

Position Announcement Early Career Fellow, Environmental DNA

The Center for Ocean Solutions ("Center") seeks a new Early Career Science Fellow to join our team of interdisciplinary researchers. The Early Career Fellow (ECF) will be responsible for leading the environmental DNA (eDNA) aspects of the Marine Biodiversity Observing Network (MBON) project at the Center for Ocean Solutions. The MBON project is a collaborative project between the Center for Ocean Solutions, MBARI, NOAA and the University of South Florida, funded by NASA and NOAA focusing on the Monterey Bay and Florida Keys National Marine Sanctuaries as sentinel sites for a demonstration marine biodiversity observing network. The work is aimed at integrating data from physical, chemical and biological monitoring methods with cutting-edge eDNA technology to track ocean biodiversity. The eDNA work of the MBON project led by Ali Boehm at Stanford University and the Center aims to develop novel genetic methods to monitor fishes and marine mammals in marine environments. To do this, the Center's eDNA team has developed next generation sequencing (NGS) technologies used to screen seawater samples for the presence and abundance of eDNA shed from organisms. The ultimate goal of the project is to provide cheaper, faster and more large-scale biodiversity monitoring for policy-makers and marine conservation. Supervised by Ali Boehm at Stanford University and the Center, the ECF will manage all aspects of the eDNA work of the MBON project, including field sampling, lab work, data analysis, manuscript and report writing, and interactions with collaborators around the state and country. We seek an individual with a strong background in molecular biology and environmental genomics who also is interested in linking science to decision making.

Early Career Fellowship Program Overview: The Center for Ocean Solutions Early Career Fellowship program is designed to draw on and enhance the academic and professional skills of early career professionals and researchers by placing them in interdisciplinary collaborations focused on identifying, developing, and implementing enduring solutions to the greatest challenges facing coastal and ocean environments. The Center is committed to providing each fellow with appropriate training and mentorship, including access to special leadership and communications workshops, courses, and training provided through Stanford's Woods Institute for the Environment, and the Center's MARINE program

Qualifications: The successful candidate will have a PhD in a related field and a strong background in environmental genomics. Extensive lab experience with molecular biology techniques including DNA extraction, PCR, and qPCR is essential. Candidates must have experience working with environmental samples, and have familiarity with processing samples for NGS. Candidates must be proficient at analyzing large sequence datasets and have an understanding of and experience using bioinformatic methods. Programming experience (e.g. R, Python, Unix) is desirable. Knowledge of marine ecology field methods including water sampling, water filtration, and experimental design is also important. Candidates must have strong written and verbal communications skills as well as project management skills. The successful candidate will be a self-starter, with the ability to work independently and as a member of a team, and to manage multiple projects simultaneously.

About the Center for Ocean Solutions: The Center for Ocean Solutions works to solve the major problems facing the ocean and prepares leaders to take on these challenges. A collaboration among Stanford University's Woods Institute for the Environment and Hopkins Marine Station, the Monterey Bay Aquarium and the Monterey Bay Aquarium Research Institute (MBARI), the Center focuses on coastal and ocean ecosystems in the natural, physical and social sciences. We draw on a pool of more than 80 scholars across the three institutions and collaborate with other academic, governmental and non-governmental organizations to tackle interdisciplinary and multisectoral problems, bringing leading experts in marine science and policy together with decision makers. For more information please see our website: http://centerforoceansolutions.org/.

The Center is committed to including a diversity of people and organizations in our work to develop robust solutions to ocean challenges and is an equal opportunity employer. We make employment decisions without regard to political affiliation, race, religious creed, color, age, sex, gender identity, genetic information, sexual orientation, national origin, ancestry, religion, marital status, medical condition, political or religious opinions, physical or mental disability, military service, pregnancy, childbirth and related medical conditions, or any other non-job related factor. In addition we aim to make our projects inclusive, to engage diverse perspectives and to equitably represent those whom our solutions affect.

Start Date: 11/01/2015

Term Period: 12 months (with potential to renew annually for up to three years)

To Apply: Send a CV and cover letter (addressed to Rebecca Martone) to Heather Bolei:

hbolei@stanford.edu