



COOPERATIVE INSTITUTE FOR CLIMATE, OCEAN, AND ECOSYSTEM STUDIES

AN INNOVATIVE COLLABORATION

Established in 1977 and known as JISAO until 2020, CICOES fosters innovative research collaborations between 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 change, ocean processes, fisheries conservation and management, and ecosystem research.

CICOES partners with academic and research institutions, government agencies, NGOs, and community organizations to increase scientific understanding and then apply 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 more than ten academic units within the university and is home to the Office of the Washington State Climatologist.



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PEER-REVIEWED PUBLICATIONS
PUBLISHED BETWEEN SEPTEMBER
2019 AND SEPTEMBER 2020

PERSONNEL

- > **123** employees
- > **80%** of CICOES employees located at a NOAA lab (PMEL, AFSC, and NWFSC)
- > **22** research scientists with Principal Investigator status
- > **12** postdoctoral scholars



RESEARCH

CICOES and NOAA researchers represent a broad range of expertise within nine core themes. Scientists focus research on such critical issues as climate change, ocean acidification, tsunami forecasting, and fisheries assessment 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

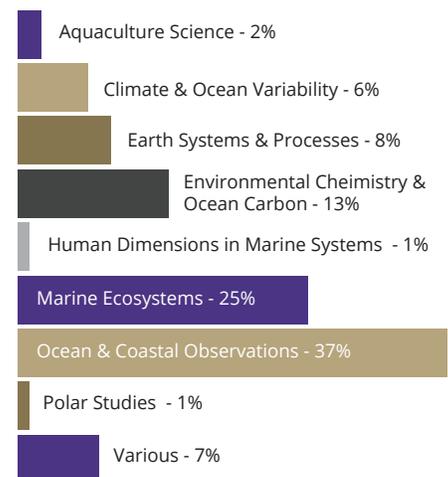
CICOES education and outreach programs continue to make important contributions to environmental literacy and mentoring the next generation of scientists who reflect the diversity of our nation.

- > **Intern Program** – Since 2008 the CICOES intern program has hosted 105 students from schools across the U.S. Sixteen former interns have received graduate degrees including four Ph.D's. Twenty students are currently in graduate school with five at the University of Washington.
- > **Postdoc Program** – We currently fund six postdocs under the CICOES Fellowship Postdoctoral Scholar program where the postdoc is given the opportunity to construct their own research, encouraging them to think broadly and to work closely with the distinguished scientists at the UW and NOAA laboratories. We have six additional postdocs working on a broad array of research projects with mentors at NOAA and UW.
- > **Graduate Student Fellowships** – This program facilitates UW graduate student research and the training of next generation NOAA scientists through opportunities to participate in research conducted in association with CICOES researchers, NOAA researchers, and UW faculty in CICOES-affiliated departments.

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



FUNDING

CICOES's Cooperative Agreement funding for April 2019 - March 2020 totaled **\$20,849,886**. Within this period, CICOES Principal Investigators received additional research grants and contracts totaling **\$2,984,164** 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, internal mini-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

