

ALLYSON DEMERLIS

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EMAIL: ALLYSON.DEMERLIS@RSMAS.MIAMI.EDU

CURRENT POSITION

University of Miami (Miami, FL) – Ph.D. Student

Fall 2019 – current

- Marine Biology and Ecology
- Advisors: Dr. Nikki Traylor-Knowles (Cnidarian Immunity Lab), Dr. Ian Enochs (NOAA/AOML)

PREVIOUS EDUCATION

McGill University (Montreal, QC) – Bachelor of Science

Fall 2013 – Spring 2017

- Major: Biology
- Field Study Semester: Tropical Ecology Research in Panama

SKILLS

- Scientific Diving, Field Work
- **Programming Languages:** R, bash
- **Visual Software:** Adobe Illustrator, Tableau, Adobe Photoshop
- **Image Software:** ImageJ, FlexScan3D
- **Data Software:** Microsoft Office Suite (Excel), SAS
- **Laboratory Techniques:** DNA and RNA extractions, qRT-PCR, RNAi
- **Animal Husbandry:** Caribbean stony coral species in-situ/ex-situ (Mote Marine Laboratory), *Pocillopora damicornis* (Pacific stony coral) ex-situ and *Nematostella vectensis* (University of Miami), *Caenorhabditis elegans* (McGill University)

CERTIFICATIONS

- American Academy of Underwater Sciences (AAUS) Scientific Research Diver – University of Miami
- PADI Rescue Diver (120+ dives)
- PADI Enriched Air Diver
- DAN Diving First Aid

RESEARCH EXPERIENCE

REU Intern, Mote Marine Laboratory

May 2019 – August 2019

Summerland Key, FL

Supervisors: Dr. Abigail Clark and Dr. Hanna Koch

- Trained incoming program interns.
- Developed protocol and optimized use of 3D scanner for measuring micro-fragment growth rates. (*manuscript in prep.*)
- Monitored spawning and collected gametes for controlled crosses of *Acropora cervicornis*.

Coral Health and Disease Intern, Mote Marine Laboratory February 2019 – May 2019

Summerland Key, FL

Supervisors: Dr. Abigail Clark and Dr. Hanna Koch

- Maintained stony corals in ex-situ nursery using husbandry methods.
- Performed DNA extractions of diseased coral samples for stony coral tissue loss disease research,
- Conducted in-situ spawning nursery maintenance and constructed PVC trees.

Marine Conservation Intern, REEF

September 2018 – December 2018

Key Largo, FL

- Conducted fish species diversity and abundance surveys on SCUBA in the Florida Keys National Marine Sanctuary.
- Engaged in education and outreach programs on the invasive lionfish.

Essential Fish Habitats Intern, NOAA Fisheries

January 2018 – April 2018

Honolulu, HI

Supervisor: Ian Lundgren

- Developed biological consultation training presentations for the Pacific Islands.
- Conducted biological consultations for management of essential fish habitats (EFH) in compliance with the Magnuson-Stevens Fishery Conservation and Management Act.

Laboratory Assistant, Dr. Roy Lab

January 2016 – June 2016

Montreal, QC

Supervisor: Dr. Sebastian Schmeisser

- Utilized molecular biology techniques (GC-MS, qRT-PCR, RNAi) to study age-related diseases with model organism *Caenorhabditis elegans*
- Investigated fatty acid composition change after lipase activity manipulation.

AWARDS

- Spring 2020: David Rowland Fellowship, University of Miami (\$3500)
- Spring 2019: REU (Research for Undergraduates) Scholarship, Mote Marine Laboratory (\$8500)
- Spring 2017 - Dean's Multidisciplinary Undergraduate Research List. McGill University

PRESENTATIONS

- 2021: International Coral Reef Symposium (ICRS)
- 2020: Skype a Scientist - virtual presentations
- 2019: Climate Change and Coral Reefs Lecture - Osher Lifelong Institute at University of Miami
- 2019: REU Project Proposal: "Optimizing Protocol for Use of 3D Scanner to Measure Coral Growth" - Mote Marine Laboratory