

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration Atlantic Oceanographic and Meteorological Laboratory 4301 Rickenbacker Causeway Miami FL 33149

Dr. DENIS PIERROT ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORY OCEAN CHEMISTRY AND ECOSYSTEMS DIVISION 4301 RICKENBACKER CAUSEWAY MIAMI, FL 33149

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To Whom It May Concern,

This is to certify that the following people will be participating in a NOAA hydrographic cruise in the Atlantic Ocean in March – April 2023 as part of the international Global Ocean Ship-based Hydrographic Investigations Program (GO-SHIP, www.go-ship.org). This is a scientific research cruise on NOAA's Research Vessel Ronald H. Brown that will begin in Recife, Brazil on 06 March 2023 and end in Rota, Spain on 06 April 2023. The cruise is one of many repeated globally as part of this program with the goal of quantifying changes and variability in ocean heat content, inorganic carbon, oxygen, nutrients, and other natural and man-made tracers of ocean circulation. During the cruise, the scientists listed below will participate in the sample collection and analysis operations on the GO-SHIP cruises. More information about this cruise can be found on https://www.aoml.noaa.gov/ocd/gcc/A16N_2023/

The purpose of this letter is to certify that the scientists listed below will leave Recife, Brazil on board the NOAA Ship *Ronald H. Brown* on 06 March 2023 for an oceanographic voyage. These scientists will remain on board until arrival in Rota, Spain on 06 April 2023. This letter should be viewed as confirmation of a one-way vessel ticket from Recife, Brazil to Rota, Spain.

Denis Pierrot	Eric Wisegarver	Caroline Branan	Courtney Dressler
Zachary Erickson	Riley Palmer	David Cooper	Tyler Christian
Samuel Mogen	Emma Pontes	Melissa Miller	Bo Dong
Taydra Low	Charles Featherstone	Rachel Bramblett	Najid Hussain
Christian Saiz	Alison Macleod	Kieran Claassen	Ellen Park
James Hooper	Bo Yang	Patrick Mears	
Kristene McTaggart	Jessica Leonard	Katelyn Schockman	
Alexandra Fine	Mackenzie Blanusa	Victoria Dina	

You may reach me via email or telephone listed in my signature below should you have any questions.

Sincerely,

Denis Pierrot, Ph.D.
Chief Scientist for 2023 NOAA's Atlantic Ocean cruise A16N NOAA/Atlantic Oceanographic and Meteorological Laboratory 4301 Rickenbacker Causeway Miami, FL 33149

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