

Arnhold Environmental Undergraduate Fellow

Innovative Blue Water Marine Protected Area (BWMPA)

Design, Implementation and Enforcement

Spring/Summer 2022

Project Background

In 2021, the University of California Santa Barbara (UCSB) and Conservation International (CI) launched the Arnhold UC Santa Barbara-Conservation International Climate Solutions Collaborative to unify their demonstrated expertise and networks to conduct cutting-edge applied research to yield tangible, progressive solutions, and propel the careers of emerging environmental professionals. Through this partnership, the Environmental Markets Lab (emLab) at UCSB and CI are launching several applied collaborative research projects pushing the boundaries on resilient ocean and land conservation, natural climate solutions, and the frontier of impact investing in the blue economy.

Marine protected areas (MPAs) are well-established conservation tools that have been shown to confer resilience to a diversity of marine ecosystems in nearshore, coastal areas. In recent years, there has been increased interest in large-scale offshore MPAs as a means to achieve international conservation targets put forth by the IUCN and CBD. However, little research has been conducted to evaluate how large-scale off-shore MPAs will impact fishing effort locally and globally. With the degazetting of offshore MPAs due to fishery losses, this question is more pertinent than ever. By leveraging big data and machine learning techniques, our project seeks to determine why fishing happens in certain areas, how fishing effort is impacted by MPAs, and how fishing effort may be redistributed if a large-scale global network of protections were to be implemented. We are currently seeking 1-2 undergraduate student fellows to support this project for 9-10 weeks, starting part-time in May and full-time in mid-June, with possibility to extend depending on project needs.

Responsibilities

Ideal candidates for this position would be an undergraduate student with interest in marine conservation science. Responsibility will include:

- Collecting data (ex. MPA implementation date, what activities are permitted within the MPA) related to marine protected areas from online sources
- Participating in meetings with emLab and CI leadership, researchers, and staff

During this opportunity, the fellows will be able to gain experience working with environmental data, see how an interdisciplinary environmental research group operates, and gain practical knowledge of marine protection, environmental markets, and solutions-driven research.

Requirements

- Excellence in environmental and ecological science and research
- Interest, skills, and experience related to the project responsibilities described above
- Registered UCSB undergraduate student in good academic standing

Special consideration will be given to candidates that:

- Enhance diversity in the environmental sciences
- Have demonstrated hardships as a result of the COVID-19 pandemic

emLab is committed to sustaining an equitable and inclusive workplace and to the goal of reflecting the rich diversity of our campus community within our staff. We encourage applications from students of all backgrounds and majors. We strive to create an adaptive, supportive environment, especially during circumstances caused by the COVID-19 pandemic. As such, this student fellow will work remotely for this appointment.

How to Apply

Apply for this position via <u>Handshake</u> with either the: a) job number – 6399522; b) job title – Arnhold Environmental Undergraduate Fellow: Innovative Blue Water Marine Protected Area (BWMPA) Design, Implementation and Enforcement; or c) employer – Marine Science Institute. In your application package, please include the following:

- 1. Your resume
- 2. A short cover letter (no longer than one page) that includes information on (a) any relevant work or volunteer experience that relates to the responsibilities and qualifications above and (b) your interest in marine science and conservation (c) if applicable, any information on demonstrated hardships as a result of the COVID-19 pandemic or how your participation would enhance diversity in the environmental sciences.

The Arnhold Environmental Undergraduate Fellow will be paid \$16/hr and will work from mid-May until the end of July. The successful candidates will be expected to commit 10-15hr/week until the end of Spring Quarter, and then 40hr/week until the end of July. For questions, please contact: Jennifer Bone (jebone@ucsb.edu).

Application Deadline: May 15th