

ABIGAIL DIAS

CURRICULUM VITAE

November 2022

abbey.dias@outlook.com

She/Her

<https://www.abbeyunderwater.com>

Marine Ecology & Conservation | Underwater Film and Photo | AAUS Scientific Diver | PADI Instructor

CURRENT POSITIONS

- 2021-current **Graduate Student and Graduate Research Assistant**, Coastal Ecology and Conservation Lab, Sonoma State University. GPA: 4.0, Expected graduation: May 2023
Advisor: Dr. Brent Hughes
- 2021-current **Teaching Associate**, Department of Biology, Sonoma State University, Rohnert Park, CA
Laboratory instructor for Introductory Genetics and Cell Biology undergraduate course
Designs lectures, instructs experiment, evaluates student learning, holds office hours each week
- 2021-current **Diving technician**, The Nature Conservancy, California Department of Fish and Wildlife, UC Davis, Moss Landing Marine Labs, San Diego State University, CA
Lead or assistant scientific diver contracted for various data collection operations, ecological surveys, and oceanographic instrument deployment/recovery in California. Assists with American Academy of Underwater Sciences (AAUS) Scientific Diver Training courses
- 2021-current **PADI Open Water Scuba Instructor**, Seals Watersports, Santa Rosa, CA

RECENT STORYTELLING PROJECTS

- 2021-2022 [The Forest Stands Tall](#). **A. Dias** and O. Davis-Bower. Written, edited, produced by **A. Dias**.
Official Selection of the International Ocean Film Festival (2022), International Ocean Film Festival Traveling Program (2022), Korean International Film Festival (2022), Tacoma Ocean Film Festival (2022). Additional screenings with California Seaweed Festival, Green Planet Films. Screening continuously at Kelp!@836M Gallery exhibit in San Francisco, CA, and the Marin County Art and Garden Center, San Rafael CA.

RELEVANT WORK EXPERIENCE

- 2021-2022 **Research Technician**, Coastal Ecology and Conservation Lab, Sonoma State University, CA
Lead scientific diver for kelp forest restoration research in Dr. Brent Hughes' Lab
Develops and implements protocols for kelp restoration funded by The Nature Conservancy
Successfully grew thermally tolerant kelp on gravel in laboratory and out-planted into the ocean
- 2020-2021 **Scuba Instructor and Ocean Education Intern**, Annie Crawley's Dive Team, Edmonds, WA
Instructed PADI scuba courses for kids (ages 10-17) and adults using dry suits in Puget Sound
Wrote and instructed Distinctive Specialty courses for citizen science diving
Created websites for [local marine protected area](#) and [educational ocean outreach platform](#)
- 2020 **AAUS Scientific Diver**, Walla Walla University's Rosario Beach Marine Laboratory, WA
Planned and led dives around Puget Sound to collect data for subtidal research

- 2020 **Sally Ann Abshire Student Research Scholar**, Whitman College Biology Department, WA
 “*Quantification of hemoglobin content and metabolic enzymes in deep-sea fishes*”
 Initiated and pursued the study of rare blood samples to inform deep-sea physiological functions
- 2018-2020 **Teaching Assistant, Peer Tutor, Writing Fellow**, Whitman College, Walla Walla, WA
 Taught and mentored students with course material from Biochemistry, Biology, Chemistry
 Raised student grades from failing to passing while developing foundational study skills
- 2019 **OWUSS® / Divers Alert Network Dive Safety Education Intern**, Durham, NC
 Risk mitigation and dive safety resources and initiatives
 Upscaled comprehensive first aid course DFA Pro (v 3.0) for global audience
- 2018 **Undergraduate Research Intern**, University of Washington Friday Harbor Laboratories, WA
 “*Habitat influence on bone density in fishes across a depth gradient (0–8,200 m)*”
 Advisors: Dr. Mackenzie Gerring and Dr. Adam Summers

EDUCATION

- 2022-2023 *in progress* M.S. in Biology, Sonoma State University, GPA: 4.0, expected graduation May 2023
 “Examining the role of interaction webs in dictating bull kelp forest resilience”
 Committee: Dr. Brent Hughes, Dr. Kristen Elsmore, Dr. Dan Crocker
- 2016-2020 **B.A. in Biology *cum laude***, Whitman College, GPA: 3.699
 “*On the adaptations of deep-sea vertebrates: Skeletal reduction and metabolic function*”
 Advisors: Dr. Mackenzie Gerring, Dr. Ginger Withers, Dr. Kate Jackson
- 2018 School for Field Studies, Turks and Caicos (semester abroad)
 Directed Research: “*Baseline measurement of coral reef topographic complexity using structure-from-motion Photogrammetry*”
 Advisors: Dr. Franziska Elmer and Dr. Heidi Hertler

PEER-REVIEWED JOURNAL ARTICLES

- Ricart, A., Gómez, J., Karm, R., Souza, V., **Dias, A.**, Velazquez, M., Cavanaugh, K., Saccomanno, V., Hughes, B.
 (In preparation) Land-to-sea connectivity and the persistence of northern California kelp forests.
- Martin, R. E., **A. S. Dias**, A. P. Summers, M. E. Gerring. (2022) Trends in bone density variation within the family Macrouridae (Grenadiers). *Integrative and Organismal Biology*. In press.
- Gerring, M.E., **A. S. Dias**, A. von Hagel, J. Orr, A. Summers, S. Farina. 2021. Habitat influences skeletal morphology and density in the snailfishes (Family Liparidae). *Frontiers in Zoology: Life at the Extremes* 18, 16 (2021). <https://doi.org/10.1186/s12983-021-00399-9>

MEDIA PUBLICATIONS AND FEATURES

Instagram accounts: (personal) [@abbeydias](#) (research lab) [@HughesLabEcology](#)

- 2022 Seagrass Restoration Tutorial Series. Seagrass Transplant And Restoration Team (**A. Dias**, Hughes, B., Beheshti, K., Ward, M.) funded by The Anthropocene Institute.
<https://www.youtube.com/watch?v=4PXsuf8bs-o>

- 2022 Photos published in article: [How math is helping restore bull kelp forests](#). G. Contolini. California Sea Grant.
- 2021 [A Voice for the Ocean](#). **A. Dias**. Alert Diver Magazine.
- 2021 Featured in book: [Planet Ocean: Why We All Need A Healthy Ocean](#)
- 2021 Featured in article: [How One Man’s Obsession Created the Edmonds Underwater Park](#). A. Castleman. Scuba Diving Magazine.
- 2021 [Existing in a breathless world](#). A. Dias. The Isolation Journals. S. Jaouad.
- 2020-2021 Published [OurOceanAndYou.com](#) and [EdmondsUnderwaterPark.com](#)
- 2020 Featured in: [Introducing the New 2020 PADI AmbassaDivers](#). PADI.
- 2019 [OWUSS Intern blog](#). **A. Dias**. Our World Underwater Scholarship Society.
- 2019 [Masters of the Deep: The Hadal Snailfishes](#). **A. Dias**. Integrative Organismal Biology.

GRANTS AND AWARDS

- 2022 Highly Commended: British Phycological Society Hilda Canter-Lund Photography Award
- 2022 Finalist: Our World Underwater Scholarship Society North American Rolex Scholarship
- 2021 Sonoma State University Student Research Award (\$750)
- 2016-2020 Whitman College Merit Scholarship (\$48,000)
- 2020 Sally Ann Abshire Student/Faculty Research Award (\$1,620)
- 2018-2019 Whitman Summer Internship Grant (\$3,500/year)
- 2019 American Microscopical Society Buchsbaum Prize for Excellence in Photomicrography
- 2019 University of Washington and Whitman College Student Conference Funding (\$870)
- 2018 Ben Rabinowitz Grant for Compassion in Healthcare (\$3,500)

LEADERSHIP AND VOLUNTEERING

- 2022 **Guest Lecturer**, UC Davis Summer Session 1 class “Sex in the Sea”.
- 2022 **Brand Ambassador and Content Contributor**, Light & Motion Dive Lights
- 2022 **Brand Ambassador and Content Contributor**, 12 Tides Organic Kelp Snacks
- 2020-2021 **Volunteer Park Maintenance Diver**, Edmonds Underwater Park Marine Reserve, WA
Invasive species removal, artificial reef construction
- 2018-2020 **Sea Kayaking Guide**, Whitman College Scrambles Leader, San Juan Islands, WA
Guided week-long excursion kayaking and camping trips for incoming college students
- 2019 **CPR Coach, World Scout Jamboree**, Beckley, WV
Taught 600+ scouts CPR and rescue breathing in English and Spanish

- 2019 **Underwater Cleanup**, Port of Edmonds, WA
- 2018 **Swim and Snorkel Instructor**, South Caicos, TCI
- 2017-2018 **[Director of The Cook Book Committee](#)**, Whitman College, WA
Managed team of 13 students to produce a free, bilingual cookbook for the local health clinic

SOCIETIES AND CLUBS

- 2022 Western Society of Naturalists
- 2020 PADI Ambassadiver
- 2020 Deep Sea Biological Society
- 2019 Explorer’s Club
- 2019 Our World Underwater Scholarship Society
- 2019 Society for Integrative and Comparative Biology

SKILLS AND TRAINING

Diving

- AAUS Scientific Diver (certified to 100 feet)
- PADI Open Water Scuba Instructor
 - 506 dives, 400+ hours underwater
- PADI Emergency O₂ Provider Instructor
- [Diving First Aid for Professional Divers](#)
- Previous NOLS Wilderness First Responder

Camera

- Canon 5d mark ii (2K HD/1080/30fps)
- Sea & Sea Underwater Housing
- Sigma 15mm fisheye and wide-angle
- Olympus TG-6
- GoPro
- Adobe Premier Pro and Lightroom

Field

- Subtidal survey techniques using SCUBA
- 3D photogrammetry
- Identification of Pacific vertebrate, invertebrate, and algae species
- Underwater photography for identification and media projects
- Underwater drill operator