

603.318.4472

Rachel Jiang

rachelyjiang@gmail.com

M.S. Environmental Science and Policy, Northeastern University

B.S. Marine Science, Boston University, 2020

WORK EXPERIENCE

New England Aquarium Aquarist (Floating Aquarist, Interactive Exhibits Aquarist)

July 2021 – August 2023

- Excelled in efficient and effective multitasking, working both in a team and independently to prioritize, evaluate, and execute working goals
- Applied efficient and creative problem-solving, critical thinking skills to troubleshoot advanced technical systems in a high-stress environment
- Educated and informed the public on conservation
- Generated reports on maintenance, observations, and treatment plans using TRACKS software
- Assisted in training of volunteers and interns
- Refined routine of scientific methodologies, best practices, and project management

New England Aquarium Intern, Volunteer

September 2020 - July 2021

- Created and optimized a routine of daily care and husbandry for gallery exhibits
- Reviewed literature to gauge proper water quality parameters for Sea of Cortez exhibit and refine diet for IndoPacific exhibit

Kaufman Lab at Boston University Research Assistant

November 2018 - May 2020

- Prepared for analysis of high-volume analysis of coral reef photomosaics
- Reviewed literature and executed a comparison study regarding adaptive radiation of *Cichlidae* fishes
- Acted as manager of aquatics lab, regularly sampled system water and executed environmental quality testing, managed team of students to participate in maintenance and feed routines

Tropical Climates & Coral Reefs Systems Lab at Boston University Research Assistant

September 2017 - June 2018

- Processed wide range of *Porites* samples to study diagenesis in coral structures
- Assisted in Electron Microscopy to determine how South Pacific corals have been altered by ocean acidification

East Coast Divers Store Staff, Purchasing

September 2020 - July 2021

- Maintained and populated excel documents of purchasing and inventory records
- Ensured organized inventory and punctual arrival of orders, developed connections with suppliers
- Provided customer support both in person, online, and via phone calls

Boston Roundtable English Immersion Program, Teacher, Program Coordinator

June 2017 - August 2018

- Taught a flexible, multi-faceted approach to learning, encouraging creative thinking and problem solving
- Mentored program teachers on effective communication skills which transcend the language barrier

FIELD WORK & RESEARCH PROJECTS

Fitzgerald Sedimentology Lab, Boston, MA

January 2019 – May 2019

- Developed GIS datasets to map distribution of samples
- Examined how suspended sediment sorts and migrates along the coast
- Sorted sand based on ϕ size using mechanical sieving
- Collected and analyzed samples to determine composition of sediment
- Participated in extracting salt marsh sediment cores to determine soil composition

Research on Offshore Energy, Cape Cod, MA

September 2019 – December 2019

- ArcGIS software experience and application to multiple, variable, real-world scenarios
- Assembled and assessed multifaceted dataset to determine what environmental qualities would output the greatest success for offshore wind farms
- Presented findings to peers

NOAA | Stellwagen National Marine Sanctuary, Scituate, MA

September 2018

- Studied the correlations between *E. glacialis* migration trends and shipping lanes in Stellwagen Bank
- Facilitated presentation on suggested alternatives to traditional fisheries tools to reduce potential of whale entanglements
- Assisted in field work regarding *Ammodytidae* sampling and collection, *Puffinis gravis* tagging, and plankton tows at Stellwagen Bank

Turneffe Atoll Sustainability Association, Turneffe Atoll, Belize

November 2019

- Conducted interviews with local Belizean fishermen to determine the economic impact of conch collecting on local communities

Research on *A. tenuifolia*, Turneffe Atoll, Belize

November 2018

- Independently designed experiments regarding the nature of *A. tenuifolia* health, color morph diversity, and ecological niches
- Implemented transects, quadrats, conducted a census to calculate coral coverage and biodiversity in the area

Research on *O. vulgaris*, Turneffe Atoll, Belize

July 2019 – November 2019

- Investigated chromatophore dilation of *Octopus vulgaris* through independent experimental design

Finnerty Lab at Boston University, Boston University Field Sampling

June 2019 - August 2019

- *Sampling of Mnenmiopsis leidyi at Woods Hole to collect parasitizing Edwardsiella lineata for the purposes of DNA extraction for investigating genetics*

ADDITIONAL CERTIFICATIONS & SKILLS

First Aid/CPR/AED/O2 certification • Proficient in MS Office • SSI SCUBA Advanced certifications

RELEVANT COURSEWORK

Marine Biogeochemistry • Geographic Information System • Oceanography • Sedimentology
Marine Biology • Elasmobranch Ecology and Conservation • Ichthyology • Marine Genomics
Marine Megafaunal Ecology • Coral Restoration and Conservation