

Melanie Gomez

Gainesville, FL — melanie.gomez@ufl.edu — (321) 240-0022

EDUCATION

University of Florida, Gainesville, FL 2022-Current
B.S Marine science with Honors, 3.8 GPA
Minor in Statistics
Honor Thesis: *Wave exposure alters both top-down and bottom-up controls on benthic community structure*

HONORS AND AWARDS

University Scholars' Program Research Scholarship. \$1500	2024-2025
Women Divers Hall of Fame Marine Conservation Scholarship. \$1500	2025
UF International Scholars Program Honoree	2025
UF VP Promise Grant. \$1400	2024
UF College of Agricultural and Life Sciences Research Grant. \$1500	2024
IFAS Summer Internship	2023
Machen Florida Opportunity First-generation Scholarship	2022-Current
Hispanic Scholarship Fund. \$2000	2022

RESEARCH

UF Behringer/Lamb Lab for Marine and Disease Ecology

Research Scholar Dec. 2023-Current

- Executed independent research project on the ecological impacts of herbivory and wave exposure on benthic marine communities.
- Conduct DNA extractions, PCR test, collecting fish tissue sample, dissecting otoliths, record fish behavioral abnormalities

Scientific Diver

Summer 2024 & 2025

- Collaborated with Galapagos Charles Darwin foundation on long-term ecological monitoring project assessing impacts of El Niño on marine ecology.
- Conducted underwater surveys, including size measurements of *Eucidaris galapagensis* (pencil urchins), fish abundance counts, and habitat assessments.
- Assisted with fish collection for trophic and morphological analyses through laboratory dissections
- Participated in multi-day research cruises; collected and processed seawater samples for environmental DNA (eDNA) to characterize community composition.

UF Center for Coastal Solutions

Science Diver

May 2025-June 2025

- Participated in long-term seagrass monitoring at Tyndall Air Force Base, FL. Collected data on seagrass shoot density, abundance, and percent cover.
- Constructed a 400-meter in-water bamboo fence to mitigate herbivory and reduce shoreline erosion.

UF IFAS Molluscan Shellfish Aquaculture and Restoration Lab

Research Intern

Jun. 2023-Oct. 2023

- Assisted with germplasm cryopreservation of oyster gametes and larvae for breeding practices
- Responsibilities included collecting tissue samples, dissections, and oyster spawning

Research Assistant

Feb. 2023-May 2023

- Oyster husbandry, including feeding, siphoning tanks and health monitoring
- Conduct nitrate, nitrite, ammonia and pH water quality tests, adjust tank water levels
- Create and manage algae cultures & acid washing

PUBLICATIONS

M. Gomez, R.W. Lamb, J.D. Witman, F. Smith. Wave exposure alters both top-down and bottom-up controls on benthic community structure. (2025) *Under Review*. Preprint at <http://dx.doi.org/10.2139/ssrn.5460126>

R.W. Lamb, F. Pierezan, R. Yanong, O. Kuhn, **M. Gomez**. Histology: Parasite Loads Across Fish Species & Temperature Gradients During El Niño in the Galapagos. (2025) *In Progress*.

PROFESSIONAL EXPERIENCE

City of Gainesville, *Lifeguard Supervisor*

2022-Current

- Supervise lifeguard team, lead CPR and first-aid trainings, respond to incidents and injuries, interact with the community, monitor and record pool chemicals

City of Altamonte Springs, *Lifeguard*

2021-2022

- Observing patrons to ensure their safety & care injuries I am qualified for or call EMS
- Pool and deck maintenance including vacuuming pool, managing water chemicals, and cleaning bathrooms

CERTIFICATIONS AND SKILLS

AAUS Science Diver, +100 ft

2025

Advanced Open water Diver

2023

Rescue and Nitrox Diver

2023

Proficient Statistical knowledge (including R coding)

CPR/ First-Aid certified

2021-Current

Bilingual: Spanish & English

CONFERENCES AND SEMINARS

VII Galápagos Research and Conservation Symposium, *Galapagos Islands*

2025

Beneath the Sea Dive Expo (invited by WODOF), *Secaucus, NJ*

2025

UF Spring Undergraduate Research Symposium, *Gainesville, FL*

2025

CAMPUS INVOLVEMENT

Machen Florida Opportunity Scholarship, *peer mentor*

2023-2024

- Use my past experience to offer guidance to incoming first-generation UF students. On topics like homesickness, imposter syndrome, financial stress, anxiety, etc

UF Scuba Dive club

2022-Current

- Community of divers who spread awareness of environmental sustainability through clean-ups, environmental literacy, and workshops

UF Women's Basketball club

2022-Current

- Practice weekly to compete at regional, state, & national competitions
- Community service: Biweekly tutoring local K-12 students

UF PorColombia club

2022-Current

- Spread Colombian heritage by cultural festivals, socials, & celebrating Colombian holidays

REFERENCES

Dr. Robert Lamb. robert.lamb@ufl.edu, 401-743-4434

University of Florida, Cedar Key, FL

Dr. Donald Behringer. behringer@ufl.edu, 325-273-3634

University of Florida, Gainesville, FL

Dr. Felipe Pierezan. fpierezan@ufl.edu, 352-392-2235

University of Florida, Gainesville, FL

Dr. Zachary Siders. zsiders@ufl.edu, 352-325-6078

University of Florida, Gainesville, FL