

ALEX HARPER

Central and Northern California Ocean Observing System
Monterey Bay Aquarium Research Institute
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EDUCATION

- 2016 Ph.D.** Chemical Oceanography, Florida State University
Department of Earth, Ocean, and Atmospheric Sciences
Dissertation: *Mercury Cycling in the Northern Gulf of Mexico*
- 2012 M.S.** Aquatic Environmental Science, Florida State University
Department of Earth, Ocean, and Atmospheric Sciences
- 2006 B.A.** Public Policy Studies, American University, Washington, DC

EXPERIENCE

Program Manager **Jan 2018-Present**
Central and Northern California Ocean Observing System **Moss Landing, CA**

- Develop and implement strategic plans that help the program run efficiently and effectively and coordination with the Director and Governing Council.
- Assist in all aspects of developing the CeNCOOS program, including representing CeNCOOS in national to regional fora, and development of build-out plans and updates.
- Assist in product and project management oversight within the organization.
- Provide administrative management and oversight of CeNCOOS grants, programs and subawards including data contracts and subawards.
- Develop standard operating procedures and provides direct operational oversight of all CeNCOOS ocean observing assets and activities.
- Monitor the progress of the program in meeting goals and objectives and ensuring organizational accountability.
- Prepare documentation for meeting national program reporting requirements.
- Work closely with the CeNCOOS staff, partners and stakeholders to facilitate the prioritization and implementation of new observing instruments and initiatives, especially those relevant to navigation safety, maritime domain awareness, coastal hazards, and ecosystem and climate variability and change.
- Help supervise data management employees and contractors and coordinate closely with the CeNCOOS Principal Investigators and technical staff.
- Participate with national programmatic efforts and activities in other regional ocean observing programs.
- Lead and participates in CeNCOOS proposal efforts, facilitate working groups, give presentations at professional conferences and meetings, write peer reviewed papers and white papers relevant to ocean observing.
- With the Data and Communications Manager, oversee communications activities to increase ocean observing literacy and the impact of coastal ocean observing on decision-making and wise use of the ocean.

Program Analyst **2017- 2018**
U.S. Integrated Ocean Observing System (IOOS) **Silver Spring, MD**

- Led the new strategic planning initiative on behalf of the Integrated Ocean Observation Committee, IOOS Federal Advisory Committee, IOOS Program Office, and IOOS Regional Associations (RAs) to develop and communicate the shared priorities for the next five years.
- Managed incoming requests from the National Ocean Service (NOS) Policy and Congressional Affairs Division and NOAA Policy and Congressional Office.
- Coordinated the National Harmful Algal Bloom Observing Network to support operational HABs forecasting through inventorying existing systems, organizing working group activities, and executing a NOAA-wide workshop of HABs experts.
- Participated in the U.S. IOOS Global Observing team representing biogeochemical observing and data management issues and supporting Ocean Obs'19 engagement.
- Served as primary point of contact for Gulf of Mexico (GCOOS), Caribbean (CariCOOS), Southeast (SECOORA), and Great Lakes (GLOS) regions to communicate federal funding information and solicit Observing Technology Transfer proposals, field budget questions, and collaborate on NOAA policy responses.

National Sea Grant Knauss Marine Policy Fellow **2016-2017**
NOAA Ocean Acidification Program **Silver Spring, MD**

- Coordinated and advanced the West Coast OAH Integrated Monitoring Task Force, a partnership between the NOAA, the California Ocean Protection Council, and the west coast IOOS Regional Associations.
- Led stakeholder engagement efforts, liaising between NOAA Ocean Acidification Program and IOOS Regional Associations to support regional Coastal Acidification Network (CAN) development.
- Staffed the Interagency Working Group on Ocean Acidification (IWG-OA) to facilitate information exchange and standardization of OA monitoring within the National Parks Service, NOAA Office of National Marine Sanctuaries, EPA National Estuaries Program, and others.
- Coordinated the Global Ocean Acidification Observing Network (GOA-ON) helping to organize international workshops and manage new member recruitment.
- Launched and led an international scientific mentoring program to support technology and scientific exchange.

Graduate Research Assistant **2012-2016**
NSF National High Magnetic Field Laboratory **Tallahassee, FL**

- Coordinated field-sampling efforts on behalf of the Deep-C Biogeochemistry Team.
- Designed and drafted survey plans, research proposals, and funding proposals.
- Developed and conducted research experiments analyzing biological, sediment, and seagrass.
- Participated in coastal, shelf, shelf-edge, and deep-sea research cruises.
- Conducted outreach and education, developed K-12 curriculum, and attended community events.

Teaching Assistant **2013-2015**
Earth, Ocean, and Atmospheric Sciences Department **Tallahassee, FL**

- Courses: Current Issues in Environmental Science; Principles of Oceanography.
- Lectured on trace metals in the ocean and alternative energy sources and organized guest lectures on future career paths in environmental sciences.

Graduate Research Associate **2010-2012**
United States Geological Survey (USGS) – Water Science Center **Tallahassee, FL**

- Analytical chemist focused on the quantification of mercury in coastal forage fish. Produced and maintained chemical standards and reagents, calibrated analyzer, managed hazardous waste removal and safety, executed data QAQC and analysis.

- Planned and maintained Florida Big Bend seagrass habitat monitoring and analysis of trace metal and nutrient pollution distribution throughout the region.
- Participated in stream-gage monitoring of rivers and springs and USGS water quality monitoring training.

Field Staff/Laboratory Assistant

2008-2009

McGlynn Laboratories Ecology, Inc.

Tallahassee, FL

- Conducted research to identify, abate, and eliminate sources of pollutants to lakes and streams.
- Designed and monitored wastewater disposal sites to comply with state and federal environmental regulations.
- Participated in grant writing and project proposals. Worked as consultant for public interest groups in coordination with the Florida Department of Environmental Protection.

MEMBERSHIPS

U.S. West Coast Integrated OAH Monitoring Task Force

National HAB Observing Network

Alaska Ocean Acidification Network

Gulf of Mexico Coastal Acidification Network (G-CAN)

Women’s Aquatic Network (WAN)

Ocean Acidification Africa (OA-Africa) Network

PRESENTATIONS & POSTERS – SELECTED EXAMPLES

A New Strategy for the U.S. Integrated Ocean Observing System: Charting a Path for the IOOS Enterprise. 2017 IOOS Association Spring Meeting. Washington, DC.

Global Networking for Ocean Acidification Research: Do we need an OA-Asia Network? 2016 Interdisciplinary Symposium on Ocean Acidification and Climate Change. Hong Kong, Hong Kong.

Global OA Observing Network: Recent expansion, training opportunities, and Pier2Peer initiative. 2016 Pathways to Adaptation: Ocean Acidification in the Arctic. Helsinki, Finland.

Deepwater Horizon Oil Spill Impact on Mercury Cycling in the Northern Gulf of Mexico. 2015 Gulf of Mexico Oil Spill and Ecosystem Science Conference. Houston, TX.

Mercury Concentrations and Isotope Variability in West Florida Reef Fishes. 2014 Southeastern Biogeochemistry Symposium. Atlanta, GA.

PUBLICATIONS – PEER REVIEW AND WHITE PAPERS

U.S. IOOS Enterprise Strategic Plan (2018-22). U.S. Department of Commerce. Silver Spring, MD, February 2018.

Harper, A.H., Chanton, J.P., Landing, W., (2017) Controls on the variation of methylmercury concentration in seagrass bed consumer organisms of the Big Bend, Florida, USA. *Estuaries and Coasts, in press.*

Fourth Report on Federally Funded Ocean Acidification Research and Monitoring Activities. Product of the National Science and Technology Council. Washington, D.C., December 2016.

Harper, A.H., (2016) The biogeochemical cycle of mercury in the northern Gulf of Mexico as constrained by carbon, nitrogen, sulfur, and mercury isotopic ratios in marine fish. Dissertation. Retrieved from http://purl.flvc.org/fsu/fd/FSU_2016SP_Harper_fsu_0071E_13021

Harper, A., Perrot, V., Chanton, J., Landing, W., Salter, V. (2015) Using mercury (Hg) stable isotopic composition to investigate the Deepwater Horizon oil spill impact on Hg levels of Greater Amberjack (*Seriola dumerili*) and two species of eels (*Ophichthus rex* and *Synaphobranchus oregoni*) in the Northern Gulf of Mexico. *MagLab Reports*, Vol. 22, No. 2 43-45.