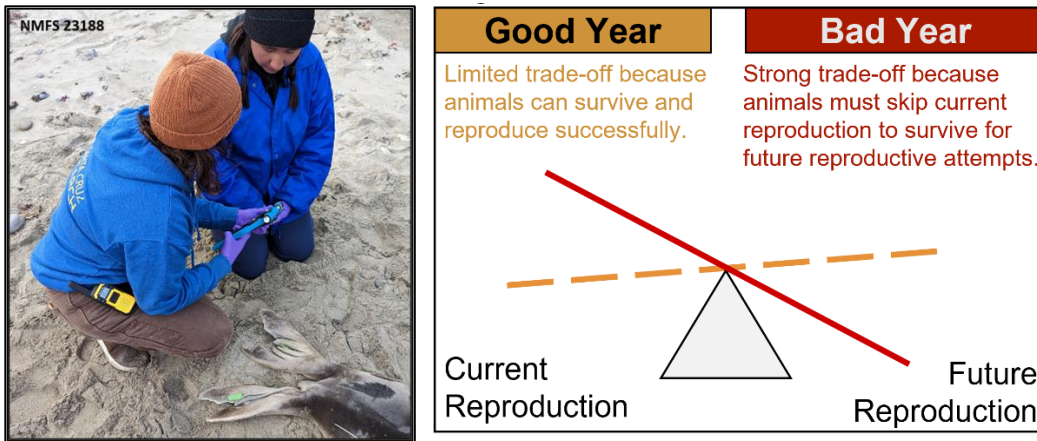


Dr. Roxanne Beltran at the University of California Santa Cruz is recruiting 2 PhD students interested in the demography and movement ecology of long-lived vertebrates.



Project Overview: We are seeking 1-2 PhD students to study demography and at-sea movement ecology of long-lived vertebrates, with a focus on elephant seals at Año Nuevo Reserve, a 30-minute drive from the UCSC campus. The students will collaboratively analyze elephant seal demographic data (mark-recapture data, census, drone imagery) or biologging data (diving data, tracking data) to complement ongoing Beltran Lab research on ecology, physiology, and behavior. The positions will begin Fall 2024. Each student will be given 3 years of funding (stipend + tuition), with the remaining quarters funded by internal or external fellowships and Teaching Assistantships. Dissertation chapters can also be tailored to student interest and expertise. *Example projects include:*

- *life history tradeoffs such as current/future reproduction and survival*
- *fitness consequences of environmental variation*
- *maternal effects*
- *individual consistency in 3-dimensional movement patterns*
- *risk-reward landscape maps using elephant seal tracking and diving data*

Students will be trained in individual-based wildlife monitoring, drone piloting, and analytical techniques, and gain valuable experience mentoring undergraduate students in field and laboratory activities as well as outreach activities. In addition to data collected during the project, students may have access to an unparalleled 5-decade demographic elephant seal dataset collected by Drs. Burney LeBoeuf and Dan Costa (>320,000 sightings of 51,000 unique, known-age animals across 6 decades, along with offspring size data for thousands of pups born to known-moms) and diving and tracking data for adult female elephant seals.

About Us: The candidates will be expected to collaborate extensively with each other and with members of the [Beltran Lab](#) (2 postdocs, 6 grad students, 1 field technician, 3 program assistants, 10 undergraduate student field assistants). We study the ecology, physiology, behavior, and population dynamics of large marine vertebrates. The lab sits within the [Ecology and Evolutionary Biology](#) department at the [University of California Santa Cruz](#). Our goal is to develop a supportive and respectful community that fosters curiosity and exploration, produces high-quality original science, and launches productive and passionate independent scientists. We expect members of the lab to share our values for enthusiasm, communication, and collective excellence. Lab expectations are available on our website.

UC Santa Cruz is a Hispanic-Serving Institution with a high proportion of first-in-family undergraduate students and is renowned for fostering student social mobility. Our department commits to and advocates for equity, anti-racism, and inclusion in every facet of our work. We welcome candidates who understand

the barriers facing traditionally underrepresented groups in higher education, and strongly urge candidates who have engaged in teaching, research, professional and/or public service contributions that promote diversity, equity, and inclusion to apply. In addition to biology research, our lab group undertakes research on education (the benefits of field courses for undergraduate student success), equity and inclusion, reproducibility, and the power of long-term monitoring program for training the next generation of wildlife biologists. The students would be welcomed and encouraged to participate in these efforts.

Qualifications: Candidates must hold a Bachelor's degree in biology, physiology, ecology, statistics, or a related field. The successful candidates for these positions will have a strong working knowledge of wildlife and/or marine ecology, excellent verbal and written communication skills, and analytical expertise including but not limited to spatial analyses of animal location data. Extensive experience with mammal handling is strongly desired. Skills relevant to the project components will be viewed favorably. Applicants with a MSc degree and/or first-author publication are especially encouraged to apply. Fieldwork will require long hours in the field, including work outside the traditional Mon-Fri, 9am-5pm hours.

Application Instructions: To apply, please fill out [this Google Form](#) with the following materials:

- A cover letter highlighting your research motivations, your short and long-term career goals, and which component of the research interests you most.
- A curriculum vitae / resume that outlines your academic and professional experience.
- A writing sample. This could be a technical report, academic paper, or class research project.
- Copies of unofficial transcripts or a list of classes taken, as well as your undergraduate GPA. Please do not send GRE scores.
- Names and email addresses of 3 references.

Application deadline is **November 01, 2023**. I will review applications and contact the top candidates to set up a time to chat by phone/Zoom and, if appropriate, to visit our lab in person. The selected candidates will be invited to apply through the official [UCSC Admissions](#) process (due **December 10, 2023**).

For more information contact Roxanne Beltran (roxanne@ucsc.edu).