Undergraduate and Graduate Opportunities

NASA Living with a Star Heliophysics Summer School
Participants learn about the exciting science of heliophysics as a broad, coherent discipline that focuses on the physics of space weather events that start at the Sun and influence atmospheres, ionospheres and magnetospheres of Earth and their counterparts around the other planets throughout the solar system.

NOAA Okeanos Explorer-in-Training Program
The NOAA Explorer-in-Training Program trains undergraduate and graduate ocean mapping interns in the use of bathymetric sonar mapping systems aboard the NOAA Ship Okeanos Explorer. A typical placement will consist of one 15 to 30-day expedition either offshore aboard the Okeanos Explorer or onshore at the University of New Hampshire Exploration Command Center in Durham, NH.

NOAA Bill Lapenta Internship
The NOAA Bill Lapenta Internship is a unique opportunity lasting ten weeks open to U.S. citizens who are sophomore or junior undergraduates, or in a graduate program. Students are matched with NOAA mentors and can focus their study on areas like modeling, programming, how to improve our understanding of forecasting problems, new data analysis techniques, testing of data visualization systems, the incorporation of social science to communicate science, and contributing to the National Climate Assessment and other reports.

Postdoctoral Fellowship Programs

NOAA Climate & Global Change (C&GC) Postdoctoral Fellowship
The C&GC fellowship program has developed an outstanding reputation of attracting the best and the brightest PhDs in the sciences relevant to the NOAA Climate Program Office and has been instrumental in developing today’s climate research experts and leaders. As of 2021, 247 new PhDs have come through this prestigious program.

Desired research areas focus on observing, understanding, modeling, and predicting climate variability and change on seasonal and longer time scales. This includes the documentation and analysis of past, current, or possible future climate variability and change as well as the study of the underlying physical, chemical, and biological processes.

NASA Living with a Star Jack Eddy Postdoctoral Fellowship
Since 2009, CPAESS has joined the NASA’s Living With a Star (LWS) program in training the next generation of researchers needed for the emergent field of heliophysics through the Jack Eddy Postdoctoral Fellowship Program.

Heliophysics embraces all science aspects of the Sun-Earth connection, and includes many of the basic physical processes that are found in our solar system, the laboratory, and throughout the universe. Major topics of focus for LWS are the science of space weather and of the Sun-climate connection, or any research program relevant to LWS.
CPAESS provides an array of scientific opportunities that promote lifelong professional and workforce development, and foster a new generation of leaders within the scientific community.

### Scientific Research Opportunities

**Short-term Research Collaborations at NOAA’s National Centers for Environmental Prediction (NCEP)**

This program offers an opportunity for the research community to be fully integrated within a national scale operational environment for discrete periods of time. Researchers integrated within operations will provide great benefit to NOAA research-to-operations (R2O) transition activities, bringing new concepts, tools, processes, and innovation to the conduct of operations more efficiently. Their presence will enhance ongoing activities and catalyze new efforts at several of the onsite test-beds while promoting an environment ripe for innovation. By immersing visitors into the NCEP operational infrastructure, they can carry valuable insights and capabilities back to their home institutions, thereby facilitating O2R support.

### Scientific Appointment Opportunities at U.S. Federal Agencies

CPAESS facilitates and manages scientific research and research-to-operations appointments for early career and expert scientists at U.S. institutions, federal laboratories and program offices. CPAESS also offers long-term job opportunities and workforce management at selected federal locations, in accordance with UCAR collaboration agreements with federal sponsors and agencies.

Visiting Scientist appointments have included the following agencies: NASA Ocean Observations, National Hurricane Center (NHC), National Ocean Service (NOS), Naval Research Laboratory (NRL), NOAA Climate Program Office (CPO), NOAA Geophysical Fluid Dynamics Laboratory (GFDL), NOAA National Centers for Environmental Information (NCEI), NOAA National Environmental Satellite, Data, and Informational Service (NESDIS), NOAA National Weather Service (NWS), NOAA Climate Prediction Center African Desk, NOAA Global Ocean Monitoring and Observing (GOMO), NOAA Ocean Acidification Program (OAP), the United States Geological Survey (USGS), and the NOAA Office of Water Prediction (OWP).

### Our Sponsors

- [NOAA](https://www.noaa.gov)
- [NASA](https://www.nasa.gov)
- [U.S. Naval Research Laboratory](https://www.nrl.navy.mil)

### More Info On

- Scientific and Discovery Partnerships
- Research & Career Opportunities
- Scientific Event Management

[cpaess.ucar.edu](http://cpaess.ucar.edu) | 303.497.8666