

Bachelors Paolo Marra-Biggs

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PaoloMB@Hawaii.edu

Education

B.Sc in Marine Biology, **University of California: Santa Cruz** Class of 2014

Ph.D in Marine Biology, **University of Hawaii: Manoa** In Progress 2019

PUBLICATIONS & PRESENTATIONS

UH Manoa QUEST Lectures

2020/2021 International Coral Reef Symposium Poster Abstract Acceptance

UH Manoa Mini Tester Presentation April 2020

NOAA Sea Grant: Hanauma Bay Research Talk

Coral degradation impacts CO₂ fluxes, Trunkhill et al., in review

NOAA Sea Grant: Science by the SEA Talk

NOAA Sea Grant: Research Symposium Talk

2020- Present: Mentor for Hawaii Pacific University student (1)

2021- Present: Mentor for UH Manoa Undergraduate student (3)

2022 University of Guam Conference on Island Sustainability Presentation

FUNDING

Hawaii Conservation Conference 2020 Student Scholarship \$180

Lorde Scholarship 2019 \$2,500

Lorde Scholarship 2020 \$1,000

Ruth Gates Scholarship 2020 \$1,000

Robinson Fellowship 2020 \$5,000

Watson T. Yoshimoto Fellowship \$5,000

Sea Grant Biennial Grant \$72,513

Skills & Certifications

SCUBA Certifications

PADI Divemaster (Padi # 307113)

PADI Rescue /Advanced

NAUI Master Diver / Open Water

AAUS Scientific Diver 70'

National Park Service Blue Card Certified 100'

500+ logged SCUBA dives, 150 Drysuit Dives

SCUBA survey experience in cold waters (250 dives)

Boating Experience

USFWS MOCC Certified

Small Vessel Operator (<40ft) (300+ Hours logged)

-Current CPR, O2 Administration & First Aid Certified

-Wilderness First Responder

-ArcGIS, Microsoft Office, Access proficient

-Data entry, analysis & report preparation

-Proficient with identifying South Pacific Corals, Fish, Inverts

-Proficient with classifying NE Pacific Algae, Fish, Inverts

Employment

Pacific Islands Climate Adaptation Science Center

Feb 2021 – Present

PI-CASC Graduate Scholar

Supervisor: Beth Lenz (EALenz@hawaii.edu) (May be contacted)

- Drive small research vessels (17' Boston Whaler, 22' Boston Whaler Outrage)
- Conduct genetic research projects (phylogenetics and population connectivity)
- Grant writing

NOAA: Sea Grant

Dec 2019 – Feb 2021

Hawai'i Sea Grant Graduate Fellow

Supervisor: Maya Walton (Waltonm@hawaii.edu) (May be contacted)

- Drive small research vessels (17' Boston Whaler, 22' Boston Whaler Outrage)
- SCUBA diving to deploying and retrieve CTD sensors
- Water quality analysis (DIC, Oxygen, Nutrients, Chlorophyll)
- Data analysis (spatial and statistical) for technical reports

Employment (Continued)

NOAA National Marine Sanctuary of American Samoa

March - April 2019

Outboard Engine Mechanic

Supervisor: Hanae Spathias (684 633 6503) (May be contacted)

- Diagnosed and repaired Evinrude E-Tec outboard engines
- Small boat operations to test repairs
- Trailer operation and repair

National Geographic / Lindblad Expeditions

June 2017 - Present

Undersea Specialist, Naturalist Tour Guide

Supervisor: Ashley Knight (206 403 1543) (May be contacted)

- Drysuit SCUBA diving in polar and temperate regions
- Drysuit and SCUBA repair and maintenance
- Drive zodiac tours and shoreside expeditions
- Underwater videography, create and edited undersea footage for guest lectures
- Create natural history talks and present them onboard

National Park Service of American Samoa

April 2015 – February 2018

Marine Field Technician, Research SCUBA Diver

Supervisor: Tim Clark (808 792 9566) (Timothy_Clark@FWS.gov) (May be contacted)

- Managing dive team and conducting safe and efficient data collection dives
- Operating boat trailers and small vessels (33 ft Swiftcat, 24 ft Boston Whaler, 23 ft Zodiac Hurricane)
- Extensive repairing and maintaining of boat, truck and SCUBA gear. regularly fill Nitrox tanks.
- Data management using Microsoft Access, ArcGIS, and DNR GPS to communicate data
- Grant writing for National Park Service Projects
- Installing and operated sensor instruments for monitoring projects (ADCP's, CDT's, SONDE, Niskin Bottles)
- Writing safety protocols (writing job hazard analyses, SOP's, MSDS sheets, incident report forms)
- Collecting stream Inventory & Monitoring data
- Coral bleaching and crown of thorn monitoring surveys
- Data analysis (spatial and statistical) for technical reports
- Using Microsoft Access to manage, query, and graph data for technical reports
- Composing outreach & education programs for local students

University of Hawaii at Manoa

May– July 2016 & Feb 2017

Marine Science Technician

Supervisor: Matthew Widlansky (808 956 2822) (May be contacted)

- Retrieved/deployed temperature loggers
- Conducted coral bleaching photo surveys
- Downloaded data using instrument specific software, entering data into database

UCSB: SONGS Mitigation and Monitoring

May - Nov 2014

Marine Field Technician, Research SCUBA Diver

Supervisor: David Huang (706 310 0828) (May be contacted)

- Conducted underwater scientific research for long term Mitigation and Monitoring project.
- Performed Scientific methods on SCUBA: Quadrad, RPC, UPC, Algae/Invert swath, Fish Surveys
- Conducted biological surveys of artificial and natural reefs
- Operating dive boats (26ft Radon)
- Performed SCUBA dive operations off of boats in poor visibility (<3 ft)
- Fabricated scientific instrument using lathe, drill press, table saw, planar, band saw, milling machine
- Processing, sorting, and classifying samples collected in situ
- Data Entry, QA/QC

Kayak Connection – Santa Cruz / Moss Landing

June 2010 – May 2014

Kayak Instructor/ Naturalist Tour Guide

Supervisor: Dave Grigsby (831 454 6999) (May be contacted)

- Guided 300+ naturalist tours in Monterey Bay
- Instructed Kayak and Stand up paddleboard classes in the Monterey Bay
- Managed relations with sponsors, dealers and event managers
- Worked retail selling kayaks, stand up paddleboards and accessories

Professional Research Experience

NOAA Marine Sanctuaries and Bishop Museum Rebreather Divers

February 2017

Safety Support Diver

- Supervisor: Joe Paulin (684 633 6500) (May be contacted)
- Provide safety support on decompression stops on SCUBA
 - Cross-training for emergency procedures and diver egresses

Department of Marine and Wildlife Resources

December 2015 – Jan 2017

Assistant Researcher

- Supervisor: Mareike Sudek (+351 912 980 982) (Mareike.Sudek@NOAA.gov) (May be contacted)
- Designing and implementing coral bleaching surveys
 - Conducting coral monitoring surveys
 - Maintaining and Repairing SCUBA gear
 - Data Entry, QA/QC

PISCO (Partnership for Interdisciplinary Studies of Coastal Oceans)

Sept 2013 – March 2014

Research SCUBA Diver, Data Technician

- Supervisor: Peter Raimondi (831 459 5674) (May be contacted)
- Kelp forest rugosity, sediment and habitat surveys
 - Collected data on algae, invert populations on SCUBA
 - Data Entry and database management
 - Mapped features using ArcGIS

Monterey Bay Aquarium

June 2009 – Sept 2009

Student Docent

- Managed and maintained touch tanks
- Operated marine mammal information booths
- Supervised sustainable fishing department booths
- Informed public of current environmental hazards

Name	Employer	Title	Phone	Email
Robert Toonen	UH Manoa/HIMB	Graduate Advisor	(808) 236-7471	RJToonen@gmail.com
Tim Clark	National Park	PhD Marine Ecologist	(808) 792-9566	Timothy_Clark@FWS.gov
Mareike Sudek	NOAA: NMSAS	Project Coordinator	(684) 252-1327	Mareike.Sudek@NOAA.gov
David Huang	UCSB:SONGS	Research Associate	(706) 310-0828	David.Huang@LifeSci.UCSB.edu
Peter Raimondi	UCSC; PISCO	PI, Professor	(831) 459-5674	Raimondi@UCSC.edu
David Grigsby	Kayak Connection	Owner	(831) 454-6999	Dave@KayakConnection.com