

Gabrielle Pantoni

Curriculum Vitae

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EDUCATION

Florida Atlantic University, **Master of Science in Biology**, In progress, began *January 2022*, GPA 4.0

Research Project: Assessing Success of Coral Outplanting and Restoration as a Response to Coral Loss due to Stony Coral Tissue Loss Disease

University of Rhode Island, **Bachelor of Science in Marine Biology**, Minor in Spanish, Graduated May 2020, *Magna Cum Laude*; GPA 3.62.

Relevant Coursework: Marine Biology, Ecology, Genetics, Animal Physiology, Evolution and Diversity of Fishes, Biology of Sharks and their Relatives, Oceanography, Marine and Coastal Law, Animal Behavior, Herpetology

Bermuda Institute of Ocean Sciences, Fall Semester Abroad, *September – December 2018*; GPA: 3.67

Relevant Coursework: Research Diving Methods (20 scientific dives), Tropical Marine Invertebrate Zoology, Coral Reef Ecology, Tropical Marine Biology Research

Research Project: The effect of rising ocean temperatures on the symbiotic relationship between zooxanthellae and its host, *Cassiopea andromeda*. (Mentored by: Dr. Samantha de Putron, BIOS)

RESEARCH EXPERIENCE

Graduate Research Assistant, *January 2022 – Present*

Voss Coral Reef Health and Ecology Lab, Dr. Joshua Voss

Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, F.L.

- Conduct coral outplant monitoring and serve as FAU project manager for a collaborative reef restoration project led by the Florida Fish and Wildlife Commission
- Manage and report on local diving projects within SEFL and plan local field work

Research Project: Assessing Success of Coral Outplanting and Restoration as a Response to Coral Loss due to Stony Coral Tissue Loss Disease

Professional Presentations: Presented initial research findings from above project at:

- Benthic Ecology Meeting 2022, Poster Presentation, Portsmouth, N.H., *March 2022*
- 15th International Coral Reef Symposium, Poster Presentation; Bremen, Germany, *July 2022*
- Benthic Ecology Meeting 2023, Oral Presentation, Miami, F.L., *April 2023*

Safety and Scientific Diver, *May 2023*

CYCLE Cruise, RV Manta

Flower Garden Banks National Marine Sanctuary

- Safety diver for mesophotic CCR technical diving team
- Collected shallow coral tissue samples for population genetics research

Scientific Diver, June 2022

Stony Coral Tissue Loss Disease Intervention Cruise, MV Makai, led by Dr. Karen Neely
Dry Tortugas National Park, F.L.

- Invited to participate in this cruise funded by the National Fish and Wildlife Foundation
- Identified and treated Stony Coral Tissue Loss Disease (SCTLD) infected corals with an amoxicillin paste *in situ*
- Completed daily data entry tasks

Coral Research Technician, March 2021- January 2022

Voss Coral Reef Health and Ecology Lab, Dr. Joshua Voss

Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, F.L.

- Conduct coral outplant monitoring and data entry for a collaborative reef restoration project led by the Florida Fish and Wildlife Conservation Commission
- Plan and prepare for field work
- Assist in all field diving operations for the lab
- Conduct roving diver surveys to monitor for Stony Coral Tissue Loss Disease
- Manage updates for Voss Lab website

Scientific Diver, September 2021

Stony Coral Tissue Loss Disease Intervention Cruise, MV Makai, led by Dr. Karen Neely

Dry Tortugas National Park, F.L.

- Invited to participate in this cruise funded by the National Fish and Wildlife Foundation
- Identified and treated Stony Coral Tissue Loss Disease (SCTLD) infected corals with an amoxicillin paste *in situ*
- Treated over 6000 diseased coral colonies with a group of seven other scientific divers
- Completed daily data entry tasks

R.I. C-AIM Summer Undergraduate Research Fellow and SURF+ Fellow, May 2019 – May 2020

Dr. Lindsay Green-Gavrielidis

University of Rhode Island, Kingston, R.I.

- Conducted benthic video surveys on SCUBA (30+ scientific dives)
- Used a diver propelled custom-made video system to compare video transects to traditional quadrat sampling at 24 sites in fall and summer
- Processed quadrat samples and identified local species of algae and invertebrates
- Collected snails and crabs in the field to be preserved and sent to collaborators at Roger Williams University
- Analyzed videos from benthic surveys to determine percent cover of kelp or rockweed at a given site
- Obtained permits for diving access at various locations in Rhode Island, including Naval Base Newport

Research Project: Changes in kelp and rockweed in Narragansett Bay (Mentored by: Dr. Lindsay Green-Gavrielidis, Salve Regina University; Dr. Carol Thornber, URI)

Media Coverage of Research: McLeish, Todd. URI student investigates changing seaweed populations in Narragansett Bay. August 13, 2019.

<https://today.uri.edu/news/uri-student-investigates-changing-seaweed-populations-in-narragansett-bay/>

Professional Presentations: Presented research findings from above project at:

- RI 2019 C-AIM SURF Conference, Poster Presentation, Kingston, R.I., *July 2019*
- University of Rhode Island Showcase for Undergraduate Research, Poster Presentation, Kingston, R.I. *October 2019*
- Rhode Island Natural History Society (RINHS) 2019 Climate Change Conference, Poster Presentation, North Kingstown, R.I., *November 2019*
- Northeast Algal Symposium, Oral Presentation (Virtual), Burlington, V.T., *April 2021*
Awarded: Best Undergraduate Oral Presentation

Undergraduate Researcher, *January 2018- May 2018 and January 2019- May 2019*

Shark Undergraduate Research and Education Program, Dr. Bradley Wetherbee

University of Rhode Island, Kingston, R.I.

- Analyzed stomach content data sets previously collected from deceased sharks at fishing tournaments and compared the results across several different large Atlantic shark species
- Used data collected from dorsal fin attached satellite tags to map Atlantic mako shark movement and identify diel movement patterns across different groups, i.e., size classes and gender

VOLUNTEER EXPERIENCE

Volunteer, October 2017 – May 2018

Fish and Invertebrate Husbandry

Mystic Aquarium, Mystic, CT

- Prepared food for various animals as per the aquarist's instructions
- Cleaned tanks and equipment, kept working areas clean and organized
- Cultured brine shrimp daily for jellyfish exhibits
- Mixed saltwater daily using Instant Ocean,
- Aided aquarists in animal feeding and enrichment of various animals including nurse sharks, cownose rays, a green sea turtle, and a giant Pacific octopus
- Took part in animal demonstrations and education for the public
- Cared for jellyfish larvae grown in the aquarium
- Helped to train new volunteers on daily tasks

PUBLICATIONS

Technical Reports:

Voss J., Shilling E., Pantoni G., Eckert R. and Sturm A. 2021. Advancing Coral

Intervention and Resilience in Southeast Florida. Florida DEP. Miami, FL., pp. 1-18

AWARDS, HONORS, AND FELLOWSHIPS

Indian River Lagoon Graduate Research Fellowship (2023)

URI Biology Department Alpha Award (2020)

R.I. C-AIM Summer Undergraduate Research Fellowship (2019)

URI Dean's List (2016-2020)

URI Centennial Scholarship (2016)

Pell Grant (2016)

TEACHING AND MENTORING EXPERIENCE

Graduate Teaching Assistant, January 2022 – May 2022

Marine Biodiversity Lab taught by Dr. Dennis Hanisak, Dr. Joshua Voss, Dr. James Masterson

- Aided professors in lab portion of the undergraduate course for Semester by the Sea students
- Graded students on in-class research presentations

Marine Biology Peer Mentor, September – December 2019

Appointed by Dr. Hollie Putnam, URI

- Mentored a class of ~20 marine biology freshmen
- Gave presentations on campus life, adjusting to a college curriculum, and how to succeed in the marine biology program at URI

Undergraduate Teaching Assistant, September – December 2019

Animal Physiology Lab, Dr. Erin Davis, URI

- Worked with a graduate student TA to teach Animal Physiology lab to a group of ~20 students
- Prepared laboratory experiments, answered student's questions, and cleaned up after experiments

LEADERSHIP ROLES AND EXTRACURRICULAR ACTIVITIES

Marine Science Society (2016-2020)

President 2019-2020 (elected)

Social Media Manager 2018-2019 (elected)

URI Scuba Club (2019-2020)

College of the Environment and Life Sciences Student Ambassador (2019-2020)

Shark Undergraduate Research and Education Program (2018-2019)

LICENSES AND CERTIFICATIONS

SDI Open Water SCUBA, (2018)

PADI Advanced Open Water (2018)

PADI Rescue Diver (2018)

AAUS Scientific Diver (2018), currently 100+ scientific dives, 100 ft depth cert

SDI Divemaster (2020)

DAN Diving First Aid for Professional Divers and Emergency Oxygen Provider (2021)

PADI Nitrox (2021)

OTHER SKILLS

Personal Skills

- Ability to interpret scientific data sets and current publications
- Strong written and verbal communication skills with peers and the public
- Comfortable in leadership roles
- Organized and able to adapt to challenges

Language Skills

Spanish Language: Reading (advanced), Speaking (proficient), Writing (proficient)

Laboratory and Computer Skills

- Data management, data entry- Microsoft Office
- Image and video analysis - iMovie, ImageJ
- Statistical analysis - R
- Social media outreach and blogging
- Preparation of macroalgae and invertebrates for stable isotope analysis
- Microscope skills
- DNA extraction
- Qubit
- Nanodrop
- Coral tissue sampling- waterpik method
- Saltwater aquarium design, setup, and maintenance
- Oyster spawning

Field Sampling and Dive Skills

- Underwater video surveys
- Underwater photo transects
- Roving diver surveys
- Fish transect counts
- Field quadrat sampling
- In situ* organism identification including tropical marine fish, coral, and invertebrates, and temperate marine algae and invertebrates
- In situ* coral disease identification
- Coral outplanting including using underwater cement
- Underwater mapping