

Rebecca L. Martinez

Curriculum Vitae

Undergraduate Researcher and Student Assistant
University of California, Santa Barbara
Office of Education Partnerships
Santa Barbara, CA

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Education

B.S. Environmental Studies, University of California, Santa Barbara *Expected 2026*

A.S. Biology, Allan Hancock College *with honors, May 2024*

A.A. Biology, Allan Hancock College *with honors, Dec 2023*

A.A. Mathematics and Science, Allan Hancock College *with high honors, May 2021*

IT Fundamentals Certificate, Allan Hancock College *May 2024*

Research Experience

Peer Mentor, ERES Field Workshop, Santa Cruz Island Reserve (UCNRS)
UCSB–Smithsonian Scholars Program (Summer 2025)

Trained students in the use of field sensors (camera traps, Audiomoths) and GPS

Supported data collection using FAIR data practices, orienteering, and bioacoustic survey protocols

Undergraduate Researcher, 199RA

UC Santa Barbara – under Dr. Iris Holzer (Winter 2025–Present) *The Role of Mammalian Bioturbators in Soil Formation and Elemental Cycling: Comparing rock-derived N release across the Channel Islands and the Transverse Ranges using an undergraduate-led research framework*

Collected and processed soil and rock samples

Prepped samples via rock saw for N-release assays and isotope analysis

Drafted literature review and developed learning resources

Planning AGU Fall Meeting presentation

Research Assistant, UCNRS Sedgwick Reserve (Spring 2025–Present)
Soil Carbon Stabilization Study

Assisted with pit digging, bulk density sampling, and soil auger collection

Performed USDA soil profile descriptions: color, roots, pores, aggregates

Applied safe sampling protocols and helped maintain positive morale on long field days

Student Assistant, UCSB Office of Education Partnerships (Fall 2024–Present)

Revised protocols for fog water collection device, 'Fog Harp', project

Collected and managed camera trap data for the Santa Cruz Island Skunk project

Maintained inventory and provided peer mentorship and support

Discussion Leader (Intern), UCSB–Smithsonian Data Bootcamp
Smithsonian Data Science Lab – Dr. Alexander White (Summer 2023)

Facilitated data science instruction in R via RStudio/PositCloud as part of a Smithsonian Data Science Lab internship

Introduced biodiversity-focused datasets to undergraduates, emphasizing reproducible workflows and visual data communication

Participant, Advanced Field Research and Data Science Training, Smithsonian Tropical Research Institute (STRI) Panama
UCSB–Smithsonian Scholars Program (Summer 2023)

Completed two-week field methods course and advanced data science training in RStudio/PositCloud
Shadowed Smithsonian researchers to learn ecological field methods and ongoing research at STRI and participated in guided ecotourism

Developed an a priori question and completed a group research project: *Comparison of Species Richness and Functional Richness on Barro Colorado Island and Pipeline Road in Panama*

Participant, ERES Field Research Workshop, Santa Cruz Island
UCSB–Smithsonian Scholars Program (Summer 2023)

Teaching and Mentorship

Discussion Leader, UCSB–Smithsonian Data Bootcamp (Summer 2024, 2025)

Guided undergraduates in using RStudio/PositCloud for data manipulation and visualization, emphasizing collaborative learning, equitable access, and open science principles.

Teaching Assistant, Human Anatomy Open Lab, Allan Hancock College (2023–2024)

Instructor: Alicia Fox

Managed Friday lab sessions including setup and breakdown; developed visual study guides, led office hours, and supported human cadaver lab activities.

Embedded Tutor (TA Support Role), Allan Hancock College (2020–2024)

Supported multiple courses by creating review materials, leading exam preparation sessions, holding office hours, and assisting with grading.

Courses and instructors include:

Botany — Wendy Hadley

Cellular Biology and Physiology — Ashley Wise

Introductory and General Chemistry — Dr. James Houlis

Human Anatomy — Dr. Len Miyahara

Microbiology (online) — Dr. Tim Doyle

Lead Tutor and Tutor, Allan Hancock College Academic Resource Center & STEM Center (2019–2024)

Delivered one-on-one and group tutoring in biology, chemistry, math, and general education. Promoted to Lead Tutor in 2020, where I trained new tutors and hosted workshops on study skills and time management. Assisted with staff and faculty onboarding orientations.

Leadership and Service

Outreach, UCSB Student Veterans Association (SVA) and She Raised Her Hand (2024–Present)

Organized networking events to connect veteran students and women veterans from both UCSB's SVA and She Raised Her Hand networks.

Science Outreach Volunteer, Allan Hancock College Life & Physical Sciences Department (2022–2024)

Designed and facilitated hands-on science activities for local K–12 students; created educational materials and coordinated event logistics.

Student Representative, Allan Hancock College Hiring Committees (2023–2024)

Participated as student representative in full-time faculty and staff selection committees.

Student Representative, Allan Hancock College Title V Committee (2021–2023)

Advocated for student needs in planning academic support programs; collaborated with faculty and committee members to improve and implement student support initiatives.

Vice President and Community Service Chair, AGS Aquarius Honor Society (2019–2021)

Organized community service projects and fundraisers; developed and managed an online system for tracking service points.

United States Marine Corps (2005–2010)

Completed specialized training in land navigation, survival skills, swim qualification, and CBRN defense; developed leadership and operational skills applicable to academic research and fieldwork.

Presentations

Learning from the Ground Up: Mammalian Bioturbators, Soil, & Undergraduate Education, UCSB Environmental Studies 55th Anniversary Symposium, Santa Barbara, CA, April 2025.

Student Speaker, Allan Hancock Foundation Honors Gala, Santa Maria, CA, May 2024.

Comparison of Species Richness & Functional Richness Between Barro Colorado Island and Pipeline Road in Panama, Cal Poly Summer Internship Research Symposium, San Luis Obispo, CA, August 2023.

Comparison of Species Richness & Functional Richness Between Barro Colorado Island and Pipeline Road in Panama, UCSB Fall Undergraduate Research Showcase, Santa Barbara, CA, November 2023.

Awards and Scholarships

UCNRS Field Science Fellowship, 2025

Wenger Scholarship, 2025

Gene & Susan Lucas Undergraduate Research Fund, 2025

G. Allan Hancock Scholarship, 2024

Allan Hancock MESA Scholarship, 2023

Brander Single Parent Scholarship, 2022, 2023, 2024

Joyce Dendo Veteran Scholarship (Inaugural), 2021

Kathleen D. Loly Service Scholarship, 2021

Joan Semelsberger Scholarship, 2021, 2022, 2023

Virginia B. Martinez Memorial Scholarship, 2021

AGS Aquarius Honor Society Leadership Award, 2021

Programs and Affiliations

Bren–Environmental Studies Fellows Program, 2025–2026 cohort

Tau Sigma National Honor Society, Member since 2025

American Geophysical Union (AGU), Member since 2025

UCSB Promise Scholars Program, Member since 2024

UCSB Letters & Science Honors Program, Member since 2024

UCSB Student Veterans Association (SVA), Member since 2024

UCSB–Smithsonian Scholars Program (ERES participant 2023; discussion leader/mentor 2024–2025), Member since 2023

Alpha Gamma Sigma Honor Society, (Vice President 2019–2021 and Community Service Chair 2022–2023), Member since 2019

Association of Colleges for Tutoring & Learning Assistance (ACTLA), Member since 2021

Lompoc Veteran Advisory Committee (LVAC), Member since 2017

Last updated: July 8, 2025

https://rebeccalmartinez.github.io/personal_website/experience.html