

EDUCATION

PhD in Biology	Expected Graduation	2030
University of Washington Seattle, WA		
Advisor: Dr. Carrie Tribble		
BS in Biology, Concentration in Integrative Biology and Evolution, <i>cum laude</i>		2025
Gonzaga University Spokane, WA		

SCHOLARSHIPS AND AWARDS

ROOT & SHOOT Travel Award, American Society of Plant Biologists		2026
Adrian Sun Award, University of Washington		2025
SACNAS Travel Scholarship		2024
Ecological Society of America SEEDS Travel Award		2024
Mary Stuart Rodgers Scholarship		2023 & 2024
Gearldine Arnold Scholarship, Gonzaga University		2021
Community Scholar, Gonzaga University		2021
Dussault Scholarship, Gonzaga University		2021

WORK AND RESEARCH EXPERIENCE

Doctoral Researcher September 2025 – Present
University of Washington Biology | Seattle, WA

- Researching the evolutionary relationships and reproductive strategies of Hawaiian ferns
 Project Title: Vegetative Proliferations in *Asplenium*: Evolutionary Watershed or Dead End?

Teaching Assistant September 2025 – Present
University of Washington Biology | Seattle, WA

- Assisted lectures for undergraduate biology courses
- Lead lab and discussion sections, demonstrating procedures and teaching concepts
- Grading exams, lab reports, and in-class worksheets
- Prepared and taught lecture on phylogeography for BIOL 354

Student Research Assistant

June 2025 – August 2025

Snail Extinction Prevention Program | Honolulu, HI

- Conducted and designed a research experiment using the genetic modeling program VORTEX to simulate gene flow to inform captive rearing management in endangered Hawaiian land snails
- Collected demographic data of in situ populations and performed various lab procedures in a captive rearing facility
- Participated in field work to manage predator-proof exclosures. Tasks included population census, weed control, and predator removal

Ecological Aquatic Undergraduate Researcher

January 2023 – August 2025

Gonzaga University Bancroft Lab | Spokane, WA

- Led and collaborated on several research projects focused on understanding the impact of climate change on species interactions and biodiversity through field and lab experiments
- Data collection, writing protocols, and manuscript, data analysis
- Extensive use of microscopes to ID and dissect macroinvertebrates

Avian Disease Dynamics Undergraduate Researcher funded by NSF

June – August 2023

United States Geological Survey PIERC and the University of Hawaii | Hilo, HI

- Conducted independent research to determine the effect of chronic avian malaria infections on forest bird coloration
- Forest bird banding, collecting morphometric and other biological data
- qPCR prep, dissections, gel electrophoresis, colorimeter, and data analysis using RStudio

Endangered Plant and Invertebrate Field Technician Intern

June – August 2022

Army Natural Resources Program Oahu | Wahiawa, HI

- Endangered plant/invertebrate surveying, management, relocation, and ID
- Herbicide/pesticide application and predator control (A-24/snare traps)
- Helicopter operations and camping trips

Seasonal Restoration and Nursery Assistant

June – December 2021 & 2023

Waianae Mountains Watershed Partnership | Kapolei, HI

- Installing predator-proof ungulate fences on steep mountain ridges (Mikilua fence line)
- Helicopter operations (sending/receiving large loads)

- Propagated and maintained native plants in a shade house nursery
- Invasive species control (weed whacking, girdling, leading community groups)

Field Technician Intern for the Snail Extinction Prevention Program June – August 2020

Department of Land and Natural Resources | Honolulu, HI

- Surveying, relocating, and managing, in-situ and ex-situ populations of endangered Hawaiian land snails
- Helicopter operations, camping, and night surveys

PUBLICATIONS AND PRESENTATIONS

1. **“Competition and Hydroperiod Selectively Modify Various Aspects of Snail and Tadpole Life Histories”**

Authors: **Makoa A De Almeida**, Josh T David, Carson Sellers, Owen VanDerPuy, Katie Ellis, Clare McGowan, Joseph M Baum, Mia Mastrangelo, Holly Fijolek, Zoe Dodsley, Isabella Centanaro-Castro, Annika Rose-Person, Betsy A Bancroft (in preparation for review)

2. **De Almeida, Makoa A**, and David, Joshua T, “Competition and Hydroperiod Selectively Modify Various Aspects of Snail and Tadpole Life Histories.” Poster presented by Joshua Garcia at the ESA Conference, 2025.
3. **De Almeida, Makoa A**, and David, Joshua T, “Competition and Hydroperiod Selectively Modify Various Aspects of Snail and Tadpole Life Histories.” Poster presented at the 2024 SACNAS NDiSTEM Conference, 2024.
4. **De Almeida, Makoa A**, “Carotenoids and Disease in the Hawaii Amakihi.” Talk presented at the 2023 PIPES Symposium at the University of Hawaii at Hilo, 2023.

OUTREACH AND SERVICE

- 2025-Present Mentor for the UW Burke Museums Research Family, a program designed to provide research mentorship for Pacific Islander undergraduate students, Seattle, WA.
- 2025 Volunteered with the Plant Extinction Prevention Program, surveyed and outplanted critically endangered Hawaiian plants, and deployed predator control methods in remote locations, Kahului, HI.

- 2024 Taught a group of Spokane high school students about freshwater ecology and opportunities in higher education through the Gonzaga Biology Department, Spokane, WA.
- 2023-2024 Captive rearing facility volunteer with the Bernice Pauahi Bishop Museum's Malacology Department, Honolulu, HI.
- 2023–2024 Volunteered with Protect and Preserve, to restore native Hawaiian ecosystems, Honolulu, HI.
- 2023 Media Feature: “Project Chronicles: The Conservationist” – Short film by Michael Garces, Honolulu, HI.
- 2023 Volunteered at Hale o Lono loko i'a to restore a native Hawaiian fishpond
- 2022-2024 Gonzaga Hawaii and Pacific Islanders Club public relations chair, Spokane, WA
- 2022-2023 Co-instructor of a hula class for students at Shaw Middle School, Spokane, WA
- 2020–2024 Volunteered with the Snail Extinction Prevention Program and contributed towards data collection for a master's thesis, Pearl City, HI.
- 2018-2025 Educational Photographic Features and Projects: @hawaiian.plants on Instagram, Laulima's “Field Guide | Flowers of Hawai'i”, Cover photo of the U.S. Army Garrison's “Ecosystem Management Program Bulletin”, Hawai'i Tourism Authorities' “Ma'ema'e Toolkit”, and a presentation at Mililani Mauka Elementary School, Mililani, HI.
- 2017–2024 Volunteered with the Army's Natural Resources Program, working to preserve endangered Hawaiian flora and fauna, Wahiawa, HI.