along the track as requested.

² **Financial support** for the co-Chief Scientist is provided through an NSF grant to UCSD/SIO, coordinated by Lynne Talley (ltalley@ucsd.edu). Except in the case of a directly supported project post-doc, there is no support from this NSF grant for post-cruise scientific analyses, only for time spent on final documentation, which is minimal for this program (almost all work is done at sea). Support can be provided for cruise-related publication costs. This cruise-specific salary plus benefits support for the co-chief scientist should never exceed $(2.5 \cdot D / 30)$ months (where D = number of days at sea), and in general will be less than this amount, in many cases much less (typically 1.5, respectively), depending largely on pre- and post-cruise project-related activities for each person. A contract agreeing to the guidelines set out by the US GO-SHIP Executive Council must be signed before travel preparations can be made.

STILL WANT MORE INFORMATION?

This cruise is a US contribution to the international GO-SHIP program, <http://www.go-ship.org>, which is part of the Global Ocean Observing System, <https://ioc.unesco.org/our-work/global-ocean-observing-system-goos> and <https://www.goosocean.org/>. The portal to GOOS observing system information and metrics, including GO-SHIP is at OceanOps <https://www.ocean-ops.org/board>.

You can read more about the US GO-SHIP program at: <https://usgoship.ucsd.edu/>
You can find data and cruise reports from previous A13.5 occupations at: <https://cchdo.ucsd.edu/search?q=a13.5>.

Section-based graphics and maps available from the online Atlantic Ocean atlas at http://whp-atlas.ucsd.edu/whp_atlas/atlantic_index.html

Further questions can be directed to Denis Pierrot (denis.pierrot@noaa.gov) and/or Lynne Talley (ltalley@ucsd.edu).

