

Arnhold Environmental Graduate Fellowship: A Framework for Climate Resilient Marine Protected Areas Summer 2022

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 <u>Environmental Markets Lab</u> (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. The Collaborative has also created the Arnhold Environmental Fellows program - a powerful opportunity for undergraduate and graduate students to engage in collaborative research projects and receive mentorship from experts in the fields of environmental and ecological science.

Planning MPAs for a changing climate: Marine Protected Areas (MPAs) are well-established conservation tools for protecting marine species and habitats by limiting human activity in marine ecosystems. Furthermore, at the start of the decade, the <u>UN Convention on Biological</u> <u>Diversity</u> released a draft plan that established a target of protecting 30% of the Earth by the year 2030. At the moment, only 7% of the world's oceans are protected. Further research is needed to inform which parts of the ocean should be designated as MPAs and how to design and manage MPAs to promote ecosystem resilience, especially as climate change is rapidly changing marine ecosystems. For this project, UCSB and CI will examine the mechanisms behind which climate change is affecting MPA efficacy and how MPAs can be used to protect marine ecosystems from climate change. We are looking to hire 1-2 full-time or part-time summer graduate research assistants to support this project.

Responsibilities

The graduate student(s) selected for this project will be responsible for:

- Conducting a literature review to find evidence of linkages between climate change impacts and MPA efficacy, and identify suitable case studies
- Working with the project team to develop a framework for assessing MPA efficacy in the face of climate change
- Developing a report describing case studies found in the literature review including general lessons, themes, and highlighting key case studies

Desired Skills and Experience

Ideally, the selected candidates would demonstrate the following:

- Expertise identifying and synthesizing literature and/or data from disparate sources;
- Background in ocean science, marine ecology, and/or climate change/climate impacts including coursework and/or work experience;
- Experience both leading independent research efforts and working collaboratively as a team;
- Strong organization and creative thinking skills.

Fellow Selection Criteria

Students will be selected as Arnhold Environmental Fellows based on the following criteria:

- Excellence in environmental and ecological science and research;
- Interest, skills, and experience related to the project responsibilities described above;
- Registered UCSB graduate student.

Special consideration will be given to candidates that enhance diversity in the environmental sciences.

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 will work remotely for the beginning of this appointment, with the possibility of remote work for the duration.

How to Apply

To apply, please send your resume and cover letter to Mukta Kelkar at muktakelkar@ucsb.edu. 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 desired skills and experience outlined above for the projects you are interested in, b) your availability this summer (e.g., how many hours/week you are available to work, and (c) if applicable, any information on how your participation in the Fellowship would enhance diversity in the environmental sciences.

The Arnhold Environmental Graduate Fellow will be paid \$18/hr and will work for the duration of summer quarter. The successful candidates will be expected to commit 20hr/week, with up to 40hr/week possible, depending on the candidates' schedules.

Application Deadline: May 20th, 2022