NOAA'S CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Sea Grant State Fellowship Opportunity #1
Research Department Position

1. Host Location

NOAA's Channel Islands National Marine Sanctuary
University of California, Santa Barbara
Ocean Science Education Building 514, MC 6155
Santa Barbara, California 93106-6155

2. Fellowship Supervisors

Chris Mobley, Sanctuary Superintendent (chris.mobley@noaa.gov, 805-893-6416)
Chris Caldow, Research Coordinator (chris.caldow@noaa.gov, 805-893-6419)

3. Position Description – Research Department Assistant

Channel Islands National Marine Sanctuary is part of the National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries. It is located approximately 23 miles off the coast of Santa Barbara and encompasses 1,470 square miles of state and federal ocean waters surrounding Anacapa, Santa Cruz, Santa Barbara, Santa Rosa, and San Miguel Islands. The sanctuary waters are a fertile combination of warm and cool currents that result in a highly productive marine ecosystem with diverse habitats, a wide array of fish and invertebrates, 27 species of whales and dolphins, 5 species of pinnipeds, and over 60 species of seabirds. Recognized as an important marine protected area at the local, state, national and international levels, the sanctuary's primary goal under the National Marine Sanctuaries Act is to protect its natural and cultural resources. Essential to meeting that goal is the sanctuary's ability to understand the function, condition and trends of the marine sanctuary, to coordinate scientific study and monitoring of the marine ecosystem, to apply marine science to addressing management needs, and to communicate sanctuary science to a diversity of audiences.

The sanctuary's office is located within the new Ocean Science Education Building on the campus of the University of California, Santa Barbara. This is a strategic office location from which our 15 staff members work to enhance existing university partnerships and seek to develop a host of new collaborative arrangements in science and education. In pursuing science partnerships, the sanctuary brings forth important assets such as two research vessels, the *Shearwater* and the *Shark Cat*, and access to unmanned aerial vehicles. Key documents guiding science work at the sanctuary include: 1) the Conservation Science Action Plan within the sanctuary's management plan; 2) the 2009 sanctuary Condition Report; and 3) a Science Needs Assessment for the sanctuary.

The appointed Sea Grant Fellow will play a key role in helping to sustain a variety of research projects underway within the sanctuary. In 2017, the site will be identifying gaps in our knowledge of the spatial distribution of sanctuary resources and users and developing a plan to fill these gaps. The site will also be wrapping up an update to the 2009 sanctuary Condition Report and evaluating how best to incorporate the findings into the upcoming management plan revision. It is envisioned that the incoming fellow will greatly assist in both of these tasks. In addition, in accordance with experience and skills and under the supervision of the Research Coordinator the Sea Grant Fellow will be asked to assist with several other duties, including:

- Collection of scientific and socioeconomic data relevant to the sanctuary. Collection, processing, analysis, and integration of results into GIS and other databases for use in research and management.
- Contributing to the publication of sanctuary research and monitoring work in peer-reviewed journals, NOAA technical reports, web publications, and other appropriate outlets.
- Contributing to the development of partnerships and pursuing external funding to support research and monitoring programs. This includes assisting in applying for and administering grants, and collaborating with agency, academic, and non-profit researchers to develop and execute research and monitoring programs that address sanctuary research and monitoring priorities.
- Interpreting research and monitoring information to support management decision-making. Integrating research and monitoring results into the sanctuary program areas of resource protection, management, and education/outreach.
- Assisting with the review and development of sanctuary research and salvage permits, including literature review on research methods and potential environmental impacts.
- Assisting the Research Coordinator with planning, coordination and occasional field-based research and monitoring projects related to assessing the sanctuary's status and trends in climate, ocean acidification, trophic interactions, invasive species, endangered species, eelgrass health, ecology, etc. Such work may cover a wide range of disciplines, and involve a the use of a variety of field gear/technologies, including: ROVs, UASs, AUVs, CTDs, ADCPs, AIS, transect surveys, buoy maintenance diving, sediment traps, bottom grabs, bongo nets, plankton tows, fish tagging, and fish trawling.
- Working as an effective member of the sanctuary management team through participation in regular meetings, budget planning, and various reporting requirements (superintendent reports, annual operating plans, vessel cruise plans, etc.).

To be successful in this position the Sea Grant Fellow will have demonstrated knowledge, skills, or abilities applicable to many of the above-described duties. Ideal candidates should be self-motivated, creative, innovative, entrepreneurial, and comfortable working with a diverse team in a fast-paced, collaborative environment. Also important is the ability to effectively manage multiple projects, and enthusiasm about marine science, stewardship and conservation. This position also requires superior communication and interpersonal skills as individuals will work directly with sanctuary management and staff, scientists from NOAA, UCSB and other agencies, academic institutions, and NGOs.

Through this federal agency assignment, the Fellow will gain a unique and valuable set of skills and professional experiences applicable to succeeding in a setting where cutting edge science is applied to protected area management, environmental policy development, and public education. Former sanctuary fellows and interns have gone on to become permanent or contract NOAA employees, received the Knauss and Presidential Management Fellowships, or taken research and leadership positions in the private and non-profit sectors.