

Education

- Michigan State University**, Research associate, Fall 2022 to present. East Lansing, MI
- Quantitative Fisheries Center, Fisheries and Wildlife Department.
- Pitzer College**, Claremont College Consortium. 2017. Claremont, CA
- Bachelors of Science in Organismal Biology.
 - Bachelors of Science in Environmental Analysis, Policy emphasis.
 - **Hawaii Pacific University**, Spring 2016. Kaneohe, HI
 - **University of Hawaii**, Spring 2017. Manoa, HI

Experience

- Safety diver and whale guide**, *Mo'orea Moana Tours*, August to November 2018, 2019, and 2021 Mo'orea, French Polynesia
- Led snorkels for public and private charters with humpback whales, pink whiptail rays, blacktip reef sharks, grey reef sharks, tiger sharks, pilot whales, oceanic whitetips sharks, *Steno* dolphins, and lemon sharks (sorted most to least common).
 - Provided relevant educational and safety briefings for each species encountered, modifying diver behavior as necessary.
 - Gathered whale observations, whale skin samples, and shark photos under Mao Mana Foundation and Direction l'environnement.
 - Assisted Mao Mana Foundation with collating photographic identification (ID) databases for tiger and oceanic whitetip sharks.
- Safety diver**, *Shark Addicts*, January 2020 to February 2020, July 2021 to September 2021 Jupiter, Florida
- Conducted shark dives with bull, silky, Dusky, and great hammerheads sharks with proper safety advisement for guests.
- Southeast fisheries observer**, *A.I.S.*, March 2021 to June 2021 Dulac, Louisiana
- Assessed effectiveness of experimental gear types under the Oceanic Fish Restoration Project (OFRP) over 12 day trips.
 - Consolidated commercial fishing activity and catch data onto corresponding gear use and type; fishing log; catch composition; safety checklist; and photo log forms.
 - Identified targeted (tuna and swordfish) and incidental catch to species in the Gulf of Mexico.
- Groundfish observer**, *Saltwater Inc.*, June 2020 to November 2020 Dutch Harbor, Alaska
- Ascertained data on fishing activity and catch aboard a catcher vessel in the Bering Sea for 60 days.
 - Identified North Pacific rockfish, flatfish, and roundfish species to obtain species compositions of hauls.
 - Managed Akutan processing plant duties as both plant and electronic monitoring observer for remaining 45 days.
 - Collected and organized up to 60 pollock and rockfish otoliths for Bering Sea and Gulf of Alaska per offload.
 - Conducted sex determinations and maturity scans for pollock, salmon, and sablefish.
 - Monitored salmon during offloads at the Akutan processing plant to conduct appropriate salmon counts and scale collection by species (king, chinook, pink, sockeye, coho, and chum).
 - Generated two random sampling frameworks throughout the 105 day contract appropriate for sea and factory conditions.
 - Collected salmon and Pacific sleeper shark sex, lengths, and eyeballs for voluntary internal research projects.
- Safety diver and onboard biologist**, *Cabo Shark Dive*, December 2018 to March 2020 Cabo San Lucas, Mexico
- Educated guests regarding safety protocols and local fishing history for in water snorkels with pelagic predators.
 - Provided in water safety and behavioral assessments for shortfin mako, blue, smooth hammerheads, and silky shark populations.
 - Collaborated with nonprofit Mexico Azul to collect population and environmental data on a largely unstudied aggregate site.
- Divemaster and instructor**, *Freelance*, March 2017 to October 2018 and December 2018 to July 2019
- Organized and guided dives around the Baja California Sur Peninsula and the South Shore of O'ahu.
 - Briefed and led two tank dives, averaging 35 minutes, for certified, student, and discover scuba divers.
 - Instructed PADI open water, advanced, and specialty courses complemented with pool and ocean instructional dives.
 - Maintained and operated a diesel air compressor as well as all scuba equipment.
- Safety diver and onboard biologist**, *One Ocean Diving*, January 2017 to August 2018 Hale'iwa, Hawai'i
- Surveyed each dive to collect shark and environmental data (number of each species, positive sex IDs, confirmed shark IDs, agonistic displays, shark distance from diver, wind strength and direction, wave height, visibility, etc.).
 - Mitigated competitive behaviors towards divers, permitting safe interactions between guests and the residential populations of Galapagos and sandbar sharks with occasional tiger and scalloped hammerhead shark occurrences.

- Maintained boat via daily cleanings and trailering; engine repairs; paintings; bilging; and mooring construction and deployment.
- Operated three dual-engine vessels including a 6m monohull, a 10m catamaran, and a 10m aluminum monohull.
- Constructed, organized, and consolidated in-house shark photo identification database and dataset.

Assistant researcher, Cozumel Ocean Research, June 2016 to January 2017 Cozumel, Mexico

- Gathered eagle ray photos during scuba dives to generate photo identification appropriate footage.
- Established photo ID database to correlate the seasonal presence of eagle rays to that of the Gulf of Mexico and the Atlantic.
- Processed and analyzed citizen science data of *Aetobatus narinari* sightings producing a significant association with sandy flats.

Divemaster and Instructor, Aldora Divers, July to August 2015 and June to August 2016 Cozumel, Mexico

- Organized, briefed, and led daily Nitrox two-tank drift dives, averaging 65 minutes, 7 days a week.
- Managed schedules, financial transactions, and bookkeeping of the boutique dive shop.
- Taught PADI open water scuba courses and led pool and ocean associated dives.

Assistant researcher, Haevy Mudd College Coral Lab, January 2015 to December 2016 Claremont, California

- Utilized polymerase chain reactions (PCR) to extract DNA sequences from 9 deep sea coral samples.
- Compared resulting genetics to determine inter-species phylogeny.

Assistant researcher, Pomona College Natural Sciences Lab, September 2015 to December 2015 Claremont, California

- Used a carbon nitrogen elemental analyzer to test 200+ California sage scrub ecosystem soil samples.

Research intern, Oceans Research, June 2015 Mossel Bay, South Africa

- Obtained photo ID dorsal fin photos and population data on seasonal white shark population.
- Analyzed photo identification and baited remote underwater video (BRUV) footage to assess localized shark presence.