

Alexandria Marquardt

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EDUCATION

Ph.D. Marine Science , Virginia Institute of Marine Science, Gloucester Point, VA	2020-Pres
M.S. Biological Sciences , California Polytechnic State University, San Luis Obispo, CA With Distinction, GPA 3.90	2017-2020
B.S. Fisheries & Wildlife Science <i>Cum laude</i> , Oregon State University, Corvallis, OR Undergraduate Research Fellow, GPA 3.65	2010-2013

PUBLICATIONS ^denotes undergraduate mentee

- 2) **Marquardt, A**, S Park[^], E Maietta[^], N Clark[^], G Waltz, L Needles, B Ruttenberg. 2023. Status of intertidal populations of Pismo clams (*Tivela stultorum*) across their range in California. Reg Stud Mar Sci 103063. <https://doi.org/10.1016/j.rsma.2023.103063>
- 1) **Marquardt, A**, N Clark[^], E Maietta[^], S Park[^], B Ruttenberg. 2022. Reproduction, body condition, age, and growth of a large sandy intertidal bivalve, *Tivela stultorum*. Aquat Biol 31:19-30. <https://doi.org/10.3354/ab00749>

FELLOWSHIPS

2022-24	Graduate Research Fellowship; Virginia Sea Grant
2021-22	Kelly Watson Fellowship; VIMS
2021-22	Commonwealth Coastal Research Fellowship; VIMS
2021-22	Tidewater Oyster Gardeners Association Fellowship; VIMS Foundation
2020-22	Provost Distinguished Graduate Fellowship; VIMS
2020-21	Tidewater Oyster Gardeners Association Fellowship; VIMS Foundation
2020-21	Phyllis L. Cothran and Arnold L Stolberg Fellowship; VIMS Foundation

RESEARCH GRANTS

2022	Fisheries Improvement Fund; Virginia Marine Resources Commission (\$77,209)
2021	COA Grants to Malacology; Conchologists of America (\$1,685)
2021	Oyster Education, Technology and Monitoring Award; Chesapeake Bay Trust (\$5,000)
2019	COAST Graduate Student Research Award; Cal State University System (\$3,000)
2018	Myers Oceanographic and Marine Biology Trust (\$1,200)

AWARDS

2023	Student Travel Grant; VIMS Academic Affairs
2023	Field Course Financial Aid; Friday Harbor Laboratories, University of Washington
2022	Student Travel Grant; VIMS Academic Affairs
2022	Thurlow C. Nelson Outstanding Oral Presentation; National Shellfisheries Association
2020-21	Graduate Research Assistantship; VIMS
2019	Thurlow C. Nelson Outstanding Oral Presentation; National Shellfisheries Association
2019	Student Travel Award; National Shellfisheries Association
2019	COAST Student Travel Award; California State University
2018	Student Travel Award; Western Society of Naturalists
2018	Graduate Presentation Award; Cal Poly
2018-19	Rich and Arnie Leggett Scholarship; Cal Poly
2018-19	Graduate Assistantship Award; Cal Poly
2018-19	Out of State Tuition Waiver; Cal Poly
2017-18	Rich and Arnie Leggett Scholarship
2018	Graduate Presentation Award; Cal Poly
2017-18	Graduate Assistantship Award; Cal Poly
2017-18	Out of State Tuition Waiver; Cal Poly

2017	Sponsored; Taxonomic Identification of Harmful Algae in U.S. Waters Course
2013-14	Undergraduate Research, Innovation, Scholarship and Creativity Grant; OSU
2012	Vivian Shriver-Thompson Scholarship; OSU
2009	Heidi James Memorial Intern Award; Northwoods Wildlife Center

PROFESSIONAL POSITIONS

Graduate Researcher; Virginia Institute of Marine Science	05/20 – Pres
Graduate Researcher; California Polytechnic State University	09/17 – 05/20
Oyster Farm Technician; Grassy Bar Oyster Company	03/19 – 03/20
Marine Phytoplankton Specialist (NRS-1); Oregon Department of Fish and Wildlife	04/17 – 08/17
Marine Biotoxin Specialist (NRS-1); Oregon Department of Fish and Wildlife	06/16 – 03/17
Juniper Obligate Technician; Wyoming Game & Fish Department	05/16 – 06/16
Bat Technician; Wyoming Game & Fish Department	05/15 – 09/15
Deer Capture Technician; Pennsylvania Game Commission	01/15 – 04/15
Experimental Biology Aide (OASIS Project); Oregon Department of Fish & Wildlife	09/14 – 12/14
Shellfish Sampling and Data Technician; Oregon Department of Fish and Wildlife	09/13 – 09/14
Biological Technician (prairie dog/plague research); United States Forest Service	06/13 – 09/13

INVITED PRESENTATIONS *denotes presenter

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- 1) ***Marquardt, A** (2022, June). Distribution and demographics of fossil oysters on the Atlantic continental shelf. Wageningen University and Research. Yerseke, Netherlands.

ORAL PRESENTATIONS *denotes presenter ^denotes undergraduate mentee

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- 12) *Mann, R, M Southworth, M Tarnowski, J Wesson, **A Marquardt**, and J Harding. (2023, March). Revisiting the Newell number – estimating pre-colonial oyster abundance and ecological services in the Chesapeake Bay. National Shellfisheries Association. Baltimore, MD.
 - 11) *Southworth, M, J Wesson, A Button, R Mann, **A Marquardt**, and A Scheld. (2023, March). Rotational management of oyster harvest in the Rappahannock River, Virginia: 15 years onward. National Shellfisheries Association. Baltimore, MD.
 - 10) ***Marquardt, A**, R Mann, and E Powell. (2022, March). Distribution and demographics of fossil oysters on the Atlantic continental shelf. Aquaculture. San Diego, CA.
 - 9) ***Marquardt, A**, M Southworth, and R Mann. (2022, March). Estimating post-settlement growth and survival in eastern oysters *Crassostrea virginica* in the Chesapeake Bay. Aquaculture. San Diego, CA.
 - 8) ***Marquardt, A**, ^S Park, ^N Clark, ^E Maietta, and B Ruttenberg. (2021, March). Pismo clams in California: Growth and reproduction of an iconic species. National Shellfisheries Association. Virtual.
 - 7) ***^Clark N, A Marquardt**, ^E Maietta, and B Ruttenberg. (2020, November). Age and growth of the Pismo clam (*Tivela stultorum*) in California. Western Society of Naturalists. Virtual. Speed talk.
 - 6) ***^Clark N, A Marquardt**, E Maietta, and B Ruttenberg. (2020, October). Age and growth of the Pismo clam (*Tivela stultorum*) in California. Pacific Coast Shellfish Growers Association. Virtual.
 - 5) ***^Park S, A Marquardt**, and B Ruttenberg. (2019, October). Assessing life history parameters of the Pismo clam, *Tivela stultorum*, on Pismo Beach, CA. Western Society of Naturalists. Ensenada, MX.
 - 4) ***Marquardt, A**, ^S Park, ^N Clark, ^E Maietta, ^E De Luca, ^D Almaguer, G Waltz, and B Ruttenberg. (2019, October). Distribution, abundance, and habitat associations of the Pismo clam (*Tivela stultorum*) in California. Western Society of Naturalists. Ensenada, MX.

- 3) ***Marquardt, A**, ^S Park, ^N Clark, ^E Maietta, ^E De Luca, ^D Almaguer, G Waltz, L Needles, and B Ruttenberg. (2019, September). Population trends and reproductive cycles of the Pismo clam (*Tivela stultorum*) in California. Pacific Coast Shellfish Growers Association. Portland, OR.
- 2) ***Marquardt, A**, ^S Park, ^D Almaguer, G Waltz, L Needles, and B Ruttenberg. (2019, March). Population trends and abundance of Pismo clams (*Tivela stultorum*) in California. Aquaculture. New Orleans, LA.
- 1) ***Marquardt, A**, ^S Park., ^D Almaguer, G Waltz, L Needles, and B Ruttenberg. (2018, November). Population trends and abundance of Pismo clams (*Tivela stultorum*) in California. Western Society of Naturalists. Tacoma, WA.

POSTER PRESENTATIONS *denotes presenter ^denotes undergraduate mentee

- 8) ***Marquardt, A**, R Mann, and E Powell. (2022, August). Distribution and demographics of fossil oysters on the Atlantic continental shelf. American Fisheries Society. Spokane, WA.
- 7) Southworth, M, ***A Marquardt**, N Otto, M Unger, and R Mann. (2022, March). Revisiting *Rapana venosa* in Hampton Roads, Chesapeake Bay as TBT abates. Aquaculture. San Diego, CA.
- 6) ***Marquardt, A**, M Southworth, and R Mann. (2021, March). Post settlement survival in eastern oysters (*Crassostrea virginica*) to inform management and restoration in the Chesapeake Bay. National Shellfisheries Association. Virtual.
- 5) ***^Maietta, E**, ^N Clark, **A Marquardt**, and B Ruttenberg. (2021, March). A comparison of aging methodologies for the Pismo clam (*Tivela stultorum*). National Shellfisheries Association. Virtual.
- 4) ***^Clark, N**, **A Marquardt**, ^E Maietta, and B Ruttenberg. (2019, October). Age and growth determination of the Pismo clam (*Tivela stultorum*) in California. Western Society of Naturalists. Ensenada, MX.
- 3) ***^Park, S**, **A Marquardt**, and B Ruttenberg. (2018, November). Reproductive cycle of the Pismo clam, *Tivela stultorum*, on Pismo Beach, California. Western Society of Naturalists. Tacoma, WA.
- 2) ***Marquardt, A**, M Hunter, S Rumrill, K Corbett, and C Schmitt (2018). Marine Biotoxins: Domoic Acid Monitoring on the Oregon Coast. National Shellfisheries Association. Seattle, WA.
- 1) **Marquardt, A**, ***M Hunter**, S Rumrill, K Corbett, and C Schmitt (2017). Marine Biotoxins: Domoic Acid Monitoring on the Oregon Coast. Annual Pacific Estuarine Research Society. Coos Bay, OR.

PUBLIC PRESENTATIONS

- 6) ***Marquardt, A**, M Southworth, A Scheld, A Button, and R Mann. (2023, April). The Virginia oyster fishery: a management decision tool. Virginia Marine Resources Commission Shellfish Management and Advisory Committee. Gloucester, VA.
- 5) ***Marquardt, A** (2022, April). 10,000 years under the sea: fossil oysters and rising sea level. Scientist Walks Into A Bar, Gloucester Brewing Company. Gloucester, VA.
- 4) ***Marquardt, A** (2020, January). TOGA Endowment Recipient Presentation. Tidewater Oyster Gardeners Association annual meeting. Virtual.
- 3) ***Marquardt, A** and B Ruttenberg. (2019, May). Pismo clams (*Tivela stultorum*) in California. Morro Bay Science Explorations: Native Shellfish and Aquaculture. San Luis Obispo, CA.
- 2) ***Ruttenberg B** and **A Marquardt**. (2019, May). The Rise and fall (and rise?) of the Pismo Clam. Concert for the Clams. San Luis Obispo, CA.
- 1) ***Marquardt, A**, B Ruttenberg, L Needles, G Waltz, and D Wendt. (2018, June). Rise and Fall (and Rise?) of the Pismo clam. Pismo Beach City Council Meeting, Pismo Beach, CA.

WORKSHOPS, TRAININGS, CERTIFICATIONS

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| 2022 | Team Science Training; Virginia Sea Grant |
| 2022 | Intro to GIS and Spatial Analysis; Virginia Institute of Marine Science |
| 2022 | Integrating DEI in the classroom; Virginia Institute of Marine Science |

- 2021 ComSciCon (science communication workshop); University of Virginia
- 2021 Science Policy Bootcamp; University of Virginia
- 2019 PADI Advanced Open Water Diver
- 2018 Assessing the Effectiveness of Your Teaching and Maximizing Student Success; Cal Poly
- 2017 Teaching Assistant Workshop on Creating an Active and Inclusive Classroom; Cal Poly
- 2017 Taxonomic Identification of Harmful Algae in U.S. Waters Course; NCCOS & Bigelow Lab
- 2016 EPA Region 10 Harmful Algae Identification Training Webinar
- 2016 Survival Equipment, Procedures and Onboard Drills (ALMSEA-490)

MEDIA

- 11/30/21 Los Angeles Times: City was once the clam capital of the world. Then they vanished. Newspaper and online. (<https://www.latimes.com/projects/pismo-clams/>)
- 06/09/19 KVEC: Pismo Beach Today Show. Radio Show.
- 06/09/18 KSBY News: A new study aims to learn more about Pismo Beach clams. TV and Web.
- 05/05/18 The Tribune: Pismo's legendary clams are back - but don't plan a bake just yet. Newspaper and online.

TEACHING EXPERIENCE

Workshop Participant, Virginia Scientists & Educators Alliance, Gloucester Point, VA

Developing a K-12 lesson plan based on current research

In development 2023-2024

Graduate Teaching Fellow, College of William and Mary, Williamsburg, VA

Professional Development for Marine Scientists, undergraduate 1 credit seminar

In development for Sp24

Laboratory Instructor, California Polytechnic State University, San Luis Obispo, CA

Introduction to Organismal Form & Function, Undergraduate lab course, 7 sections; 2017-2020

Introduction to Ecology & Evolution, Undergraduate lab course, 2 sections; Fall 2018

Diversity & History of Life, Undergraduate lab course, 2 sections; Fall 2017

Guest Instructor, Santa Barbara City College

Invertebrate field sampling trip at Morro Bay, CA

PROFESSIONAL SERVICE AND ACTIVITIES

- 2022-Pres Member: Professional Development Committee; Virginia Institute of Marine Science
- 2021-2023 Student Rep: VIMS Academic Council (elected position)
- 2022 Member: ICES (International Council for the Exploration of the Sea) Student Review Group for Data Limited Stocks, Elasmobranch Fishes Advice Drafting Group
- 2021-2022 Student Rep: Search Committee VIMS Executive Director Advancement/Foundation
- 2020-2022 Co-Chair: National Shellfisheries Association
- 2019 Graduate Student Rep: Distinguished Scholarship Award Committee; Cal Poly

MENTORSHIP

- 2022-Pres Mentor: William and Mary Women's Mentoring (WM²)
- 2021-Pres Mentor: Molluscan Ecology Lab: Mentored 4 undergraduate researchers
- 2021-Pres Mentor: VIMS Graduate Student Association: Peer mentoring for first year students
- 2022 Panelist: Graduate School in Marine Science: VIMS Society for Women in Marine Science
- 2019 Presenter: Cal Poly Wildlife Club: Resume Workshop for Fisheries and Wildlife Science
- 2018-2020 Frost Research Mentor: Supervised 4 undergraduate research projects. Panelist for Graduate School Panel Q & A
- 2017-2020 Mentor: Pismo Clam Project, Cal Poly: Mentored 17 undergraduate students

SCIENCE COMMUNICATION AND OUTREACH

2021-Pres	Visiting Scientist, Skype a Scientist Program: 7 classroom matches
2023	VIMS Marine Science Day: Co-developed educational activities focused on molluscs
2020	Project Engage Richmond, VA: Meet a Marine Scientist: 1 session
2019	Pismo Beach Clam Festival: Led outreach table on current research and bivalve biology
2018	DIG Event Leader: Led two outreach days for high school students focused on bivalves
2015	Bat Blitz Organizer: Coordinated Biological Blitz for bats with local community college

PROFESSIONAL MEMBERSHIPS

2017-Pres	National Shellfisheries Association (Student Co-Chair 2020-2022)
2017-Pres	American Fisheries Association
2017-2021	Western Society of Naturalists
2018-2019	Graduate Women In Science
2017-2018	American Association for the Advancement of Science