

SERENA HACKEROTT

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serenahackerott.com

INTERESTS

Coral Reef Ecology, Environmental Epigenetics, Marine Conservation

EDUCATION

2018-PRESENT PH.D. BIOLOGY, FLORIDA INTERNATIONAL UNIVERSITY

Primary Advisor: Dr. Jose Eirin-Lopez

Research Focus: Epigenetic responses to environmental stressors in corals, and connections between environmental epigenetics and coral reef conservation.

2013-2014 M.S. MARINE SCIENCES, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Primary Advisor: Dr. John Bruno

Thesis Title: The effect of invasive lionfish on reef fish community structure along the Mesoamerican Barrier Reef.

2009-2013 B.S. BIOLOGY, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Highest Honors and Carolina Research Scholar; GPA: 3.673

Research Advisor: Dr. John Bruno; Minors in Chemistry and Marine Sciences

POSITIONS

AUG 2020-PRESENT [Research Assistant](#), Florida International University (FIU) Biological Sciences Department

AUG 2019-JULY 2020 [Teaching Assistant](#), FIU Biological Sciences Department

AUG 2018-PRESENT [Graduate Assistant](#), FIU NSF-CREST Center for Aquatic Chemistry and the Environment (CACHE) Fellow

APR- AUG 2018 [Data Analysis Consultant](#), Marshall Islands Conservation Society (MICS) and Marshall Islands Marine Resource Authority (MIMRA)

AUG 2017-DEC 2017 [Marine Science Certificate Program Coordinator](#), College of the Marshall Islands (CMI), STEM Dept.

JAN 2016-DEC 2017 [Marine and Environmental Science Instructor](#), CMI STEM Dept.

JUNE-JULY 2015 [Instructor](#), Council on International Educational Exchange (CIEE) Research Station Bonaire

JAN-JUNE 2015 [Teaching and Research Assistant](#), CIEE Research Station Bonaire

AUG 2013-DEC 2014 [Teaching Assistant](#), University of North Carolina at Chapel Hill (UNC-CH), Biology Dept.

PUBLICATIONS

Beal A. P., **S. Hackerott**, K. Feldheim, S. Gruber, J. M. Eirin-Lopez. (2022) [Age group DNA methylation differences in lemon sharks \(*Negaprion brevirostris*\): Implications for future age estimation tools.](#) Ecology and Evolution 12: e9226

Hackerott, S., H. A. Martell, J. M. Eirin-Lopez. (2021) [Coral environmental memory: Causes, mechanisms, and consequences for future reefs.](#) Trends in Ecology and Evolution 36: 1011-1023 (Cover Article)

- Beal A. P., **S. Hackerott**, B. Franks, S. Gruber, K. Feldheim, J. M. Eirin-Lopez. (2021) [Epigenetic responses in juvenile Lemon sharks \(*Negaprion brevirostris*\) during a coastal dredging episode in Bimini, Bahamas](#). *Ecological Indicators* 127: 107793
- Hackerott, S.**, A. Valdivia, C. E. Cox, N. J. Silbiger, J. F. Bruno. (2017) [Invasive lionfish had no measurable effect on prey fish community structure on the Belizean Barrier Reef](#). *PeerJ* 5:e3270
- Valdivia A., J. F. Bruno, C. E. Cox, **S. Hackerott**, S. J. Green. (2014) [Re-examining the relationship between invasive lionfish and native grouper in the Caribbean](#). *PeerJ* 2:e348
- Hackerott, S.**, A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. (2013) [Native predators do not influence invasion success of Pacific lionfish on Caribbean reefs](#). *PLoS ONE* 8(7): e68259.

PRESENTATIONS

- Hackerott, S.**, P. Flood, F. Viridis, D. G. Souto, J. M. Eirin-Lopez. 2022. Environmental and epigenetic drivers of phenotypic plasticity in *Acropora cervicornis* corals. EpiMar Conference. Woods Hole, Massachusetts. October 12th. Oral.
- Hackerott, S.**, P. Flood, F. Viridis, D. G. Souto, J. M. Eirin-Lopez. 2022. Environmental and epigenetic drivers of phenotypic plasticity in *Acropora cervicornis* corals. Reef Futures Conference. Key Largo, Florida. September 28th. Oral.
- Hackerott, S.**, P. Flood, F. Viridis, D. G. Souto, J. M. Eirin-Lopez. 2022. Environmental and epigenetic drivers of phenotypic plasticity in *Acropora cervicornis* corals. International Coral Reef Symposium. Bremen, Germany. July 8th. Oral.
- Hackerott, S.** and J. M. Eirin-Lopez. 2020. Epigenetic responses to environmental stressors in corals, and connections between environmental epigenetics and coral reef conservation. FIU Biosymposium. February 8th. North Miami, FL. Poster.
- Hackerott, S.** and J. M. Eirin-Lopez. 2019. Epigenetic responses to environmental stressors in *Acropora* corals, and connections to coral reef conservation. FIU Biosymposium. February 2nd. North Miami, FL. Poster.
- Hackerott, S.**, A. Valdivia, C. E. Cox, N. J. Silbiger, J. F. Bruno. 2017. Low lionfish, no problem? The effect of lionfish on reef fish communities in Belize. ASLO Aquatic Sciences Meeting. February 26th-March 3rd. Honolulu, HI. Oral.
- Hackerott, S.**, A. Valdivia, C. E. Cox, N. J. Silbiger, J. F. Bruno. 2015. Low lionfish, no problem? The effect of lionfish on reef fish communities in Belize. GCFI Scientific Meeting. November 9th-13th. Panama City, Panama. Oral. Invited to Lionfish Research Symposium Session.
- Hackerott, S.**, A. Valdivia, C. E. Cox, J. F. Bruno. 2015. Low lionfish, no problem? The effect of lionfish on reef fish communities in Belize. AMLC Scientific Meeting. May 18th-22nd. Willemstad, Curacao. Oral.
- Hackerott, S.**, A. Valdivia, C. E. Cox, J. F. Bruno. 2014. The impacts of the lionfish invasion on reef fish communities in Belize. International Marine Conservation Congress. August 14th-18th. Glasgow, Scotland. Poster.
- Hackerott, S.**, A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. 2014. Native vs invasive predators: Can anything stop lionfish? ASLO Ocean Sciences Meeting. February 23rd-28th. Honolulu, HI. Oral.
- Hackerott, S.**, A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. 2013. Native predators do not influence invasion success of lionfish on

Caribbean reefs. UNC-CH Marine Sciences Graduate Student Symposium. September 2013. Morehead City, NC. Oral.

Hackerott, S., A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. 2013. Native predators do not influence invasion success of lionfish on Caribbean reefs. UNC-CH Annual Celebration of Undergraduate Research. April 2013. Chapel Hill, NC. Oral.

Hackerott, S., A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. 2013. Native predators do not influence invasion success of lionfish on Caribbean reefs. Benthic Ecology Meeting. March 2013. Savannah, GA. Oral.

Hackerott, S., A. Valdivia, S. Green, I. Côté, C. E. Cox, L. Adkins, C. A. Layman, W. F. Precht, J. F. Bruno. 2013. Native predators do not influence invasion success of lionfish on Caribbean reefs. UNC-CH Honors Biology Research Symposium. March 2013. Chapel Hill, NC. Oral.

RESEARCH
EXPERIENCE

SEP 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Florida Keys: Monitored survival and growth and collected samples of stress primed corals 4-months post-outplanting. Assisted in conducting Thermal Performance Curve respirometry.

AUG 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Bonaire: Monitored coral performed and thermal tolerance 12-months following a reciprocal transplant between two sites to explore environmental memory within coral restoration.

MAY 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Florida Keys: Performed a stress priming experiment exposing *Acropora cervicornis* corals to different thermal regimes prior to outplanting to assess stress hardening within restoration.

APR 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Florida Keys: Performed a stress priming experiment exposing *Acropora cervicornis* corals to thermal and nutrient stress regimes prior to a recovery and subsequent thermal challenge.

MAR 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Bonaire: Monitored coral performed and thermal tolerance 8-months following a reciprocal transplant between two sites to explore environmental memory within coral restoration.

FEB 2022 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Florida Keys: Performed a thermal priming experiment exposing *Acropora cervicornis* corals to six different thermal priming regimes prior to a recovery and subsequent thermal challenge.

DEC 2021 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Bonaire: Monitored coral performed and thermal tolerance 4-months following a reciprocal transplant between two sites to explore environmental memory within coral restoration.

AUG 2021 GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB
Bonaire: Performed a reciprocal transplant between two sites and monitored coral growth, physiology, and thermal tolerance to explore environmental memory within coral restoration.

- JUNE 2021** **GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Bonaire: Performed an acute heat stress assay to assess the thermal tolerance of *Acropora cervicornis* corals living at different nursery sites. Trained one undergraduate research intern.
- NOV 2020** **FIU CREST-CACHE RNA-SEQ ANALYSIS WORKSHOP**
Virtual: Attended the FIU CREST-CACHE RNA-Seq Analysis Workshop for FIU and UPR graduate students on bioinformatics and statistical analysis of RNA sequencing data.
- DEC 2019** **GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Bonaire: Trained and mentored two undergraduate research interns on environmental monitoring, coral growth analysis, and sample collection of *Acropora cervicornis* and *A. palmata*.
- SEP 2019** **GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Bonaire: Initiated a two-year study focused on connections between environmental epigenetics, coral performance, and stress preconditioning in *Acropora cervicornis* and *A. palmata* corals.
- JULY 2019** **MEGA2019 FUNCTIONAL GENOMICS AND GENE EXPRESSION WORKSHOP**
Florida: Attended the MEGA Functional Genomics and Gene Expression Workshop led by Dr. Mikhail Matz to learn Tag-Seq gene expression lab protocols, bioinformatics, and data analysis.
- DEC 2018** **GRADUATE RESEARCHER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Bonaire: Collaborated with Reef Renewal Bonaire to prepare 348 coral fragments of *Acropora cervicornis* and *A. palmata* at four coral nursery sites for an upcoming study to explore connections between environmental epigenetics and coral performance.
- AUG 2018** **FIELD VOLUNTEER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Curacao: Joined the Eirin-Lopez lab on coral spawning dives in collaboration with CARMABI and SECORE. Helped mark genotyped *Acropora* colonies and monitor for signs of spawning.
- APR-AUG 2018** **DATA ANALYSIS CONSULTANT, MICS AND MIMRA**
Marshall Islands: Created a Microsoft Access Database and a Data Analysis Guide for the Marshall Islands Marine Resource Authority (MIMRA) to store and analyze coral reef survey data collected under the RMI REIMAANLOK Strategic Management Plan, with support from the Marshall Islands Conservation Society (MICS).
- APR 2018** **FIELD VOLUNTEER, EIRIN-LOPEZ ENVIRONMENTAL EPIGENETICS LAB**
Puerto Rico: Joined the Eirin-Lopez lab to collect *Acropora cervicornis* fragments from reefs impacted by Hurricane Irma, replanted fragments at experimental sites to monitor recovery.
- JUNE 2016** **CORAL REEF SURVEYOR, COASTAL MANAGEMENT ADVISORY COUNCIL**
Marshall Islands: Identified and counted marine invertebrates as a member of the Marshall Islands Coastal Management Advisory Council (CMAC) REIMAANLOK Strategic Management Plan.
- FEB-JUNE 2015** **RESEARCH ASSISTANT, CIEE BONAIRE**
Bonaire and Curacao: Helped develop and co-lead a CIEE student-staff project comparing reef assessment methods. *Bonaire:* Co-led CIEE's long-term monitoring dives for the summer.
- JULY 2014** **GRADUATE RESEARCHER, BRUNO LAB ANNUAL REEF SURVEY**

Akumal, Mexico: Responsible for herbivore grazing videos using SCUBA. Assisted in the collection of parrotfish tissue samples during night dives.

MAY-JUNE 2013 GRADUATE RESEARCHER, BRUNO LAB ANNUAL REEF SURVEY

Belize: Completed large predator and lionfish transect surveys, identifying species and estimating sizes using SCUBA. Met with managers regarding lionfish removal efforts.

MAY-JULY 2012 UNDERGRADUATE RESEARCHER, BRUNO LAB ANNUAL REEF SURVEY

Belize and Abaco, Bahamas: Completed large predator and lionfish transect surveys, identifying species and estimating sizes using SCUBA. Captured, recorded weight, length, and stomach weight, and collected otoliths from 103 lionfish. *UNC IMS*: Processed and imaged 186 otoliths.

MAY-JUNE 2011 UNDERGRADUATE RESEARCHER, DOLPHIN BEHAVIOR FIELD COURSE

Bimini, Bahamas: Recorded dolphin species, sex, age class, characteristics, and behavior. Assisted PhD candidate Daisy Kaplan (Dr. Diana Reiss Hunter College, NY).

TEACHING
EXPERIENCE

JUNE-AUG 2022 UNDERGRADUATE DEVELOPMENT, ENVIRONMENTAL EPIGENETICS LAB

Created and led professional development workshops for EELab undergraduate interns on R (data organization and analysis), resumes/cover letters, and post-graduation paths in science.

MAY-JULY 2021 REU GRADUATE MENTOR, FIU INSTITUTE OF ENVIRONMENT

Mentored a student in the Coastal Ecosystems Research Experience for Undergraduates (REU) program through all steps of project development, implementation, analysis, and presentation.

AUG 2019-JULY '20 TEACHING ASSISTANT, FIU BIOLOGICAL SCIENCES DEPARTMENT

Taught Biology 1 lab in person and online. Students included FIU undergraduates and MAST (Marine Academy of Science and Technology) dual enrollment students.

AUG-DEC 2017 MARINE SCIENCE CERTIFICATE PROGRAM COORDINATOR, CMI STEM DEPT.

Coordinated with Marine Science Certificate (MSC) instructors on courses and curriculum, advised MSC students, organized the CMI Marine Science Symposium to highlight student work.

AUG 2016-MAY '17 MARINE SCIENCE CERTIFICATE PROGRAM, CMI STEM DEPT.

Created a 30-credit certificate program in marine science. Updated 6 existing courses and created 5 new courses for the program. Achieved both CMI and ACCJC program approval.

JAN 2016-DEC '17 SCIENCE INSTRUCTOR, CMI, STEM DEPT.

Developed and taught the curriculum for Marine Biology, Environmental Science, and Tropical Marine Ecosystems, each worth 4 credits with two lectures and one lab per week.

JUNE-JULY 2015 INSTRUCTOR, CIEE BONAIRE

Led lectures, discussions, and dives for Marine Biology and Ecology of the Southern Caribbean. Topics: diversity, invasive species, habitat loss, MPA's, and effects of climate change.

JAN-MAY 2015 RESEARCH ADVISOR, CIEE BONAIRE

Co-advised, with Dr. Enrique Arboleda, three undergraduate students on 13-week independent research projects offering guidance on planning, data collection, and writing.

JAN-MAY 2015 TEACHING ASSISTANT, CIEE BONAIRE

Attended lectures, led students on dives to learn fish and coral identification, AGGRA and REEF surveys, video transects, and fish behavior analysis for Marine Ecology Field Research Methods.

SEP-NOV 2014 GUEST LECTURER, UNC MARINE SCIENCES DEPARTMENT

Guest lecture series on coral reef ecology, coral reef conservation, and invasive species in marine ecosystems for both Introduction to Marine Sciences and Ocean Exploration courses.

AUG-DEC 2014 TEACHING ASSISTANT, UNC BIOLOGY DEPARTMENT

Attended lectures, assisted in lectures and discussions, lead review discussions, and gave a lecture on the effects of invasive lionfish on reef fish communities for Marine Ecology.

FEB 2014 GUEST LECTURE, UNC ENVIRONMENTAL SCIENCE DEPARTMENT

Guest lecture on science communication via blogging and other social media outlets for Science Communication to Diverse Audiences.

JAN-MAY 2014 TEACHING ASSISTANT, UNC ENVIRONMENTAL SCIENCES DEPARTMENT

Attended lectures, facilitated weekly discussions, held weekly office hours, and graded weekly assignments for Water in Our World.

AUG 2012-MAR '13 SURF PEER ADVISOR, UNC OFFICE OF UNDERGRADUATE RESEARCH

Attended SURF interest meetings to describe my experience. Attended proposal writing seminar. Advised four undergraduates preparing a proposal for the UNC SURF.

AUG-DEC 2013 TEACHING ASSISTANT, UNC BIOLOGY DEPARTMENT

Attended lectures, led review discussions, developed assignments for students to engage scientific literature, and gave a lecture on marine invasions for Marine Ecology.

MAY-JUNE 2010 EDUCATION VOLUNTEER, NORTH CAROLINA AQUARIUM AT FORT FISHER

Worked at the touch-tank, sea turtle, and alligator exhibits teaching visitors about the animals and answering questions. Ran hands-on exhibit on marine mammals.

OUTREACH

AUG 2022 REEF RENEWAL THERMAL ASSESSMENT TRAINING, BONAIRE

Trained Reef Renewal Foundation Bonaire staff on the set up and implementation of an acute coral thermal stress assessment experiment that can be conducted without an aquarium facility.

FEB 2022 KML OPEN HOUSE, KEYS MARINE LABORATORY, FLORIDA KEYS

Presented to local community members during the Keys Marine Laboratory Open House including description of an ongoing research project and coral biology and conservation.

DEC 2021 STINAPA JUNIOR RANGERS PRESENTATION, BONAIRE

Presented an introduction to coral environmental memory, environmental epigenetics, and applications to coral conservation to the STINAPA Junior Rangers (virtual).

APR 2020-FEB '21 CORAL TRAFFICKING TASKFORCE, FIU AND FLORIDA FWC

Developed coral identification workshop to train Florida FWC officers in the identification of endangered and protected (ESA) Caribbean coral species to combat coral trafficking.

OCT 2018-FEB '20 **FIU BIOSYMPIUM, FLORIDA INTERNATIONAL UNIVERSITY, BBC**

Served on the organizational committee for the FIU Biosymposium, an annual event that highlights undergraduate and graduate research within the FIU Biological Sciences Department.

MAY 2018 **DATA ANALYSIS AND R WORKSHOP LEVEL 2, MIMRA, MARSHALL ISLANDS**

Led a second workshop to continue training employees of the Marshall Islands Marine Resource Authority (MIMRA) in the analysis of coral reef survey data (both fish and benthic data) using R.

SEP 2017 **DATA ANALYSIS AND R WORKSHOP LEVEL 1, MIMRA, MARSHALL ISLANDS**

Led a workshop to train employees of the Marshall Islands Marine Resource Authority (MIMRA) in the analysis of coral reef survey data (both fish and benthic data) using R.

APR 2017 **COMMUNITY PRESENTATION AT RMI NATIONAL OCEANS SYMPOSIUM**

Presented an introduction to coral biology and ecology, as well as the importance of coral reefs, to RMI community members the National Oceans Symposium Community Events

FEB-MAR 2017 **SCIENCE COMMUNICATION WORKSHOPS, ASLO ASM, HONOLULU, HI**

Attended workshops at ASLO ASM 2017 by Bob Chen and Brian Palermo to further develop science communication skills especially in teaching introductory science courses.

JAN-APR 2017 **RMI NATIONAL OCEANS SYMPOSIUM, CMAC, MARSHALL ISLANDS**

Collaborated with local agencies, especially Marshall Islands Marine Resource Authority, to organize and execute the first National Oceans Symposium on Majuro, Marshall Islands.

JAN-MAY 2017 **STUDENT INTERNSHIPS IN MARINE SCIENCE, MARSHALL ISLANDS**

Collaborated with local marine agencies to organize internships for CMI students to gain field experience in marine science or marine conservation on Majuro, Marshall Islands.

JUNE 2016 **REMAANLOK COMMUNITY PRESENTATION, CMAC, MARSHALL ISLANDS**

Helped develop a presentation describing the importance of coral reefs and explaining the REMAANLOK plan for local communities on three remote atolls in the Marshall Islands.

JUNE 2015 **STINAPA JUNIOR RANGERS SHARK MONTH AND DEBATE, CIEE BONAIRE**

Helped develop workshops on shark biology, ecology, and conservation. Assisted in judging and moderating debate on shark conservation along with Angelo Villagomez (The Pew Foundation).

JAN-MAY 2015 **STINAPA JUNIOR RANGERS, CIEE BONAIRE**

Assisted in developing curricula and leading weekly lectures and hands-on activities for the Junior Rangers, the local youth conservation organization on Bonaire.

MAR-APR 2015 **PUBLIC PRESENTATIONS, CIEE BONAIRE**

Gave presentations on my undergraduate and graduate research to local community members.

MAR 2015 **ECO-COMEDY: CLEAN AIR CLEAN WATER FILM, CIEE BONAIRE**

Co-produced [SEASPN: Clean Water Healthy Reefs](#) for the [Eco-Comedy Film Competition](#).

JAN 2015 **PRESENTATION TO SCIENCE EXPLORERS CLUB, RALEIGH, NC**

Gave a presentation to the 6-8th grade Science Explorers of Dillard Drive Middle School about marine ecology and careers in marine sciences.

- NOV 2014** **LED UNC IDEA SCIENCE COMMUNICATION WORKSHOP, UNC**
 Led a workshop for UNC IDEA (Increasing Diversity and Enhancing Academia) undergraduate students on ways to communicate their science to various audiences.
- OCT 2014** **CAREER FAIR AT MILLS PARK MIDDLE SCHOOL, CARY, NC**
 Gave presentations to five eighth grade classes about how to pursue marine science careers and how students can start getting involved in science in North Carolina.
- AUG 2014** **WROTE ARTICLE FOR DAN'S ALERT DIVER MAGAZINE**
 Wrote an "Expert Comment" article for Alert Diver titled [Hazardous Conditioning](#) to explain the danger of the misguided practice of feeding speared lionfish to predators.
- FEB 2014** **SCIENCE COMMUNICATION WORKSHOPS, ASLO OSM, HONOLULU, HI**
 Attended workshops at ALSO OSM 2014 by Randy Olsen, Ari Daniel, and Christie Wilcox to further develop scientific outreach, education, storytelling, and presentation skills.
- JAN-MAY 2013** **SCIENCE COMMUNICATION AND OUTREACH COURSE, UNC**
 Developed outreach skills through scientific storytelling, social media, magazines or newspapers, speaking to policy makers, and in elementary to high school level classes.
- OCT 2013** **CO-FOUNDED UNDERTHEC BLOG, UNC**
 Co-founded [UndertheC Blog](#), a blog by Marine Sciences graduate students at UNC with the goal of making marine science accessible and interesting to the general public.
- OCT 2013** **SCIENCE ONLINE OCEANS CONFERENCE, MIAMI, FL**
 Attended the Science Online Oceans Conference to further my outreach skills and learn new techniques to communicate science and conservation to the public.
- SEP 2013** **REEF LIONFISH WORKSHOP, MOREHEAD CITY, NC**
 Attended the REEF Lionfish Workshop in Morehead City and assisted in greeting guests, distributing educational packets, and demonstrating safe lionfish handling practices.
- SEP 2013** **SCIENTIFIC WRITING COURSE FOR UNDERGRADUATES, UNC**
 Gave a presentation on how to get involved in undergraduate research, applying for a SURF grant, and my experience as an undergraduate researcher and SURF recipient.
- MAY 2013** **SAN PEDRO LIONFISH DERBY, SAN PEDRO, BELIZE**
 Gave a presentation at a lionfish derby about the lionfish invasion, expected impacts, and how to help control lionfish to derby participants. See news article [here](#).

**RELEVANT
SKILLS**

FIELD METHODS

- Coral restoration methods (nursery trees and outplanting)
- Coral thermal tolerance assessments
- Reef survey protocols
- Identification and size estimation of Caribbean fish and coral species
- Identification and size estimation of Caribbean fish and coral species
- Identification of Pacific marine invertebrates
- Otolith removal, processing, and basic reading experience

LAB METHODS

- Coral physiological assays
- DNA and RNA extraction
- Epigenetic (DNA methylation) and transcriptomic (gene expression) characterization
- Respirometry

DATA MANAGEMENT

- R experience: data analysis and statistics
- Microsoft Access database experience

DIVING EXPERIENCE

- PADI Dive Master; 350+ logged dives
- AAUS Scientific Diver (60ft); 150+ logged AAUS dives
- Underwater photography and video experience

ADDITIONAL CERTIFICATIONS

- American Red Cross Adult CPR and First Aid
- DAN Oxygen First Aid for Scuba Diving Injuries
- IYT Crew Member and Navigation Master; 40 days sailing experience

ACHIEVEMENTS

GRANTS

2022 FIU CREST-CACHe Graduate Student Travel Support \$1,620
2022 FIU CREST-CACHe Graduate Student Travel Support \$1,590
2021 FIU Women Explorers Award \$1,000
2021 FIU CREST-CACHe Graduate Student Research Support \$2,000
2021 FIU University Graduate School Graduate Student Research Support Program \$1,200
2021 Judith Evans Parker Travel Scholarship \$850
2020 Lerner Gray Memorial Fund for Marine Research \$1,700
2020 Wave of Change Rebuilding Coral Reefs Scholarship \$5,000
2020 FIU Institute of Environment Graduate Research Award \$4,000
2020 Friends of Gumbo Limbo Graduate Student Research Grant \$2,500
2020 FIU Center for Coastal Ocean Research (CCOR) Travel Award \$500
2019 FIU CREST-CACHe Graduate Student Research Support \$2,448
2019 FIU Center for Coastal Ocean Research (CCOR) Travel Award \$1,000
2019 Judith Evans Parker Travel Scholarship \$500
2019 FIU Tropics Graduate Student Research Grant \$3,000
2018 FIU Tropics Graduate Student Travel Grant \$1,500
2012 UNC Summer Undergraduate Research Fellowship (SURF) \$3,000

HONORS

2022 Graduate Women in Science National Fellowship Honorable Mention
2021 Ford Foundation Predoctoral Fellowship Honorable Mention
2020 Ford Foundation Predoctoral Fellowship Honorable Mention

2019 Ford Foundation Predoctoral Fellowship Honorable Mention
2018-Present NSF-CREST Center for Aquatic Chemistry and the Environment (CACHE) Fellow
2018 GRE Verbal: 163; GRE Quantitative 158
2015 Eco-Comedy: Clean Air Clean Water Film Competition Finalist
2013 Highest Honors Biology and Carolina Research Scholar Program
2009-2013 UNC Dean's List
2012 GRE Quantitative: 165; GRE Verbal:163

SERVICE	2020-Present	Florida International University Biology Graduate Student Committee
	2018-2020	Florida International University Biosymposium Planning Committee
	2016-2017	College of the Marshall Islands Curriculum Committee
	2016-2017	Marshall Islands Coastal Management Advisory Council (CMAC)
	2015-2017	AMLC Communications Committee
	2015	Reviewer for Aquatic Biology
	2015	Student Poster Judge at AMLC Scientific Meeting
	2014	Reviewer for Coral Reefs
	2013	Reviewer for the NOAA/NMFS Saltonstall Kennedy Grant

REFERENCES

RESEARCH-SPECIFIC REFERENCES

Dr. Jose Eirin-Lopez [PhD Advisor] jeirinlo@fiu.edu
Dr. Hollie Putnam [PhD Committee Member] hputnam@uri.edu
Dr. John Bruno [B.S. and M.S. Advisor] jbruno@unc.edu
Francesca Viridis [Key Collaborator] francesca@reefrenwalbonaire.org

ADDITIONAL TEACHING REFERENCES

Ernest Canonigo [CMI Supervisor, Previous STEM Chair] ecanonigo@cmi.edu
Dr. Patrick Lyons [CIEE Supervisor] lyonspj@lavc.edu