



# Fellowships in Geophysical Fluid Dynamics

at  
Woods Hole Oceanographic Institution

*June 17 to August 22, 2019*

Since 1959 the GFD program has promoted an exchange of ideas among researchers in the many distinct fields that share a common interest in the nonlinear dynamics of fluid flows in oceanography, meteorology, geophysics, astrophysics, applied mathematics, engineering and physics. Each year, the program is organized around a ten-week course of study and research for a small group of competitively selected graduate-student fellows. The overall philosophy is to bring together researchers from a variety of backgrounds to provide a vigorous discussion of concepts that span different disciplines, and thereby to create an intense research experience. For the student fellows, the centerpiece of the program is a research project, pursued under the supervision of the staff. At the end of the program, each fellow presents a lecture and a written report for the GFD proceedings volume. Over its history, the GFD Program has produced numerous alumni, many of whom are prominent scientists at universities throughout the world. The interdisciplinary atmosphere of the Program is the ideal place for young scientists to learn the habits of broad inquiry, of speaking to others with very different backgrounds and viewpoints, and of seeking answers in unfamiliar places.

The Program commences with two weeks of Principal Lectures focusing on a particular theme in GFD. For 2019, the theme is "**Stratified Turbulence and Oceanic Mixing Processes**" and the lecturers will be **Colm-cille Caulfield** (University of Cambridge), who will concentrate on recent theoretical developments in the fluid dynamical description of turbulent stratified mixing, and **Stephanie Waterman** (University of British Columbia), who will concentrate on the observational evidence of such mixing in the world's oceans.

Up to ten competitive fellowships are available for graduate students. Successful applicants will receive stipends of \$7,205 and an allowance for travel expenses within the United States. A small number of unpaid fellowships may also be available for strongly qualified students who can support themselves financially. Fellows are expected to be in residence for the full ten weeks of the program. The application deadline is February 15, 2019. Awards will be announced by April 1, 2019. We seek applicants from all areas of Geophysical Fluid Dynamics, and particularly encourage applications from women and members of underrepresented groups. Further information and application forms may be obtained at <http://gfd.whoi.edu>, or by writing to: [gfd@whoi.edu](mailto:gfd@whoi.edu)

*Prospective visitors should contact Claudia Cenedese at [ccenedese@whoi.edu](mailto:ccenedese@whoi.edu), Karl Helfrich at [khelfrich@whoi.edu](mailto:khelfrich@whoi.edu) or Bruce Sutherland at [bsuther@ualberta.ca](mailto:bsuther@ualberta.ca)*

WHOI is an Equal Employment Opportunity/Affirmative Action Organization  
The GFD Program is funded by the National Science Foundation and the Office of Naval Research