

Heather Page

Assistant Professor of Oceanography
Specialization in Coral Reef Biological Oceanography
Sea Education Association
hpage@sea.edu | she/her

Education

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| PhD Oceanography | Scripps Institution of Oceanography, UC San Diego Advisor: Dr. Andreas Andersson Dissertation: Ocean Acidification on Coral Reefs: The effects of community composition on benthic metabolism and seawater carbonate chemistry | 2017 |
| MS Oceanography | Scripps Institution of Oceanography, UC San Diego | 2014 |
| BS Marine Biology & Environmental Science | University of North Carolina Wilmington University Honors, Honors in Biology, <i>magna cum laude</i> Advisor: Dr. Martin Posey Thesis: Biogeochemical effects on the adult oyster <i>Crassostrea virginica</i> feeding efficiency and condition | 2011 |

Postdoctoral and Faculty Appointments

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| Visiting Lecturer | University of Chicago's Marine Biological Laboratory | 2022 |
| Assistant Professor of Oceanography | Sea Education Association | 2019-Present |
| Postdoctoral Research Fellow | Mote Marine Laboratory's Elizabeth Moore International Center for Coral Reef Research and Restoration | 2018-2019 |

Publications

- Page HN**, Johnson M, McCoy S, Spencer R, Burnham K, Hewett C. 2023. Effects of ocean acidification on tropical macroalgae photo-physiology: implications for organic carbon cycling on coral reefs. *PLoS ONE*.
- Pezner AK, Courtney TA, Barkley HC, Chou W-C, Chu H-C, Clements SM, Cyronak T, DeGrandpre MD, Kekuewa SAH, Kline DI, Liant Y-B, Martz TR, Mitarai S, **Page HN**, Rintoul MS, Smith JE, Soong K, Takeshita Y, Tresguerres M, Wei Y, Yates KK, & Andersson AJ. 2023. Global coral reefs will experience moderate to severe hypoxia before the end of the century. *Nature Climate Change*. 13: 403-409.
- Page HN**, Bahr KD, Cyronak T, Jewett EB, Johnson M, McCoy SJ. 2022. Responses of benthic calcifying algae to ocean acidification differ between laboratory and field settings. *ICES Journal of Marine Science*. 0: 1-11.
- Burnham KA, Nowicki RJ, Hall ER, & Pi J, & **Page HN**. 2022. Effects of ocean acidification on the performance and interaction of fleshy macroalgae and a grazing sea urchin. *Journal of Experimental Marine Biology and Ecology*. 547: 151662.
- Page HN**, Hewett C, Thompkins H, Hall ER. 2021. Ocean acidification and direct interactions affect coral, macroalga, and sponge growth in the Florida Keys. *Journal of Marine Science and Engineering*. 9(7): 739.

- Pezner AK, Courtney TA, **Page HN**, Giddings SN, Beatty CM, DeGrandpre MD, & Andersson AJ. 2021. Lateral, vertical, and temporal variability of seawater carbonate chemistry at Hog Reef, Bermuda. *Frontiers in Marine Science*. 8: 562267.
- Gravinese PM, **Page HN**, Butler CB, Spadaro AJ, Hewett C, Considine M, Lankes D, & Fisher S. 2020. Ocean acidification disrupts the orientation of postlarval Caribbean spiny lobsters. *Scientific Reports* 10: 108092.
- Cyronak T, Takeshita Y, Courtney T, DeCarlo EH, Eyre BD, Kline D, Martz T, **Page HN**, Price N, Smith J, Stoltenberg L, Tresguerres M, & Andersson AJ. 2020. Diel temperature and pH variability scale with depth across diverse coral reef habitats. *Limnology and Oceanography Letters* 5(2): 193-203.
- Page HN**, Courtney TA, De Carlo EH, Koester I, Howins N, & Andersson AJ. 2019. Spatio-temporal dynamics in seawater carbonate chemistry for a coral reef flat in Kaneohe Bay, Hawaii. *Limnology and Oceanography* 64: 913-934.
- Cyronak T, Andersson AJ, Langdon C, Albright R, Bates NR, Caldeira K, Carlton R, Corredor J, Dunbar RB, Enochs I, Erez J, Eyre BD, Gattuso J-P, Gledhill D, Kayanne H, Kline DI, Koweek DA, Lantz C, Lazar B, Manzello D, McMahon A, Melendez M, **Page H**, Santos I, Schulz KG, Shaw E, Silverman J, Suzuki A, Tenenva L, Watanabe A, & Yamamoto S. 2018. Taking the metabolic pulse of the world's coral reefs. *PLoS ONE* 13(1): e0190872.
- Paulsen M-L, Andersson AJ, Aluwihare L, Cyronak T, D'Angelo S, Davidson C, Elwany H, Giddings S, Harvey M, **Page HN**, Porrachia M, & Schroeter S. 2018. Temporal changes in seawater carbonate chemistry and carbon export from a southern California estuary. *Estuaries and Coasts* 41: 1050-1068.
- Courtney TA, De Carlo EH, **Page HN**, Bahr KD, Barro A, Howins N, Tabata R, Terlouw G, Rodgers KS & Andersson AJ. 2017. Recovery of reef-scale calcification following a bleaching event in Kāneʻohe Bay, Hawaiʻi. *Limnology and Oceanography* 3(1): 1-9.
- Page HN**, Courtney TA, Collins A, De Carlo EH, & Andersson AJ. 2017. Net community metabolism and seawater carbonate chemistry scale non-intuitively with coral cover. *Frontiers in Marine Science* 4:161.
- Page HN**, Andersson AJ, Jokiel PL, Rodgers KS, Lebrato M, Yeakel K, Davidson C, D'Angelo S, & Bahr KD. 2016. Differential modification of seawater carbonate chemistry by major coral reef benthic communities. *Coral Reefs* 35(4): 1311-1325.
- Long WC, Swiney KM, Harris C, **Page HN**, & Foy RJ. 2013. Effects of ocean acidification on juvenile red king crab and Tanner crab. *PLoS ONE* 8(4): e60959.
- Hettinger A, Sanford E, Hill TM, Russell AD, Sato KN, Hoey J, Forsch M, **Page HN**, & Gaylord B. 2012. Persistent carry-over effects of planktonic exposure to ocean acidification in the Olympia oyster. *Ecology* 93(12): 2758-2768.

IN PREP, SUBMITTED, OR IN REVIEW

- Li Y, Jabaily RS, **Page HN**. Submitted. Benthic community variation of shallow coral reefs and the effect of herbivory on algae in the United States Virgin Islands. *Marine Biology*.

Research and Professional Experiences

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| Expert Reviewer Amplify | Provided expert review of Oceans reader for middle school students | 2023 |
| Postdoctoral Research Fellow Mote Marine Laboratory | Led a research program in the Florida Keys examining the response of coastal ecosystems, particularly coral reefs, to ocean acidification and environmental change. Experimental work studying the effects of ocean acidification on species interactions (e.g., competition, facilitation, herbivory, and settlement). Initiated monthly monitoring program for mangrove lagoon water chemistry. | 2018-2019 |
| Graduate Student Research Fellow Geosciences Research Division Scripps Institution of Oceanography | Conducted independent and collaborative research, including leading research teams, to study the influence of benthic metabolism on seawater carbonate chemistry. Assisted with variety of field research measuring carbonate chemistry of coastal ecosystems (coral reefs, estuaries, seagrass, and local coasts in San Diego). | 2012-2017 |
| Research Technician Coral Reef Ecology Laboratory University of North Carolina Wilmington | Developed techniques to culture dissociated coral cells and to measure pH regulation of these cells using fluorescent microscopy techniques. Mentored undergraduate honors student. | 2011-2012 |
| Research Technician Benthic Ecology Laboratory University of North Carolina Wilmington | Coordinated and led laboratory experiments testing the effects of inorganic sediments on oyster feeding physiology. Coordinated and led processing of sediment core samples for analysis of infaunal communities. Assisted with a variety of fieldwork examining the effects of coastal development on oyster reef health. | 2011-2012 |
| Directed Independent Study Dept. of Biology and Marine Biology University of North Carolina Wilmington | Developed methodologies to study pH homeostasis of coccolithophores using fluorescent microscopy techniques. | 2011 |
| Field Methods in Tropical Marine Ecology Course Bermuda Institute of Ocean Sciences/ University of North Carolina Wilmington | Spring break study abroad program. Collaboratively conducted field research in tropical marine ecosystems including mangroves, seagrasses, and coral reefs. Completed two research projects in one week. | 2011 |
| Hollings Scholars Program Intern Kodiak Fisheries Research Center NOAA | Conducted independent research examining the effects of ocean acidification on juvenile Tanner crab survival and growth. | 2010 |

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| <p>NSF REU Intern Bodega Marine Laboratory</p> | <p>Conducted collaborative research studying the effects of ocean acidification on larval oyster growth. Independently examined the metabolic response of larval oysters. Received training in science ethics, scientific writing, and presenting science.</p> | <p>2009</p> |
| <p>Directed Independent Study Benthic Ecology Laboratory University of North Carolina Wilmington</p> | <p>Conducted collaborative research examining the effects of inorganic sediments on oyster growth.</p> | <p>2009</p> |
| <p>Undergraduate Laboratory Assistant Benthic Ecology Laboratory University of North Carolina Wilmington</p> | <p>Assisted with processing sediment samples for infaunal communities and conducting field studies to examine the health of oyster reefs in local estuaries.</p> | <p>2008-2011</p> |
| <p>Aquatic Husbandry Intern Newport Aquarium University of North Carolina Wilmington</p> | <p>Assisted with daily care of animals in the Dangerous and Deadly exhibit. Monitored growth of juvenile Amazon turtles. Researched compatibility of fishes to be added to existing exhibits.</p> | <p>2008</p> |

Teaching and Outreach Experiences

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| <p>Instructor Academic Connections UC San Diego</p> | <p>Co-taught <i>Marine Invertebrates</i> during July for this 3-week college experience for high-achieving high school students.</p> | <p>2017</p> |
| <p>Teaching Assistant UC San Diego</p> | <p>Led discussion seminars twice a week for an undergraduate course titled <i>Physics and Chemistry of the Oceans</i>. Assisted with curriculum design and grading course materials.</p> | <p>2017</p> |
| <p>Instructor Academic Connections UC San Diego</p> | <p>Created and co-taught <i>Ocean Acidification</i> during July for this 3-week college experience for high-achieving high school students.</p> | <p>2016</p> |
| <p>Coordinator Scripps Community Outreach for Public Education</p> | <p>Coordinated over 70 outreach events (e.g. tours of research facilities, classroom visits, career fairs, etc.) per year. Started scholarship program that provides funds for local teachers from Title I schools to bring K-12 students to SIO. Initiated quarterly training for graduate students, staff, and faculty to instill confidence in communicating science through tours of research facilities.</p> | <p>2013-2017</p> |
| <p>Ecology Seminar Series Organizer Scripps Institution of Oceanography</p> | <p>Invited speakers and coordinated seminar series for five weeks. Hosted five speakers on campus which included advertising seminar, coordinating lunch with the speaker, and arranging one-on-one meetings.</p> | <p>2013</p> |
| <p>Volunteer Scripps Community Outreach for Public Education</p> | <p>Participated in 5-10 outreach events per year ranging from leading tours of research facilities at SIO to presentations at schools and to local organizations.</p> | <p>2012-2017</p> |

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| NSF Teaching Fellowship in K-12 Education Scripps Institution of Oceanography | Partnered with a high school teacher to develop a curriculum using marine science to address Next Generation Science Standards that is now available online. Assisted in the classroom for the academic year 2013-2014 and taught the curriculum that the teacher and I developed together. | 2013-2014 |
| Summer Camp Instructor Cincinnati Zoo | Taught full-day and half-day zoo camps for kids aged 3-12. | 2012 |
| Educator Newport Aquarium | Taught visitors about marine animals and ecosystems at the aquarium. Monitored guest-animal interactions at several exhibits. | 2006-2007 |

Sea-going Experiences

Scientific and Academic Grants, Fellowships, and Awards

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| Chief Scientist | Pacific Reef Expedition | Sea Education Association | 2023 | 18 days |
| Chief Scientist | Caribbean Colleague Sail | Sea Education Association | 2023 | 5 days |
| Chief Scientist | Caribbean Reef Expedition | Sea Education Association | 2022 | 31 days |
| Chief Scientist | SEA Expedition | Sea Education Association | 2022 | 14 days |
| Chief Scientist | Graduate Student Cruise | MIT-WHOI Joint Program | 2022 | 5 days |
| Chief Scientist | Partnership in Education Program Cruise | Sea Education Association | 2022 | 5 days |
| Chief Scientist | Spring Semester: Biological Oceanography | University of Chicago MBL | 2022 | 10 days |
| Chief Scientist | Caribbean Reef Expedition | Sea Education Association | 2021 | 31 days |
| Chief Scientist | Science at SEA | Sea Education Association | 2021 | 14 days |
| Chief Scientist | Caribbean Reef Expedition: Florida Reef | Sea Education Association | 2020 | 31 days |
| Chief Scientist | Caribbean Reef Expedition | Sea Education Association | 2019 | 31 days |
| Deckhand | SEA Expedition | Sea Education Association | 2019 | 10 days |
| Visiting Scientist | Caribbean Reef Expedition | Sea Education Association | 2018 | 7 days |
| Science Technician | I08S Oceanographic Research Cruise | GO-SHIP/SIO | 2016 | 42 days |
| Mote Marine Laboratory Protect Our Reefs Grant (co-PI; \$17,795.11) | | | 2019 | |
| Mote Marine Laboratory Becker Research Experience for Undergraduate Fund (\$1,200) | | | 2019 | |
| Phycological Society of America Grant-In-Aid (\$2,500) | | | 2019 | |

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| Mote Marine Laboratory Postdoctoral Fellowship | 2018 |
| Scripps Institution of Oceanography Graduate Student Excellence Travel Award | 2016 |
| Foundation of Science and Disability Graduate Scholarship | 2016 |
| National Science Foundation Graduate Research Fellowship | 2013 |
| National Science Foundation Graduate STEM Fellowship in K-12 Education | 2013 |
| Scripps Institution of Oceanography Tegner Research Award | 2013 |
| Association of Women in Science San Diego Chapter Scholarship | 2013 |
| University of California San Diego Graduate Diversity Fellowship | 2012 |
| UNCW Center for Marine Science Undergraduate Research Fellowship Grant | 2011 |
| UNCW Distinguished Undergraduate Research Scholar | 2011 |
| UNCW J. Marshall Crews Scholarship for Science | 2010 |
| UNCW Department of Biology and Marine Biology Jay Hensley Endowed Scholarship | 2010 |
| NOAA Hollings Scholarship Award | 2009 |
| Western Society of Naturalists Best Student Poster Award | 2009 |
| UNCW Department of Biology and Marine Biology Jay Hensley Endowed Scholarship | 2009 |

Presentations

Conference Presentations (*Students mentored)

- Page, HN & Marin C. 2023. *SEA's New Directions: Fully Shore-based programs to increase connections with coastal communities*. NEOSEC Ocean Literacy Summit. Gloucester, MA.
- Pezner, AK, Courtney, TA, **Page, HN**, Beatty, C, DeGrandpre, MD, Giddings, S, & Andersson, AJ. 2020. *Lateral, vertical, and temporal variability of seawater carbonate chemistry at Hog Reef, Bermuda*. Ocean Sciences Meeting. San Diego, CA.
- Considine, M*, Hewett, C*, Lankes, D*, Nowicki, R, & **Page, H**. 2019. *Effects of ocean acidification on herbivore-macroalgae interactions*. Benthic Ecology Meeting. St. Johns, Newfoundland. Poster.
- Page, HN**, Gravinese, P, Hall, ER, Nowicki, R, Spadaro, J, & Butler, C. 2019. *Coral reef species interactions under ocean acidification*. Benthic Ecology Meeting. St. Johns, Newfoundland. Poster.
- De Carlo, EH, Knor, L, Howins, N, Mackenzie, FT, Sabine, CL, Musciulewicz, S, Sutton, A, Courtney, TA, **Page, HN**, & Andersson, AJ. 2019. *A decade of CO₂ system observations at the coastal ocean Hawaii acidification network (COHAN): What have we learned?* The 4th Global Ocean Acidification Observing Network (GOA-ON) International Workshop. Hangzhou, China.
- Page, HN**, Andersson, A, Courtney, T, De Carlo, EH, Koester, I, Howins, N, Lebrato, M, Rodgers, K, & Bahr, K. 2018. *Importance of coral reef community composition and benthic metabolism to seawater carbonate chemistry: Implications for ocean acidification*. Ocean Sciences Meeting. Portland, OR.
- Page, HN**, Nagarkar, M, Jones-Cervantes, SA, Nesbit, K, & Wolfe, W. 2018. *SCOPE: Scripps Community Outreach in Public Education*. Ocean Sciences Meeting. Portland, OR. Poster.
- Cyronak, T, Andersson, AJ, Courtney, T, De Carlo, EH, Eyre, B, Kline, DI, Martz, TR, **Page, H**, Price, N, Smith, J, Stoltenberg, L, Takeshita, Y, Tresguerres, M, & Kekuewa, S. 2018. *Variability of seawater carbonate chemistry within diverse coastal habitats across different spatiotemporal scales*. Ocean Sciences Meeting. Portland, OR.
- Cyronak, T, Andersson, AJ, Courtney, T, DeCarlo, E, Eyre, BD, Kline, DI, Martz, T, **Page, H**, Price, N, Smith, JE, Stoltenberg, L, Takeshita, Y, & Tresguerres, M. 2017. *Synthesizing the spatiotemporal variability of*

- seawater temperature and pH across diverse reef zones*. Chemical Oceanography Gordon Research Conference. New London, NH. Poster.
- Courtney, TA, Andersson, AJ, DeCarlo, EH, **Page, HN**, Koester, I, Terlouw, G, Tabata, R, Bahr, KD, & Rodgers, KS. 2017. *Coral bleaching impacts on reef-scale net calcification and net community production in Kaneohe Bay, HI*. ASLO Aquatic Sciences Meeting. Honolulu, HI.
- Page, HN**, Andersson, AJ, Courtney, TA, DeCarlo, EH, Koester, I, & Howins, N. 2017. *Importance of coral reef community composition and benthic metabolism to seawater pH: implications for ocean acidification*. Benthic Ecology Meeting. Myrtle Beach, SC.
- Page, HN**, Andersson, AJ, Jokiel, P, Rodgers, KS, Lebrato, M, Yeakel, K, Davidson, C, D'Angelo, S, & Bahr, K. 2016. *Differential modifications of seawater carbonate chemistry by major coral reef benthic communities*. International Coral Reef Symposium. Honolulu, HI.
- Page, HN**, Andersson, AJ, Jokiel, P, Rodgers, KS, Lebrato, M, Yeakel, K, Davidson, C, D'Angelo, S, & Bahr, K. 2015. *Differential effects of reef benthic communities on seawater carbonate chemistry*. Western Society of Naturalists Meeting. Sacramento, CA.
- Page, HN**, Patin, N, & Wilson, S. 2014. *Scripps Community Outreach in Public Education*. Ocean Sciences Meeting. Honolulu, HI. Poster.
- Page, HN**, Yeakel, K, Jokiel, P, Rodgers, K, Lebrato, M, Davidson, C, Bahr, K, & Andersson, AJ. 2014. *Diel trends in net community calcification and production rates for different benthic communities exposed to ambient and acidified seawater*. Ocean Sciences Meeting. Honolulu, HI. Poster.
- Page, HN**, Posey, M, & Alphin, TD. 2013. *Particle overload! The Eastern oyster's role in biogeochemical cycling under chronic exposure of sediment and nitrate*. CERF Conference. San Diego, CA. Poster.
- Page, HN**, & Taylor, A. 2011. *Effect of extracellular pH on intracellular pH homeostasis in calcifying Scyphosphaera apsteinii: Development of methods to study intracellular pH in coccolithophores*. University of North Carolina Wilmington Research Showcase. Wilmington, NC. Poster.
- Page, HN**, Posey, M, & Alphin, TD. 2011. *Biogeochemical effects on the adult oyster Crassostrea virginica feeding efficiency and condition*. University of North Carolina Wilmington Research Showcase. Wilmington, NC. Poster.
- Page, HN**, Posey, M, & Alphin, TD. 2011. *Impact of elevated total suspended solids and nitrate load on feeding efficiency and condition of the Eastern oyster Crassostrea virginica*. Colonial Academic Alliance Conference. Hampstead, NY. Poster.
- Page, HN**. 2010. *Effect of ocean acidification on juvenile Tanner crab, Chionoecetes bairdi, survival and growth*. NOAA Symposium. Silver Springs, MD.
- Page, HN**, Hettinger, A, Gaylord, B, Sanford, E, Hill, T, Russell, A, Forsch, M, & Sato, K. 2010. *The effects of ocean acidification on the respiration rates and growth of Olympia Oyster Ostrea lurida larvae*. Benthic Ecology Meeting, Wilmington, NC. Poster.
- Page, HN**, Hettinger, A, Gaylord, B, Sanford, E, Hill, T, Russell, A, Forsch, M, & Sato, K. 2009. *The effects of ocean acidification on the respiration rates and growth of Olympia Oyster Ostrea lurida larvae*. Western Society of Naturalists Conference, Monterey, CA. Poster. Best Poster Award.
- Page, HN**, Hettinger, A, & Gaylord, B. 2009. Symposium: *The effects of ocean acidification on the respiration rates and protein synthesis of Olympia Oyster Ostrea lurida larvae*. Research Experience for Undergraduates.

Invited Seminars

See the Sea: Inclusion and accessibility for at-sea education and research experiences. PaleoPERCS Seminar Series on Inclusive Fieldwork. 2022. Remote.

Sea Education Association: Documenting Global Change in World's Ocean and Coral Reefs. University of Rhode Island Fall Lecture Series. 2020. Remote.

Coral reefs in a changing ocean. SEA Class on the Quarterdeck Seminar Series. 2020. Remote.

Corals, seaweeds, and sponges, oh my! Coral reefs in an acidifying ocean. Mote Marine Laboratory and Aquarium Special Lecture Series. 2018. Sarasota, FL.

The effects of ocean acidification on biological controls of seawater pH. Hawaii Institute of Marine Biology Special Seminar. 2014. Kaneohe, HI.

The effects of ocean acidification on the respiration rates and protein synthesis of Olympia Oyster *Ostrea lurida* larvae. 2009. Bay Area Symposium of Undergraduate Research Experiences. San Francisco, CA.

Invited Guest Lectures

Coral reef conservation in era of global climate change. Pace Academy. Sea Education Association. 2023. Woods Hole, MA.

Coral reef conservation: Understanding ecosystem response to ocean acidification. Introduction to Oceanography class at Colgate University. 2023. Hamilton, NY.

Ocean acidification and coral reefs: stories from the field. Pre-College Program. Sea Education Association. 2023. Woods Hole, MA.

Ocean acidification: a carbon story. Marine Biodiversity and Conservation. Sea Education Association. 2023. Woods Hole, MA.

Ocean acidification: a carbon story. The Ocean and Global Change class for Climate and Society. Sea Education Association. 2023. Woods Hole, MA.

Anthropogenic impacts on coral reefs: Biogeochemistry and ecology perspectives. Marine Biology class at SUNY-ESF. 2022. Remote.

Introduction to coral reefs. Oceanography for Ocean Exploration and Atlantic Odyssey. Sea Education Association. 2022. Woods Hole, MA.

Introduction to Coral Reefs. Oceanography for SEA Quest. Sea Education Association. 2021. Remote.

Ocean acidification on coral reefs: understanding human impacts through research and monitoring. Coral Seminar. SUNY-ESF. 2021. Remote.

Introduction to Coral Reefs. Oceanography for SEA Quest. Sea Education Association. 2020. Remote.

Coral reefs in a changing climate. Introduction to Biology. Art Academy of Cincinnati. 2018. Cincinnati, OH.

Invited Panels

Graduate School Information Session. Accessible Sharks REU Program at Yale University. 2023. Remote.

Accessibility in Fieldwork. Disabled Empowerment in Higher Education Month. 2021. Remote.

Outreach Presentations

Coral reefs in a changing climate. Renaissance Secondary School. 2023. Remote.

Exploring the Ocean: How I became an oceanographer. Lancaster Middle School. 2021. Remote.

Caribbean Reef Expedition: Investigating global change on coral reefs. Wake Forest Rotary Club. 2020. Remote.

Coral reefs in a changing climate. Newport Aquarium Lunch and Learn. 2020. Newport, KY.

A window to the future: How will marine ecosystems respond to ocean acidification? Tennessee high school biology class. 2019. Remote.

A window to the future: How will marine ecosystems respond to ocean acidification? High school classes at Mote's International Center for Coral Reef Research and Restoration. 2019. Summerland Key, FL.

A window to the future: What will coral reefs look like in 2100? Fifth grade classes at Mote's International Center for Coral Reef Research and Restoration. 2019. Summerland Key, FL.

Past, present, and future of coral reefs in the Florida Keys. Venture Out Boat Club Meeting. 2018. Summerland Key, FL.

Coral reefs in a changing ocean. Reef Relief Annual Meeting. 2018. Key West, FL.

Corals, seaweeds, and sponges, oh my! Coral reefs in an acidifying ocean. Science Spotlight at Divers Direct. 2018. Key West, FL.

Ocean acidification on coral reefs. Florida Keys Advisory Council Meeting. 2018. Summerland Key, FL.

Corals, seaweeds, and sponges, oh my! Coral reefs in an acidifying ocean. Library Lecture Series. 2018. Marathon Key, FL.

Ocean acidification on coral reefs. AARP Big Pine Key Chapter Dinner and Meeting. 2018. Big Pine Key, FL.

Corals, seaweeds, and sponges, oh my! Coral reefs in an acidifying ocean. Mote Marine Laboratory and Aquarium Coffee with a Scientist. 2018. Boca Grande, FL.

Mentorship

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| Pike Li, Colorado College Undergraduate Thesis | 2023 |
| Katherine Burnham, Mote Research Experience for Undergraduates Intern | 2019 |
| Katherine Burnham, Mote College Program Intern | 2019 |
| David Lankes, Mote College Program Intern | 2018-2019 |
| Clay Hewett, Mote College Program Intern | 2018-2019 |
| Megan Considine, Mote College Program Intern | 2018 |
| Hayden Tompkins, Mote College Program Intern | 2018 |
| Amanda Kirkland, Mote College Program Intern | 2018 |
| Hanyu Wang, University of San Diego Undergraduate Student | 2017 |
| Kea Payton, UNCW Undergraduate Honors Student | 2011-2012 |

Workshops

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| Unlearning Racism in Geosciences (URGE) | 2021 |
| Science Communication Workshop at the Benthic Ecology Meeting | 2017 |
| ComSciCon in San Diego | 2016 |

Certifications

Lifeguarding with CPR/AED for Professional Rescuers and First Aid, AAUS Scientific Diver, NAUI Rescue Diver, NAUI Nitrox Diver, NSF Responsible Conduct of Research, PADI Advanced Open Water Diver, PADI Open Water Diver

Service

Academic: New England Ocean Science Education Consortium (2020-present), SEA Faculty Senate Co-Chair (2021-present), International Coral Reef Society Education Committee (2016-present)

Diversity, Equity, and Inclusion: SEA DEI Committee (2023-present), SEA DEI Task Force (Co-Chair; 2021-2023), Ocean Sciences Meeting URGE Town Hall (Co-Chair; 2022)

Peer Review: for scientific journals including *Frontiers in Marine Science*, *Biology Letters*, and *Limnology and Oceanography*