CICOES

COOPERATIVE INSTITUTE FOR CLIMATE, OCEAN, AND ECOSYSTEM STUDIES

University of Washington · Oregon State University · University of Alaska Fairbanks

AN INNOVATIVE COLLABORATION

Established in 1977 and known as JISAO until 2020, CICOES fosters innovative research collaborations among the University of Washington, NOAA, and academic partners at the University of Alaska Fairbanks and Oregon State University.

Among the oldest and largest of NOAA's Cooperative Institutes, CICOES' research is at the forefront of investigations on climate, ocean and ecosystem science.

CICOES partners with academic and research institutions, government agencies, NGOs, and community organizations to increase scientific understanding and then use this knowledge to find real world solutions. By working with NOAA, CICOES is able to strengthen and extend its areas of research and expertise in order to serve the widest possible regional, national, and global community interests. As part of the UW College of the Environment CICOES works collaboratively with many academic units including the School of Aquatic and Fishery Sciences, the School of Oceanography, the Department of Atmospheric Sciences, and more.

105

PEER-REVIEWED PUBLICATIONS RELEASED IN 2022

PERSONNEL

- > **109** employees
- > **95%** of CICOES employees located at a NOAA lab (PMEL, AFSC, and NWFSC)
- > **24** research scientists with Principal Investigator status
- > **8** postdoctoral scholars

RESEARCH

CICOES and NOAA researchers represent a broad range of expertise within nine core themes. Investigators focus research on critical issues within climate, ocean, and ecosystem science by:

> Collecting and analyzing data to better understand physical, biological, and chemical processes of ocean and coastal areas.

> Increasing our knowledge of climate variability, change, and impacts on ecosystems.

> Studying hydrothermal vents and volcanoes on the seafloor.

> Studying effects of interactions between human communities and natural ecosystems.

> Developing tools and technologies to restore and protect marine habitats.

> Improving tsunami forecasting and prediction of impacts.

EDUCATION

CICOES education and outreach programs continue to make important contributions to environmental literacy and mentoring the next generation of scientists who reflect the diversity of our nation.

> Intern Program — Since 2008 the CICOES intern program has hosted 133 students from schools across the U.S. More than 20 former interns have received graduate degrees including 8 Ph.Ds. At least 30 students are currently in graduate school with 4 at the University of Washington.

> Postdoc Program — We are currently funding 6 postdocs under the CICOES Postdoctoral Fellowship program (including 2 at UAF and 1 at OSU) where the postdoc is given the opportunity to construct their own research, encouraging them to think broadly and to work closely with distinguished university and NOAA scientists. We have 2 additional postdocs working on a broad array of research projects with mentors at NOAA and UW.

> Graduate Student Awards — This program facilitates UW graduate student research and the training of next gereration NOAA scientists through opportunities to participate in research conducted in association with CICOES researchers, NOAA researchers, and UW faculty in CICOES-affiliated departments.

9 CORE RESEARCH THEMES

> **Climate & Ocean Variability, Change, & Impacts**

> **Earth Systems & Processes**

> **Environmental Chemistry & Ocean Carbon**

> **Marine Ecosystems: Observation, Analysis, & Forecasts**

> **Ocean & Coastal Observations**

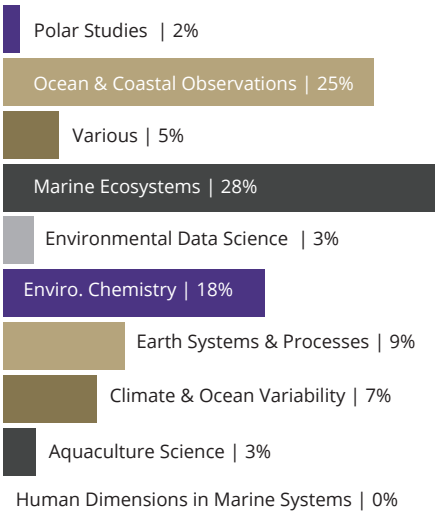
> **Environmental Data Science**

> **Aquaculture Science**

> **Human Dimensions in Marine Systems**

> **Polar Studies**

PROPORTION OF FUNDING BY THEME 2022



FUNDING

CICOES's Cooperative Agreement funding for the 2022 fiscal year totaled **$25,485,300**. Within this period, CICOES Principal Investigators received additional research grants and contracts totaling **$2,470,100** from other funding agencies including NSF, the Office of Naval Research, the Packard Foundation, and NASA.

CICOES's Cooperative Agreement is funded through three tasks:

TASK I — Central Research & Management — The institute's core program that includes funding for postdoctoral scholars, research development grants, education/outreach activities, and administrative support.

TASK II — Collaborative Research at NOAA — Funds researchers and technical staff who work onsite at local NOAA laboratories and collaborate with Federal scientists there.

TASK III — Research on UW Campus — Supports research projects initiated by scientists and UW faculty from a broad range of university departments.

PROPORTION OF FUNDING BY TASK