



September 14, 2020

Greetings,

We are looking for students to participate in one of a pair of hydrographic long-line cruises (1 month) in **mid March–mid May, 2021**, in the North Atlantic Ocean on the University of Washington (UW) R/V Thomas G. Thompson, as part of the US GO-SHIP program.

Deadline for applications (see below for details): November 15, 2020

The US GO-SHIP program collects data for global CO₂ and climate variability programs. The website is <http://usgoship.ucsd.edu>. Scripps Institution of Oceanography (UCSD) operates the NSF-funded portion of the US national program, which covers this upcoming 2021 cruise. US GO-SHIP is part of the international GO-SHIP (Global Ocean Ship-based Hydrographic Investigations Program) program; the website is <http://go-ship.org>.

US GO-SHIP pays all travel costs. It also pays student salary/tuition costs during the time of the cruise plus the few travel days before and after the cruise, if and only if the student is enrolled at a U.S. institution.

There are 2 legs on UW's R/V Thompson in the western North Atlantic: the first along the A20 line (~52.5°W) and the second along the A22 (~66°W). For each leg we are seeking 4 students for CTD/deck operations (typically PO background), 1 student to assist with chlorofluorocarbon and SF6 (CFC) analysis (typically chemistry background), and 1 student to assist with LADCP (Lowered Acoustic Doppler Current Profiler) operations per cruise, for a total of 12 students.

Leg 1 (A20): Wood Hole (MA) mid March 2021 – San Juan (Puerto Rico) mid April 2021. Chief Scientist: Ryan Woosley (rwoosley@mit.edu).

Leg 2 (A22): San Juan (Puerto Rico) mid April 2021 – Wood Hole (MA) mid May 2021. Chief Scientist: Viviane Menezes (vmenezes@whoi.edu).

Note that dates and ports can change during final ship scheduling, but any such changes are usually minor.

A valid passport and appropriate visa are required for participation in the cruises. U.S. citizenship is not required.

COVID-19 guidance and pre-boarding isolation for the A20 and A22:

This is a constantly evolving situation. All of the following guidelines and procedures are subject to change at any time. All changes will be communicated promptly.

Everyone will need to complete a 14-day pre-boarding observation period consisting of no physical contact with anybody prior to boarding the cruise and testing. The exact procedures will be communicated. This applies to both the participants meeting the ship in Woods Hole (A20 participants) and Puerto Rico (A22). The additional travel costs due to the pre-boarding isolation period will be covered by US GO-SHIP.

When departing the ship in either Puerto Rico or Woods Hole, the participants are expected to be able to go directly from the ship to the airport and return home (the exact procedure will be communicated). Participants will need to follow the restrictions/guidelines of their home state or country regarding isolation/testing upon returning home.

Note for A22 participants: Puerto Rico is encouraging essential travels only (see <https://www.discoverpuertorico.com/info/travel-advisory>). The current protocol requirements are:

- Complete a Travel Declaration Form from the Puerto Rico Health Department (online at <http://www.travelsafe.pr.gov/> or <http://www.viajaseguro.pr.gov/>)
- Demonstrate a negative molecular COVID-19 test result (a nasal or throat swab), taken no more than 72 hours prior (testing sites on the mainland US can be found here: <https://www.hhs.gov/coronavirus/community-based-testing-sites/index.html>)
- Obtain an Airport Exit Confirmation number and QR Code (automatically received when uploading the molecular test results to the Puerto Rico Health Department's online portal.)

Application Procedure:

(1) **CTD students:** Please contact Lynne Talley (ltalley@ucsd.edu) (co-chair U.S. GO-SHIP Executive Council), and CC Ryan Woosley (rwoosley@mit.edu) and Viviane Menezes (vmenezes@whoi.edu) (Chief Scientists) to let us know that you are contemplating applying, and to get more information if you have questions. We will be considering both cruises as a whole, so it is not necessary to designate which line you are interested in unless you have a strong preference.

CFC students: Please contact CFC PI Mark Warner (warner@uw.edu).

LADCP students: Please contact LADCP PI Andreas Thurnherr (ant@ldeo.columbia.edu)

(2) Talk to your advisor to be sure that this will work with your program.

(3) After that, if you want to proceed – please send a cover letter indicating your interest and information about your background (CV, including the academic program you are part of, who your advisor is, what kind of research you are carrying out if you are at that stage, any prior cruise experience) to the contacts listed above.

Graduate students in good standing at US institutions will be given preference. Undergraduates and postdocs (though paid only at student salary rates) will also be considered.

Duties/Expectations:

The repeat hydrography cruises operate around the clock, 7 days a week, with 12-hour shifts. CTD student duties include operating the CTD and rosette bottle system both on deck and in the lab, drawing and documenting water samples, and working on data quality control and analysis alongside the Chief and co-Chief Scientists. You may also be asked to assist other science groups and to contribute to the cruise blogs. The CFC student will collect CFC samples and perform onboard CFC analysis as part of the CFC science team which will provide onboard training. The LADCP student will receive training prior to the cruise (location to be determined) and will be responsible for LADCP operations.

This is a great opportunity to get out to sea, participate in collecting hydrographic data to the bottom of the ocean using the very highest reference standards of accuracy, and to get started or continue looking at phenomena that interest you. It will be an interesting and useful experience whether or not you have experience at sea thus far. We encourage all to consider coming along.

Thank you,

Ryan Woosley

(Chief Scientist for A20, rwoosley@mit.edu)

Viviane Menezes

(Chief Scientist for A22, vmenezes@whoi.edu)

Lynne Talley and Gregory C. Johnson

(co-chairs U.S. GO-SHIP Executive Council)

Isabella Rosso

(Project Manager, U.S. GO-SHIP)