Rebecca L. Martinez

Undergraduate Researcher | Student Assistant
Environmental Studies Program | University of California, Santa Barbara
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Education

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

A.S. in Biology, Allan Hancock College — Spring 2024
With honors

A.A. in Biology, Allan Hancock College — Winter 2023
With honors

A.A. in Mathematics and Science, Allan Hancock College — Spring 2021
With high honors

IT Fundamentals Certificate, Allan Hancock College — Spring 2024

Research Experience

Undergraduate Researcher, UC Santa Barbara — Winter 2025–Present
Geologic Nitrogen Inputs to Semi-Arid Soils with and without Mammalian Bioturbation
Under Dr. Iris Holzer's guidance, collected and prepared rock samples using rock saw and shatterbox. Prepared powdered samples in foil capsules for isotope analysis.

Research Assistant, UC Davis Soil Carbon Project — Spring 2025–Present
Soil Carbon Stabilization Study
Assisted with pit digging, bulk density sampling, and soil auger collection at UCNRS Sedgwick Reserve. Performed USDA soil profile descriptions and applied safe sampling protocols while supporting team morale.

Student Assistant, UCSB Office of Education Partnerships — Fall 2024–Present
Collected data, maintained field sites, repaired equipment, updated protocols, and supported project logistics to improve research operations.

Peer Mentor, UCSB–Smithsonian Scholars Program — Summer 2024, 2025
Mentored students during a field workshop at Santa Cruz Island Reserve; trained them on field sensors including camera traps, Audiomoths, and GPS; supported ecological data collection using FAIR data practices.

Participant, UCSB–Smithsonian Scholars Program — Summer 2023
Completed advanced field methods and data science training at UCNRS Santa Cruz Island Reserve and Smithsonian Tropical Research Institute (STRI), Panama, including RStudio/PositCloud instruction.

Teaching and Mentorship

Discussion Leader, UCSB–Smithsonian ERES Program — 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, Allan Hancock College Human Anatomy Open Lab — 2023–2024
Managed Friday lab sessions, including setup and breakdown; developed visual study guides, led office hours, and supported human cadaver lab activities.

Tutor, Academic Resource Center & STEM Center, Allan Hancock College — 2019–2024
Provided one-on-one and group tutoring in biology, chemistry, math, and general education.

Lead Tutor; trained new tutors, led workshops on study skills and time management, and supported onboarding of staff and faculty. 2020–2024

Embedded Tutor; Hosted review sessions and office hours, helped with grading, and customized study materials for life and physical science courses 2020–2024

Leadership and Service

Outreach Volunteer, UCSB Veteran Support Center 2024–Present
Organized networking events to connect veteran students and women veterans within UCSB's communities.

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 2021–2023
Served as a student representative for faculty and staff hiring committees and Title V Committee to advocate for student needs.

Permanent Member, Alpha Gamma Sigma Aquarius Honor Society, Allan Hancock College 2019–Present

Vice President; Organized meetings and contributed to executive decisions. 2020–2021

Community Service Chair; Led service projects, fundraisers, and developed an online tracking system. 2022–2023

Key Volunteer, Santa Barbara County Toys for Tots 2018–Present
Coordinated donation efforts and distributed toys to children during holiday seasons.

United States Marine Corps 2005–2010
Completed training in land navigation, survival skills, swim qualification, and CBRN defense; developed leadership and operational skills applicable to research and fieldwork.

Presentations

Abstract submitted for AGU Fall Meeting: *Geologic Nitrogen Inputs to Semi-Arid Soils with and without Mammalian Bioturbation*, New Orleans, LA. December 2025

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

Guest 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–Present
Tau Sigma National Honor Society	2025–Present
American Geophysical Union (AGU)	2025–Present
UCSB Promise Scholars	2024–Present
UCSB Letters & Science Honors Program	2024–Present
UCSB Student Veterans Association (SVA)	2024–Present
UCSB–Smithsonian Scholars Program	2023–Present
Alpha Gamma Sigma Honor Society	2019–Present
Association of Colleges for Tutoring & Learning Assistance (ACTLA)	2020–Present
Lompoc Veteran Advisory Committee (LVAC)	2018–Present