

KEISHA D. BAHR

Department of Life Sciences | Texas A&M University – Corpus Christi
 6300 Ocean Drive, Unit 5800 Corpus Christi, TX 78412-5800
 Keisha.Bahr@tamucc.edu | www.BahrLab.com | [Google Scholar Profile](#)
 ORCID: 0000-0002-8092-833X

EDUCATION

2012 – 2016	Doctor of Philosophy in Zoology: Specialization in Marine Biology University of Hawai‘i at Mānoa Advisor: Dr. Paul Jokiel (<i>deceased</i>) Title: <u>The interactive effects of ocean acidification and local physical stressors on Hawaiian reef corals</u>
2010 – 2012	Bachelor of Science of Marine Biology University of Hawai‘i at Mānoa
2007 – 2010	Bachelor of Science of Environmental Science & Policy Coursework University of South Florida

POSITIONS HELD

2022 – present	Research Fellow. Harte Research Institute for Gulf of Mexico Studies
2019 – present	Assistant Professor of Biology. Department of Life Sciences Texas A&M University – Corpus Christi
2016 – 2019	Postdoctoral Researcher. Laboratory of Robert Toonen. Hawai‘i Institute of Marine Biology, University of Hawai‘i Mānoa
2017 – 2023	Instructor. Outreach College, University of Hawai‘i at Mānoa

PUBLICATIONS

TOTAL: 30 | FIRST-AUTHORED: 14 | CITATIONS: 987 | H-INDEX: 17 | §UNDERGRAD ‡GRAD MENTEE

PEER-REVIEWED

2024

30. ‡Epps AM, MN Bruce, M Gates, **KD Bahr** (2024). *Cryptic corals thriving in dynamic environments may hold key insights into future coral reefs.* Estuarine, Coastal, and Shelf Science

2023

29. §Herrera G, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and **KD Bahr** (2023). Using coral color to indicate coral health in five Caribbean species. American Journal of Undergraduate Research. 20 (1) pg 27-37

28. Preuss MD, JA Avila, KL Butler-Purry, S Walton, A Myint, MC Alves, J Walewski, Z Medina Cetina, K Withers, **KD Bahr**, S Sentz, and B Szczerbinska (2023). Case study: International summer research experiences sponsored by TAMUS LSAMP. ASEE 2023 Annual Conference & Exposition. <https://strategy.asee.org/43139>

2022

27. Vicente J, MA Timmers, MK Webb, **KD Bahr**, CP Jury and RJ Toonen (2022). Ecological succession of the sponge cryptofauna in Hawaiian reefs add new insights to detritus production by pioneering species. Scientific Reports <https://www.nature.com/articles/s41598-022-18856-8>

26. Preuss MD, H Zhang, J Hogan, B Szczerbinska, K Withers, **KD Bahr**, S Garcia, M Alves, A Myint, MD Preuss, S Merriweather, S Walton, KL Butler-Purry (2022). Designing international research experiences to engage underrepresented minority undergraduates and introduce them to graduate school. 2022 ASEE Annual Conference & Exposition. <https://peer.asee.org/41143>

25. Page HN, **KD Bahr**, T Cyronak, L Jewett, M Johnson, SJ McCoy (2022). Responses of benthic

calcifying algae to ocean acidification differ between laboratory and field settings. *ICES Journal of Marine Science* 79(1)pp 1-11 <https://doi.org/10.1093/icesjms/fsab232>

2021

24. Timmers M, CP Jury, J Vicente, **KD Bahr**, MK Webb, RJ Toonen (2021) Biodiversity of coral reef cryptobiota shuffles but does not decline under the combined stressors of ocean warming and acidification. *Proceedings of the National Academy of Science* DOI: 10.1073/pnas.2103275118
23. Vicente J, M Webb, G Paulay, W Rakchai, M Timmers, CP Jury, **KD Bahr**, and RJ Toonen (2022) Unveiling hidden sponge biodiversity within the Hawaiian reef cryptofauna. *Coral Reefs*. <https://doi.org/10.1007/s00338-021-02109-7>
22. ‡Good AM and **KD Bahr** (2021). The Coral Conservation Crisis: Interacting Local and Global Stressors Reduce Reef Resiliency and Create Challenges for Conservation Solutions. Invited Review, *SN Applied Sciences*. DOI: 10.1007/s42452-021-04319-8
21. Grottoli AG, RJ Toonen, R van Woesik, R Vega Thurber, ME Warner, RH McLachlan, J Price, **KD Bahr**, IB Baums, K Castillo, MA Coffroth, R Cunning, K Dobson, M Donahue, J Hench, R Iglesias-Prieto, DW Kemp, CD Kenkel, D Kline, IB Kuffner, J Matthews, A Mayfield, J Padilla-Gamino, S Palumbi, CR Voolstra, VM Weis, HC Wu (2021). Increasing comparability among coral bleaching experiments. *Ecological Applications*. <https://doi.org/10.1002/eap.2262>

2020

20. **Bahr KD**, SJL Severino, A Tsang, J Han, A Richards Dona, YO Stender, RM Weible, A Graham, A McGowan, KS Rodgers (2020). The Hawaiian Ko‘a Card: Coral health and bleaching assessment color reference card for Hawaiian corals. *SN Applied Sciences*. DOI: 10.1007/s42452-020-03487-3
19. ‡Barnhill KA, N Jogee, C Brown, A McGowan, KS Rodgers, I Bryceson, and **KD Bahr** (2020). Acclimatization Drives Differences in Reef-Building Coral Calcification Rates. *Diversity, Special Issue: Coral Reef Ecology and Biodiversity*. Diversity 12 (9), 347
18. **Bahr KD**, Tran T, CP Jury, and RJ Toonen (2020). Abundance, size, and survival of *Pocillopora acuta* recruiting in ocean warming and acidification conditions. *PLoS One*. <https://doi.org/10.1371/journal.pone.0228168>
17. **Bahr KD**, KS Rodgers, PL Jokiel, NG Prouty, and CD Storlazzi (2020). Pulse sediment event does not impact the metabolism of a mixed coral reef community. *Ocean and Coastal Management*. <https://doi.org/10.1016/j.ocecoaman.2019.105007>

2019

16. ‡Barnhill KA and **KD Bahr** (2019). Coral Resilience at Malauka‘a Fringing Reef, Kāne‘ohe Bay, O‘ahu after 18 years. *Journal of Marine Science and Engineering: Special Issue Coral Reef Resilience*. 7, 311; doi:10.3390/jmse7090311

2018

15. **Bahr KD**, DM Coffey, KS Rodgers, and GH Balazs (2018). Observations of a rapid decline in invasive macroalgal cover likely caused by green turtle grazing in a Hawaiian marine reserve. *Micronesica*. 2018-07, 11pp. <http://micronesica.org/volumes/2018>
14. **Bahr KD**, KS Rodgers, and PL Jokiel (2018). Ocean warming drives decline in coral metabolism while acidification highlights species-specific responses. *Marine Biology Research*. DOI: 10.1080/17451000.2018.1551616
13. Burns JHR, KJ Johnson-Sapp, **KD Bahr**, A Fukunaga, D Swatland, R Kosaki (2018). Innovative 3D imaging tools for assessing damages to coral reef habitats caused by grounding events. *DOC Marine Conservation Services series*, ONMS-18, 03, 1-88.
12. *Coles SL, ***KD Bahr**, KS Rodgers, S May, A McGowan, A Tsang, and Ji Hoon Han (2018). Evidence of acclimatization or adaptation in Hawaiian corals to higher ocean temperatures. *PeerJ* 6:e5347; DOI: 10.7717/peerj.5347
*Authors contributed equally
11. Courtney TA, EH De Carlo, HN Page, **KD Bahr**, A Barro, N Howins, R Tabata, G Terlouw,

KS Rodgers, AJ Andersson (2018). Recovery of reef-scale calcification following a bleaching event in Kāneʻohe Bay, Hawaiʻi. *Limnology and Oceanography Letters*.
DOI: 10.1002/lol2.10056

2017

10. **Bahr KD**, KS Rodgers, and PL Jokiel (2017). Impact of three bleaching events on the reef resiliency of Kāneʻohe Bay, Hawaiʻi. *Frontiers in Marine Science: The Future of Coral Reefs Subject to Rapid Climate Change: Lessons from Natural Extreme Environments*.
<https://doi.org/10.3389/fmars.2017.00398>
9. *Rodgers KS, ***KD Bahr**, PL Jokiel, and A Richards Dona (2017). Patterns of bleaching and mortality following widespread warming events in 2014 and 2015 at the Hanauma Bay Nature Preserve, Hawaiʻi. *PeerJ* 5:e3355 <https://doi.org/10.7717/peerj.3355>
*Authors contributed equally
Top 5 most viewed article in Climate Change Biology and Environmental Sciences
8. **Bahr KD**, PL Jokiel, and KS Rodgers (2017). Seasonal and annual growth rates of the Hawaiian reef coral, *Montipora capitata*, under present and future climate change scenarios. *ICES Journal of Marine Science Special Issue: Ocean Acidification*.
DOI:10.1093/icesjms/fsw078

2016

7. Page HN, AA Andersson, PL Jokiel, KS Rodgers, K Yeakel, M Lebrato, C Davidson, SD D'Angelo, and **KD Bahr**. (2016) Differential modification of seawater carbonate chemistry by major coral reef benthic communities. *Coral Reefs*.
DOI: 10.1007/s00338-016-1490-4
6. **Bahr KD**, PL Jokiel, and KS Rodgers. (2016). Influence of solar irradiance on underwater temperature recorded by temperature loggers on coral reefs. *Limnology and Oceanography: Methods*. DOI: 10.1002/lom3.10093
5. **Bahr KD**, KS Rodgers, and PL Jokiel. (2016). Relative sensitivity of five Hawaiian coral species to high temperature under high-pCO₂ conditions. *Coral Reefs*.
DOI:10.1007/s00338-016-1405-4

2015

4. **Bahr KD**, KS Rodgers, PL Jokiel. (2015). The 2014 coral bleaching and freshwater flood events in Kāneʻohe Bay, Hawaiʻi. *Peer J* 3:e1136 <https://dx.doi.org/10.7717/peerj.1136>
3. **Bahr KD**, PL Jokiel, and RJ Toonen. (2015). The unnatural history of Kāneʻohe Bay: Coral reef resilience in the face of centuries of anthropogenic impacts. *PeerJ* 3:e950;
DOI: 10.7717/peerj.950. *Invited Review*.
2. **Bahr KD**, KS Rodgers, and PL Jokiel. (2015). Recent freshwater reef kill event in Kāneʻohe Bay, Hawaiʻi. *International Society for Reef Studies: Reef Encounter*. 30(1): 42-43.

2014

1. Jokiel PL, **KD Bahr**, and KS Rodgers. (2014). Low-cost, high-flow mesocosm system for simulating ocean acidification with CO₂. *Limnology and Oceanography: Methods*. 12: 313-322. DOI: 10.4319/lom.2014.12.313

SUBMITTED AND IN PREPARATION

8. Epps AM, BD Walther, **KD Bahr (in review)**. Environmental variability effects on stable isotope analyses: a case study of ahermatypic corals residing in a dynamic estuarine system. *Estuaries, Coastal, and Shelf Science*.
7. Eakin CM, DA Devotta, SF Heron, SR Connolly, ... **KD Bahr.**, et al. (*in review*). The 2014-17 Global coral bleaching event: The most severe and widespread coral reef destruction. *Nature Preprint available: <https://www.researchsquare.com/article/rs-1555992/v1>*
6. Jury CP, **KD Bahr**, E Barba, R Brainard, KL Dobson, A Graham, R McLachlan, C Nelson, JT

- Price, M Rocha de Souza, L Shizuru, C Smith, W Sparagon, C Squair, M Timmers, T Tran, J Vicente, M Webb, NH Yamase, A Grottoli, RJ Toonen (*in review*). Experimental reef communities persist under future ocean acidification and warming. *PNAS*. Preprint available: <https://www.researchsquare.com/article/rs-640089/v1>
5. ‡Sesno EE, **KD Bahr**, AS Huffmyer, JD Lemus (*in review*). Ocean acidification reduces skeletal density in proximal spines of Hawaiian collector urchins, *Tripneustes gratilla*. *Marine Environmental Research*
 4. Hankins C, KD Bahr, D White, Y Jones, A Glahn, W Lehmann, WS Fisher, V Kosmynin (*in review*). Effects of fine calcium carbonate sediment on two Atlantic scleractinian corals, *Montastraea cavernosa* and *Stephanocoenia intersepta*. *Frontiers in Marine Science: Coral Reef Research*.
 3. **Bahr KD** and G Baghdasarian (*in prep*) Ocean warming drives declines in coral calcification rates, while ocean acidification weakens bulk skeletal density.
 2. ‡Tripler AS, C McNicholl, ‡E Tenbrink, KS Rodgers, **KD Bahr** (*in prep*). Two color morphs of the coral *Montipora capitata* exhibit short-term resistance to altered seawater chemistry conditions.
 1. **Bahr KD**, M Timmers, J Vicente, CJ Jury, A Graham and RJ Toonen (*in prep*). The effects of ocean warming and acidification on reef biodiversity using Autonomous Reef Monitoring Structures (ARMS).

BOOKS

1. Douglas MR, **KD Bahr**, and R Olson. 2022. The Narrative Gym for Science Graduate Students and Postdocs: Using the ABT Framework for Proposals, Papers, Presentations, and Life in General. Praire Starfish Press. 95 pages.

TECHNICAL REPORTS

6. Rogers KS, **KD Bahr**, AT Graham, JJ Han, AE McGowan, SJL Severino, YO Stender, AO Tsang, and RW Weible. Hawai'i Institute of Marine Biology's Lilipuna Pier Floating Dock Relocation Project. Prepared for US Army Corps of Engineers and NOAA National Marine Fisheries Service: Pacific Islands Regional Office.
5. Burns JHR, K Johnson-Sapp, **KD Bahr**, A Fukunaga, D Swatland, R Kosaki (2018). Assessment of reef damage caused by a stranded weather buoy in the Papahānaumokuākea Marine National Monument. Marine Sanctuaries Conservation Series. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD.
4. Rodgers KR, **KD Bahr**, YO Stender, K Stender, A Richards Donà, R Weible, A Tsang, JJ Han, AE McGowan. (2017) 2017 Recovery Assessment and Long-term Monitoring of Reef Coral Communities at Pila'a Reef, Kaua'i. Report Prepared for: Department of Land and Natural Resources, Division of Aquatic Resources.
3. Rodgers KR, **KD Bahr**, YO Stender, K Stender, A Richards Donà, R Weible, A Tsang, JJ Han, AE McGowan. (2017). 2016 Long-term Monitoring and Assessment of Hanalei Bay, Kaua'i. Report Prepared for: Department of Land and Natural Resources, Division of Aquatic Resources.
2. Rodgers KR, **KD Bahr**, YO Stender, K Stender, A Richards Donà, R Weible, A Tsang, JJ Han, AE McGowan. (2017). 2016 Long-term Monitoring and Assessment of the Hā'ena, Kaua'i Community Based Subsistence Fishing Area. Report Prepared for: Department of Land and Natural Resources, Division of Aquatic Resources.
1. Jokiel PL, **KD Bahr**, KS Rodgers. (2013). Synergistic Impacts of Global Warming and Ocean Acidification on Coral Reefs. Pacific Islands Climate Change Cooperative Final Report.

THESES

- 2016 Bahr KD (2016). The interactive effects of ocean acidification and local physical stressors on Hawaiian reef corals. Zoology Graduate Program, University of Hawai'i at Mānoa.

RESEARCH GRANTS

Total Funding: \$6,590,455 (Bahr portion: \$1,892,593)

External Funding: \$6,506,455(Bahr portion \$1,831,593) Internal: \$84,000 (Bahr portion \$61,000)

Bahr-mentored Student Grants: \$145,934 (not included in total funding)

RESEARCH GRANTS AWARDED

2024 – 2025	NSF, Biological Oceanography Program – PI <i>Geoscience Research Experiences for Undergraduate Students (GEO-REU) Supplemental Funding.</i> Bahr portion: \$44,000 Award # 2049406	\$44,000
2024 – 2025	NSF, Biological Oceanography Program – PI <i>Covid-19 Supplemental Funding</i> Bahr portion: \$43,452 Award # 2049406	\$43,452
2023 – 2027	NOAA – Marine Carbon Removal Initiative – PI <i>Effect and risks of ocean alkalinity enhancement on the physiology, functionality, calcification, and mineralogy of corals and rhodolith coralline algae in the Pacific.</i> Bahr portion: \$419,207 Award # NA23OAR0170507	\$1,999,835
2023 – 2027	NOAA RESTORE Program – PI <i>DECORATE: Developing an Ecosystem-based Conservation framework for Oyster Reefs Across Texas Estuaries.</i> Bahr Portion: \$162,120 Award # NA23NOS4510300	\$1,996,417
2023 – 2024	Florida Department of Environmental Protection – PI <i>Defining suspended sediment tolerance and warming thresholds for Caribbean Endangered Species Act (ESA) and/or Stony Coral Tissue Loss Disease (SCTLD) susceptible coral.</i> Bahr portion: \$403,955 Award # C1F5B9	\$ 403,955
2022 – 2024	Exxon Biomedical Sciences – coPI <i>Assessments of Carbonate Chemistry Baseline and Potential Impact of Carbon Dioxide Addition in the Northwestern Gulf of Mexico Shelf Waters</i> Bahr portion: \$82,800 Award # LAW-2022-0601	\$225,244
2022 - 2023	Florida Department of Environmental Protection – PI <i>Defining suspended sediment tolerance thresholds for Caribbean Endangered Species Act and Stony Coral Tissue Loss Disease susceptible corals</i> Bahr portion: \$176,960 Award # C0ED1D	\$176,960
2022 – 2025	NOAA National Sea Grant– coPI <i>Fine-scale genetic monitoring of eastern oyster population structure for aquaculture, fisheries management, and restoration.</i> Bahr portion: \$73,000 Award # M2300741	\$258,571
2022 – 2025	NSF, Major Research Instrumentation Program– coPI <i>Acquisition of a Purge and Trap-IRMS for Isotopic Analysis of Nitrous Oxide Converted from Nitrate and Amino Acids at TAMU-CC.</i> Bahr portion: \$0 Award # 2216356	\$258,571
2022 – 2023	NSF, Biological Oceanography Program – PI <i>Geoscience Research Experiences for Post-Baccalaureate Students (GEO-REPS) Supplemental Funding.</i> Bahr portion: \$44,600 Award # 2049406	\$44,600
2021 – 2025	NSF, Biological Oceanography Program – PI <i>Collaborative Research: Reevaluating calcification response to changes in seawater chemistry by testing the Proton Flux Hypothesis</i>	\$1,054,925

and the Coral Metabolism Model. Co-PIs Sabine, Rodgers, Briggs (UHM)
Bahr Portion: \$381,499 | Award # 2049406

TAMU-CC Internal Research Grants

2022 – 2023	Texas Comprehensive Research Fund Program Development – PI <i>Characterizing the influence of boundary layers on oyster calcification under varied ocean chemistries</i>	\$40,000
2021 – 2022	Research Enhancement Grant, College of Science & Engineering – PI <i>Investigating the role of the microbiome in coral health and bleaching response under elevated temperature and eutrophication</i>	\$3,000
2021 – 2022	Research Enhancement Grant, College of Science & Engineering – coPI <i>Reconstructing stress histories and consequences in estuarine bivalve bioindicators</i>	\$3,000
2021 – 2022	Impact Multiplier Grant, TAMU-CC Community Outreach – PI <i>Creating Solutions to Pollution through STEM mentorship and local environmental stewardship</i>	\$6,000
2020 – 2021	Texas Comprehensive Research Fund Program Development – PI <i>From microbes to mosaics: Understanding coral response to and recovery from climatic threats.</i>	\$20,000
2019	Research Equipment and Infrastructure Grant – PI <i>Aquatic Experimental System: A flexible and versatile research platform to create and maintain experimental water conditions</i>	\$9,000
2019	Research Enhancement Grant, College of Science & Engineering – PI <i>Local drivers of coral bleaching susceptibility, mortality and resilience during 2019 bleaching event in Hawai‘i</i>	\$3,000
PRIOR RESEARCH GRANTS AWARDED		
2018	Harold K.L. Castle Foundation: Ocean Resiliency – Co-PI <i>Development of Hawaiian Ko‘a Card outreach and monitoring network.</i>	\$30,000
2018	Hawai‘i Community Foundation – Co-PI <i>Development of Hawaiian Ko‘a Card outreach and monitoring network.</i>	\$11,000
2017	NOAA Marine Education and Training Grant Program – Co-PI <i>Training next-gen managers in identifying environmental drivers of resilience on coral reefs after climate change-induced stress in Hawai‘i.</i>	\$14,868
2017	Hawai‘i Community Foundation Community Restoration – Co-PI <i>Community outreach support and development of the Hawaiian Ko‘a Wheel: Coral health and bleaching assessment color reference card for Hawaiian corals</i>	\$35,000
2017	Harold K.L. Castle Foundation – Co-PI <i>Development of the Hawaiian Ko‘a Wheel: Coral health and bleaching assessment color reference card for Hawaiian corals</i>	\$25,000
2017	The US Geological Survey – Co-PI <i>Defining sediment tolerance thresholds for dominant Hawaiian coral species</i>	\$18,000
2015	Col. W.E. Lord & S.L. Lord Endowed Scholarship – PI <i>Coral reef resilience in a changing ocean climate</i>	\$2,000
2015	Lerner Gray American Museum of Natural History – PI <i>Reefs at risk: Coral reef resilience in a changing ocean climate</i>	\$1,200
2014	Col. W.E. Lord & S.L. Lord Endowed Research Grant – PI <i>Illuminating the effects of multiple climate change stressors on Hawaiian corals</i>	\$2,300

2014	Charles H. and Margaret B. Edmondson Research Grant – PI <i>Some like it hot: Relative sensitivity of Hawaiian corals to climate change stressors</i>	\$2,000
2013	Charles H. and Margaret B. Edmondson Research Grant – PI <i>Identifying the interactive effects of ocean acidification and local physical stressors on the physiological response of Hawaiian corals</i>	\$1,000

STUDENT GRANTS (Bahr Mentored §Undergraduate and ‡Graduate Students)

2023	David May Memorial Scholarship ‡David Armstrong Ph.D. student	\$1,000
2023	Karen Koester Dodson Memorial Scholarship ‡Casey Gallagher M.Sc. student	\$3,200
2023	Carl R. Beaver Memorial Research Award ‡Alexandra Good Ph.D. student	\$1,500
2023	TAMU-CC R&I Student Research Competition ‡Casey Gallagher M.Sc. student	\$800
2022	Karen Koester Dodson Memorial Scholarship ‡Zoe Ruben M.Sc. student	\$1,600
2022	Carl R. Beaver Memorial Research Award ‡ David Armstrong Ph.D. student	\$1,600
2022	Carl R. Beaver Memorial Research Award ‡ Alexandra Good Ph.D. student	\$2,100
2022	Carl R. Beaver Memorial Research Award ‡Bryanna Herrera M.Sc. student	\$3,000
2022	Sigma Xi Grants-in-Aid of Research ‡Zoe Ruben M.Sc. student	\$950
2021	Karen Koester Dodson Memorial Scholarship ‡Zoe Ruben M.Sc. student	\$1,950
2021	Graduate COSE Scholarship ‡Zoe Ruben M.Sc. student	\$1,000
2021	Graduate Summer Scholarship ‡Zoe Ruben M.Sc. student	\$1,000
2021	STARS Scholarship ‡Zoe Ruben M.Sc. student	\$2,000
2021	Graduate Scholarship ‡Zoe Ruben M.Sc. student	\$2,000
2021	Sigma Xi Grants-in-Aid of Research ‡Zoe Ruben M.Sc. student	\$1,000
2021	Texas Sea Grant Grants-in-Aid ‡Alexandra Good Ph.D. student	\$2,000
2021	Texas Sea Grant Grants-in-Aid ‡Ashleigh Epps M.Sc. student	\$2,000
2021	Bring it Home Scholarship ‡Ashleigh Epps M.Sc. student	\$100
2021	Harstine Islands Women’s Scholarship ‡Ashleigh Epps M.Sc. student	\$4,000
2021	TAMU-CC R&I Student Research Competition ‡Ashleigh Epps M.Sc. student	\$800
2021	Graduate Scholarship ‡Zoe Ruben M.Sc. student	\$1,000
2021	Graduate Scholarship COSE ‡Zoe Ruben M.Sc. student	\$1,334
2021	Graduate Scholarship ‡Alexandra Good Ph.D. student	\$1,000
2020	Carl R. Beaver Memorial Research Award ‡Ashleigh Epps M.Sc. student	\$1,200
2020	Carl R. Beaver Memorial Research Award ‡Alexandra Good Ph.D. student	\$1,500
2020	Harstine Islands Women’s Scholarship ‡Ashleigh Epps M.Sc. student	\$1,850
2020	Graduate Scholarship. ‡Ashleigh Epps M.Sc. student	\$1,000
2020	TAMU-CC R&I Student Research Competition §Gabriella Herrera	\$800
2020	Provost Travel Funds. ‡Ashleigh Epps M.Sc. student	\$400
2020	Scholar Achievement in Graduate Education (SAGE) Fellowship ‡Alexandra Good Ph.D. student	\$29,500

SCHOLARSHIPS, AWARDS, AND HONORS

2024	Teaching Excellence Award , College of Science, TAMU-CC <i>This award recognizes contributions in teaching excellence, productivity, and innovation to the College of Science. Nominated.</i>	\$2,000
2024	Kavli Fellow, National Academy of Sciences. <i>Early-career researchers who have demonstrated exceptional promise and accomplishments in their respective fields of study.</i>	
2023	Outstanding Doctoral Mentor. College of Graduate Studies, TAMU-CC <i>This award recognizes outstanding faculty for their efforts in supporting, encouraging, and promoting student research, education, professional and personal development, and career plans. Nominated.</i>	\$1,000
2022 - 2024	HRI Fellow. Harte Research Institute (HRI) for Gulf of Mexico Studies	\$14,000

- 2019 **Institution Faculty of the Month.** National Residence Hall Honorary acknowledges those leaders who go above and beyond in making the collegiate experience of living in the residence hall community an incredible experience.
- 2016 **Nominated Scholar and Recipient,** Student Excellence in Research Award, *Awarded by the Vice Chancellor for Research at the University of Hawai'i for recognition of outstanding scholarly research endeavors while pursuing a doctoral degree* \$500

Nominated but not awarded

- 2024 **International Coral Reef Society Early Career Scholar**
- 2022 **NSF Waterman Award.** Nominated by TAMU-CC Research & Innovation Division

FIELD EXPEDITIONS*68 total days at sea*

- 2023 **Researcher.** NOAA's National Coral Reef Monitoring Program *Flower Garden Banks National Marine Sanctuary* Long-term Monitoring, Fish Calibration Cruise using the Reef Visual Census (RVC) stationary-point-count (SPC) method (PI: J Grove). 5 day expedition.
- 2023 **Researcher.** TriNational Reef Monitoring Expedition. 3 day expedition Arrecife Alacranes National Park. NOAA, Harte Research Institute, and National Autonomous University of Mexico Collaborative training expedition.
- 2022 **Researcher.** Flower Garden Banks National Marine Sanctuary Response Cruise. Flower Garden Banks. Disease response and surveys. (PI: M Johnston). 3 day expedition.
- 2022 **Researcher.** NOAA's National Coral Reef Monitoring Program *Flower Garden Banks National Marine Sanctuary* Long-term Monitoring, Coral Habitat Assessment, Coral Disease surveys. (PI: L Siceloff). 4 day expedition.
- 2018 **Researcher.** Long-term Monitoring, Coral Habitat Assessment, Coral Disease surveys. Pila'a, Kaua'i. 7-day expedition (PI: KS Rodgers).
- 2017 **Scientist.** *Mariana Archipelago Reef Assessment and Monitoring Program Cruise. NOAA Ship Hi'ialakai.* 28-day cruise in the Northern Marianas to assist in coral and fish surveys, collection of water samples and deploying/recovering Autonomous Reef Monitoring Structures, Calcification Accretion Units, and Bioerosion Monitoring Units.
- 2016 **Researcher.** Long-term Monitoring and Coral Habitat Assessment, Hā'ena and Pila'a, Kaua'i. 10-day expedition (PI: KS Rodgers).
- 2016 **Scientist.** *Deep Reef Expedition, NOAA Ship Hi'ialakai.* 25-day cruise in the Papahānaumokuākea Marine National Monument for coral disease surveys, coral and fish collections, and scientific diving to deploy and retrieve underwater acoustic receivers (PI: R Kosaki).

PRESENTATIONS (§ indicates a poster; ‡ indicates student mentee; † indicates presenter)

INVITED PRESENTATIONS

- 2023 **Color coding coral reef health.** Justus Liebig University. Giessen, Germany.
- 2023 **Local and global drivers of change, recovery, and resilience on Hawaiian Reefs.** Department of Oceanography, University of Hawai'i at Mānoa.
- 2022 **Science to support solutions** (Ciencia para apoyar soluciones). Stony Coral Tissue Loss Disease Peer Exchange Working Group. Mérida, Mexico.
- 2022 **Local and global drives of change, recovery, and resilience on coral reefs.** Northeastern University.
- 2022 **Coral reefs in a modern world: Assessing impacts and finding solutions.** Harte Research Institute Seminar Series. Corpus Christi, TX.
- 2021 **The Hawaiian Ko'a Card: Coral Health Assessment Tool for Hawaiian Corals.** Springer Nature Applied Sciences. *Virtual. 30 attendees. International*

- 2020 **Local and global drives of change, recovery, and resilience on coral reefs.** Australian Research Council Centre of Excellence for Coral Reef Studies. Queensland Australia. *Virtual*: https://www.coralcoe.org.au/crs_event/local-and-global-drivers-of-change-recovery-and-resilience-on-coral-reefs
- 2019 **Corals as Indicators of Change.** Sitka WhaleFest, *Mysteries of our changing seas*. Sitka, Alaska.
- 2017 **Reefs at risk: How humans shape coral reefs.** Distinguish Scientist Lecture Series, Santa Monica College.
- 2015 **The 2014 freshwater and bleaching events in Kāneʻohe Bay, HI.** Division of Aquatic Resources, Honolulu HI
- 2015 **Bleaching variation and susceptibility of Hawaiian corals.** Invited Speaker. California Academy of Sciences. San Francisco, California.

CONTRIBUTED CONFERENCE PRESENTATIONS

- 2023 **Bahr KD.** Colorful solutions for a bleak future. A Coral Health Reference Card. Benthic Ecology Meeting. Miami, Florida.
- 2022 †Rii Y, †**KD Bahr**, †K Falinski, AM McGowan, J Robertson, RJ Toonen, H Kawelo, K Kūkea-Shultz, L Wedding, C Hunter, KS Rodgers, K Winter. *Indigenous restoration management practices promote healthy coral reef ecosystems in Malaukaʻa reef, Heʻeia, Oʻahu.* Ocean Sciences Meeting.
- 2022 †Jury CP, **KD Bahr**, E Barba, R Brainard, A Cros, K Dobson, A Graham, R McLachlan, C Nelson, J Price, M Rocha de Souza, L Shizuru, C Smith, W Sparagon, C Squair, M Timmers, T Tran, J Vicente, M Webb, N Yamase, A Grottoli. *Experimental reef communities persist under future ocean acidification and warming.* Ocean Sciences Meeting.
- 2021 Razal CM, †**KD Bahr**, G Herrera, A Hirota, AM Good. A Coral's True Colors: Using color hues to assess coral health and welfare. Association of Zoos and Aquariums. *Virtual*. 120 attendees
- 2020 †Hunter CL, **KD Bahr**, SM Brunson. *Patterns of Foraging by Hawaiian Green Sea Turtles (Chelonia mydas) on Gracilaria salicornia in Kāneʻohe Bay.* First Annual Workshop on Green Turtle Diets in Hawaiʻi – Food for Thought in 2020. Hawaiʻi Pacific University. Honolulu, HI
- 2019 †**Bahr KD**, A Richards Donà, A Graham, JJ Han, AE McGowan, S Severine, YP Stender, R Weible, and KS Rogers. *The Hawaiian Koʻa Card: A coral health assessment tool for coral reef resilience, bleaching occurrence, and socioeconomic impacts of climate change in the Hawaiian Islands.* Resilience in the Face of Change 26th Hawaiʻi Conservation Conference, Honolulu, HI.
- 2019 †Timmers M, **KD Bahr**, CP Jury, A Graham, E Orndahl, C Squair, RJ Toonen, J Vincente, K VanArtsdalen, M Webb. *Effects of elevated pCO₂ and temperature on coral reef cryptofauna biodiversity and community composition.* 2019 Albert Tester Symposium, UH Mānoa, Honolulu, HI
- 2018 †Page HN, AJ Andersson, TA Courtney, EH DeCarlo, I Koester, N Howins, M. Lebrato, KS Rodgers, and **KD Bahr**. *Importance of coral reef community composition and benthic metabolism to seawater carbonate chemistry: implications for ocean acidification.* Ocean Sciences Meeting, Portland OR.
- 2017 §†Vicente J, W Rakchai, **KD Bahr**, M Timmers, C Jury, RJ Toonen. *Temporal diversity of marine sponges settling on Autonomous Reef Monitoring Structures in Kāneʻohe Bay, Oʻahu, Hawaiʻi.* NSF Collections-Based PRFB Symposium & Workshop Nov. 7-9 2017, Museum of Comparative Zoology, Harvard University, Cambridge, MA.
- 2017 †**Bahr KD** and KS Rodgers. *Impacts of the 2015 coral bleaching event on the unique embayments of Oʻahu, Hawaiʻi.* American Association for the Advancement of

- 2017 Science. 98th Symposium, Waimea Hawai‘i.
- 2017 †Courtney TA, AJ Andersson, EH De Carlo, HN Page, I Koester, G Terlouw, R Tabata, **KD Bahr**, KS Rodgers. *Coral bleaching impacts on reef-scale net calcification and net community production in Kāne‘ohe Bay, HI.* Association for the Sciences of Limnology and Oceanography, Honolulu HI.
- 2016 †**Bahr KD**, PL Jokiel, and KS Rodgers. *Coral bleaching events in Kāne‘ohe Bay O‘ahu HI: What have we learned?* International Coral Reef Symposium. Honolulu, HI.
- 2016 †**Bahr KD**, PL Jokiel, and KS Rodgers. *Kāne‘ohe Bay, O‘ahu, Hawai‘i: Centuries of Human Impact and Reef Recovery with Projections to 2050.* International Coral Reef Symposium. Honolulu, HI.
- 2016 †Page HN, Andersson AJ, Jokiel PL, Rodgers KS, Lebrato M, Yeakel KL, Davidson C, D’angelo S, **Bahr KD**. *Differential modifications of seawater carbonate chemistry by major coral reef benthic communities.* International Coral Reef Symposium. Honolulu, HI.
- 2016 †**Bahr KD**. *Reefs at risk: The future of Hawaiian corals in a rapidly changing climate.* Doctoral Dissertation Defense. University of Hawai‘i. Honolulu HI.
- 2015 †**Bahr KD** and G. Baghdasarian. *Interactive effects of multiple stressors on coral bleaching.* Western Society of Naturalists Annual Meeting. Sacramento, California.
- 2015 †Page HN, PL Jokiel, KS Rodgers, KS Yeakel, M Lebrato, C Davidson, S D’Angelo **KD Bahr**, and AJ Andersson. *Differential modifications of seawater carbon chemistry by major coral reef benthic communities.* Western Society of Naturalists Meeting. Sacramento, California.
- 2015 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Reefs at Risk: Relative susceptibility of Hawaiian corals in a changing ocean climate.* 40th Albert L. Tester Memorial Symposium. UH Mānoa, Honolulu, Hawai‘i.
- 2015 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Freshwater and bleaching events in Kāne‘ohe Bay 2014.* Division of Aquatic Resources Workshop.
- 2014 †**Bahr KD**, LD Van Heukelem, CE Westbrooke, KS Rodgers, LM Wedding, C Hunter. *Conservation and management of Species of Concern in Kāne‘ohe Bay: Reduction of invasive algal species using native urchins.* Hanauma Bay Education Program. Hanauma Bay Nature Preserve.
- 2014 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Corals under multiple climate change stressors: How much is too much?* 39th Albert L. Tester Memorial Symposium. UH Mānoa, Honolulu, Hawai‘i.
- 2014 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Multiple climate change stressors: How does the Hawaiian reef coral Montipora capitata repond?* Ocean Sciences Meeting. Honolulu Hawai‘i.
- 2014 §†Page HP, K Yeakel, PL Jokiel, KS Rodgers, **KD Bahr**, and AJ Andersson. *Diel trends in net ecosystem calcification and production rates for different benthic communities exposed to ambient and acidified seawater.* Ocean Sciences Meeting. Honolulu, Hawai‘i.
- 2013 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Response of Hawaiian reef coral, Montipora capitata, to multiple climate change stressors.* Western Society of Naturalists Annual Meeting. Oxnard, California.
- 2013 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Response of Hawaiian reef coral Montipora capitata to temperature, irradiance, and pCO₂.* Hawai‘i Conservation Conference. Honolulu, Hawai‘i.
- 2013 †**Bahr KD**, KS Rodgers, and PL Jokiel. *Response of Hawaiian reef coral Montipora capitata to temperature, irradiance, and pCO₂.* Pacific Island Climate Change Cooperation Science Symposium. Honolulu, Hawai‘i.
- 2013 §†**Bahr KD**, KS Rodgers, and PL Jokiel. *Response of Hawaiian reef coral Montipora*

- 2012 §† **Bahr KD**, MM Kosma, HM Putnam, and RD Gates. *Latent effects in juvenile Pocillopora damicornis spawned under predicted climate change conditions*. 37th Albert L. Tester Memorial Symposium. UH Mānoa, Honolulu, Hawai‘i. (Best Graduate Poster)
- 2012 §† **Bahr KD**, MM Kosma, HM Putnam, and RD Gates. *Latent effects in juvenile Pocillopora damicornis spawned under predicted climate change conditions*. 37th Albert L. Tester Memorial Symposium. UH Mānoa, Honolulu, Hawai‘i. Honorable Mention – Best Undergraduate Poster

SELECTED STUDENT PRESENTATIONS

- 2023 ‡† Savage KB, X Hu, **KD Bahr**, and JB Pollack. *The spatial distribution of carbon on a subtidal oyster reef*. Coastal & Estuarine Research Federation. Portland, OR.
- 2023 ‡† Good AM, A Epps, V Blesa, M Coberly, KS Rodgers, NG Prouty, CD Storlazzi, and **KD Bahr**. *Impact of warming and suspending sediment on Hawaiian reef coral, Montipora capitata*. Benthic Ecology Meeting. Miami, FL.
- 2023 ‡† Ruben Z, H Abdulla, J Turner, L Pinnell, and **KD Bahr**. *Unlocking the mysteries of coral resilience: An investigation into the interplay of environmental factors and coral holobiont response in Kāne‘ohe Bay, Hawai‘i*. Benthic Ecology Meeting. Miami, FL.
- 2023 §†† Tenbrink E, and **KD Bahr**. *Impact of ocean acidification on the structural integrity of Montipora capitata*. Benthic Ecology Meeting. Miami, FL.
- 2022 §†† White D, AM Good, C Hankins, **KD Bahr**. *Impacts of dredging sediment derived on Caribbean corals Montastrea cavernosa and Stephanocoenia intersepta*. Gulf Estuarine Research Society Conference. University of Southern Mississippi's Gulf Coast Research Laboratory in Ocean Springs, MS
- 2022 §†† Herrera G, AM Good, A Hirota, C Razal, N Gaertner, J Sefcik, J Gilber, and **KD Bahr**. *A corals true colors: understanding color hues to assess coral health and welfare in captivity*. Benthic Ecology Meeting. Portsmouth, NH
- 2022 ‡† Epps AM, MN Bruce, M Gates, J Fifer, SW Davies, and **KD Bahr**. *Corals thriving in dynamic environments may hold key insights into future corals*. American Association of Underwater Sciences. Galveston, TX.
- 2021 §†† Ruben Z, H Abdulla, J Turner, L Pinnell, **KD Bahr**. *Corals in Crisis: how temperature and nutrient fluctuations affect physiological responses of corals and their microbiome in Kāne‘ohe Bay, Hawai‘i*. International Coral Reef Symposium. July 2022. Bremen, Germany.
- 2021 ‡† Epps A, and **KD Bahr**. *Corals thriving in dynamic environments may hold key insights into future corals*. International Coral Reef Symposium. July 2021. Bremen, Germany. *Virtual*
- 2021 ‡† Epps A, and **KD Bahr**. *Corals thriving in dynamic environments may hold key insights into future corals*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX.
- 2021 ‡† Good AM, and **KD Bahr**. *Think globally, Act locally: A risk and resilience assessment of coral reef watershed quality in Kāne‘ohe Bay, Hawai‘i*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX.
* *Best short oral presentation*
- 2021 ‡† Ruben Z, H Abdulla, J Turner, L Pinnell, **KD Bahr**. *Corals in Crisis: how temperature and nutrient fluctuations affect physiological responses of corals and their microbiome in Kāne‘ohe Bay, Hawai‘i*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX.
- 2021 §†† Ramos C, and **KD Bahr**. *Assessing symbiotic algae abundance in mystery corals located in Corpus Christi, Texas*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX. * *Best presentation*

CURRICULUM VITAE

K. D. BAHR

- 2021 §‡†Herrera, AM Good, and **KD Bahr**. *Coral Health Assessment Card*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX.
- 2021 §‡†Bruce M, A Epps, and **KD Bahr**. *Plankton in Packery Channel*. Marine Science Graduate Student Organization 9th Annual Research Forum, April 30th, 2021. Corpus Christi, TX.
- 2019 ‡†McGowan A, **KD Bahr**, RJ Toonen. *Ridge restoration and reef response: Impacts of invasive mangrove removal on nearshore coral reef*. Resilience in the Face of Change 26th Hawai'i Conservation Conference, Honolulu, HI.
- 2019 ‡§†Senso E, **KD Bahr**, A Moran, J Lemus. *Growth and skeletal formation of the common collector urchin, *Tripneustes gratilla*, under a changing climate*. 2019 Albert Tester Symposium, UH Mānoa, Honolulu, HI.
- 2019 ‡†McGowan A, **KD Bahr**, RJ Toonen. *Ridge restoration and reef response: Impacts of invasive mangrove removal on nearshore coral reef*. 2019 Albert Tester Symposium, UH Mānoa, Honolulu, HI.
- 2018 ‡§†Barnhill KA, AE McGowan, **KD Bahr**. *Return to Kāne'ohē: Fringing reef community changes after 18 years*. Reef Conservation United Kingdom. Zoological Society of London.
- 2018 ‡§†McGowan AE, **KD Bahr**, RJ Toonen. *Ridge to reef connections: Effects of invasive mangrove removal on nearshore coral reef environment*. Symposium on Science in Support of Archipelagic Management. Honolulu, HI.
- 2018 ‡§†McGowan A, **KD Bahr**, RJ Toonen. *Ridge to reef connections: Effects of invasive mangrove removal on nearshore coral reef environment*. 25th Hawai'i Conservation Conference, Honolulu, HI.
- 2018 ‡†Fossett A, KS Rodgers, and **KD Bahr**. *He'eia coral reef recovery following the 2015 bleaching event*. Student Symposium, Hawai'i Pacific University.
- 2018 ‡§†McGowan A, **KD Bahr**, RJ Toonen. *Ridge to reef connections: Effects of invasive mangrove removal on nearshore coral reef environment*. 2018 Albert Tester Symposium, UH Mānoa, Honolulu, HI.
- 2018 ‡§†May S, **KD Bahr**, KS Rogers. *Will the rainforests of the sea survive climate change?* IDEA Networks of Biomedical Research Excellence (INBRE) Student Symposium, John A. Burns School of Medicine University of Hawai'i, HI.
- 2017 ‡†Tran T, **KD Bahr**, CP Jury, RJ Toonen. *Analysis of *Pocillopora damicornis* recruited under climate change stressors*. UH GES Symposium.
- 2013 §‡†Peterson A, PL Jokiel, KS Rodgers, and **KD Bahr**. *Spatial and temporal variation in water quality within major marine habitats of Kāne'ohē Bay*. National NSF EPSCoR Conference in Nashville, TN.
- 2013 §‡†Peterson A, PL Jokiel, KS Rodgers, and **KD Bahr**. *Spatial and temporal variation in water quality within major marine habitats of Kāne'ohē Bay*, Hawai'i. SACNAS National Conference. San Antonio, Texas.

TEACHING EXPERIENCE

CERTIFICATIONS

- 2022 **Promoting Active Learning Online**
Association of College and University Educators Microcredential course
- 2021 **Creating an Inclusive & Supportive Online Learning Environment**. Association of College and University Educators Microcredential course
- 2020 **Best Practices in Online Instruction**. Texas A&M University- Corpus Christi

GRADUATE

- Spring 2024 **Communicating Science** | MARB 6312.001 | 3 hr | 11 students

	Communicating Science MARB 6312.002 3 hr 10 students
	Coral Reef Conservation Issues MARB 6301 3 hr 7 students
Spring 2023	Communicating Science MARB 6312 3 hr 15 students
Fall 2022	Coral Reef Conservation Issues MARB 6301 3 hr 4 students
Spring 2022	Biology and Ecology of Coral Reefs MARB 6590 3 hr 3 students
Spring 2022	Communicating Science MARB 6312 3 hr 17 students <i>Core course for MARB. In-person delivery</i>
Spring 2021	Biology and Ecology of Coral Reefs BIOL 5590 3 hr 2 students <i>New class and full curriculum development. Hybrid delivery</i>
Spring 2021	Communicating Science MARB 6312 3 hr 13 students <i>Core course for MARB. In-person delivery</i>
Fall 2020	Coral Reef Conservation Issues MARB 6301 3 hr 7 students <i>New class and full curriculum development. Online delivery</i>
Spring 2020	Communicating Science MARB/CMSS 6312 3 hr 22 students <i>New class and full curriculum development. Core course for MARB and CMSS Graduate Programs</i>

UNDERGRADUATE

Spring 2024	Coral Reef Conservation BIOL 4302 3 hr 13 students
Fall 2022	Coral Reef Conservation BIOL 4302 3 hr 20 students
Summer 2022	Ridges to Reefs: Ecology of Coral Reef Ecosystems in Belize BIOL 4590 3h 11 students <i>Faculty-led Study Abroad Program in Belize</i>
Spring 2022	Biology and Ecology of Coral Reefs BIOL 4334 3 hr 15 students
Fall 2021	Coral Reef Conservation BIOL 4302 3 hr 18 students
Spring 2021	Biology and Ecology of Coral Reefs BIOL 4590 3 hr 11 students <i>New class and full curriculum development. Hybrid delivery</i>
Fall 2020	Coral Reef Conservation BIOL 4302/MARB 6301 3 hr 10 students <i>New class and full curriculum development. Online delivery</i>

NON-CREDIT INSTRUCTION

2020 – present **Directed Independent Study Courses**

Spring 2024 (N=4): Coral Reef Benthic Ecology (BIOL 4396; Delorge) Ocean Alkalinity Enhancement Techniques And Their Effects On Coral Reefs (BIOL 4396; Lisiecki); Ocean Acidification Impacts On Corals (BIOL 4396; Hampton); Effects Of Ocean Acidification On Corals (BIOL 4396; Morales)

Fall 2023 (N=1): Internship in research lab (BIOL 4598; Morales)

Summer 2023 (N=2) Coral response to ocean acidification at marine station (BIOL 4396: Dopp) Gulf of Mexico-Texas Reef Shelf Vulnerable Species Assessment (MARB 6596; Armstrong)

Spring 2023 (N=1): Calcification and Stress Tolerances of Marine Invertebrates (MARB 6596: Savage)

Fall 2022 (N=1): Shorebird nesting and behavior (Montanye)

Spring 2022 (N=5): Zooplankton in Packery Channel (Bruce);

Investigating Effective Science Communication Techniques using Social Media (Gates); Oyster Physiology (Gomez-Rangel); Coral Photophysiology (Herrera); Coral Bleaching Physiology (Rueda)

Fall 2021 (N=1): The Future of Coral Reefs: Investigating How Coastal Bend Corals Thrive in Dynamic Conditions (Gates)

Summer 2020 (N=1): Methods in Coral Reef Ecology (Ramos)

Fall 2020 (N=1): Coral Health at the Texas State Aquarium (Herrera)

2017 – present **Instructor. Department of Biology, University of Hawai‘i Mānoa.**
 Outreach College, Field Problems in Marine Biology
 4-week Field Course at the Hawai‘i Institute of Marine Biology

PREVIOUS TEACHING EXPERIENCE

2012 – 2014 **Teaching Assistant. Dept. of Biology, University of Hawai‘i Mānoa**
 - Marine Ecology and Evolutionary Biology (BIOL 301L), 1 semester
 - Ecology and Evolutionary Biology (BIOL 265L), 2 semesters
 - Cell and Molecular Biology (BIOL 275L), 1 semester
 - Field Problems in Marine Biology, Field Course (BIOL 403), 2 semesters

GUEST LECTURES

2023 **Coral Calcification: The knowns but mostly unknowns.** Corals and Coral Reefs (BIOL 411). School of Life Sciences, University of Hawai‘i at Mānoa.
 2022 **Crash Course in Coral Reefs.** Oceanography (ESCI 3351). Department of Physical and Environmental Sciences. Texas A&M University-Corpus Christi
 2022 **Coral Calcification: The knowns but mostly unknowns.** Corals and Coral Reefs (BIOL 411). School of Life Sciences, University of Hawai‘i at Mānoa.
 2021 **Coral Calcification: The knowns but mostly unknowns.** Corals and Coral Reefs (BIOL 411). School of Life Sciences, University of Hawai‘i at Mānoa.
 2020 **Coral Calcification: The knowns but mostly unknowns.** Invertebrate Biology (BIOL 313). Department of Biological Sciences. California State University, Long Beach. Prof Bruno Pernet.
 2019 **The Chemistry of Coral Calcification.** Corals and Coral Reefs (ZOOL 410), Department of Biology, University of Hawai‘i at Mānoa
 2018 **Mauka Makai: Human impacts on coral reefs in Hawai‘i.** Science of the Sea, Oceanography. Windward Community College.
 2018 **The Chemistry of Coral Calcification.** Corals and Coral Reefs (ZOOL 410), Department of Biology, University of Hawai‘i at Mānoa
 2017 **The Chemistry of Coral Calcification.** Corals and Coral Reefs (ZOOL 410), Department of Biology, University of Hawai‘i at Mānoa
 2016 **History of Kāne‘ohe Bay, HI.** Field Problems in Marine Biology (BIOL 403), Department of Biology, University of Hawai‘i at Mānoa
 2015 **Climate Change and Hawai‘i’s Coral Reefs.** Science Inquiry Education Program, Hawai‘i Institute of Marine Biology
 2015 **Corals and Climate Change.** Summer Marine Biology Course, Sacred Hearts Academy, Honolulu HI.
 2015 **Experimental Design and Statistics.** Field Problems in Marine Biology (BIOL 403), Department of Biology, University of Hawai‘i at Mānoa

STUDENT MENTORSHIP

Total Students: 62 | *Underrepresented in STEM

GRADUATE STUDENT ADVISEES

2024- current **Kate Gomez-Rangel***. M.Sc. FAMA, TAMU-CC; *Projected graduation Spring 2026*
 2024- current **Daphne White.** Ph.D. MARB, TAMU-CC; *Projected graduation Spring 2028*
 2023- current **Casey Gallagher.** M.Sc. MARB, TAMU-CC; *Projected graduation Spring 2025*
 2022- current **David Armstrong.** Ph.D. MARB, TAMU-CC; *Projected graduation Spring 2026*
 2022- current **Bryanna Herrera***. M.Sc. MARB, TAMU-CC; *Graduated Spring 2024*
 2021 – 2023 **Zoe Ruben.** M.Sc. MARB, TAMU-CC; *Graduated Spring 2023*
 2020- current **Alexandra Good.** Ph.D. MARB, TAMU-CC; *Projected graduation Spring 2025*
 2022 – 2022 **Ashleigh Epps.** M.Sc. MARB, TAMU-CC; *Graduated Spring 2022*

GRADUATE COMMITTEE MEMBERSHIP

- 2023 – current **Cresencia Barrera**. Ph.D. CMSS, TAMU-CC
 2022 – current **Kelley Savage**. Ph.D. CMSS, TAMU-CC, *co-chair*
 2021 – 2023 **Jessica Randall**. M.Sc. FAMA, TAMU-CC
 2021 – 2023 **Lane Evers**. M.Sc. FAMA, TAMU-CC
 2019 – 2022 **Jessica Myers**. M.Sc. CMSS, TAMU-CC; *Graduated Fall 2022*
 2021 – 2022 **Kenzie Merrill**. M.Sc. BIOL, TAMU-CC; *Graduated Summer 2022*
 2021 **Abby Tripler**. M.Sc. Marine Biology, Northeastern University
 2017 – 2020 **Emily Sesno**. M.Sc. Marine Biology, University of Hawai‘i
 2018 – 2020 **Kelsey Barnhill**. M.Sc. Tropical Ecology and Management
 Natural Resources, Norwegian University of Life Sciences.

UNDERGRADUATE STUDENT ADVISEES

- 2023 – current **Isabelle Morales***. B.Sc. Biology, LSAMP Scholar, McNair Scholar, TAMU-CC
Project: Investigation of altered ocean chemistry on Montipora capitata
 2023 – current **Soleil DeLorge**. B.Sc. Biology, TAMU-CC
Project: Influence of benthic composition on the water quality around Moku o Lo‘e
 2023 – current **Autumn Hampton**. B.Sc. Biology, TAMU-CC
Project: Investigation of the interspecific effects of elevated CO₂ on the biology and physiology of two Hawaiian coral species
 2023 – current **Danielle Lisiecki**. B.Sc. Biology, TAMU-CC
Project: Influence of ocean alkalinity enhancement on the biology and physiology of Hawaiian coral species and crustose coralline algae
 2023 – current **Brittany Marx**. B.Sc. Mechanical Engineering, NSF REU Scholar, TAMU-CC
 2023(summer) **Nichole Dopp**. B.Sc. Biology, NSF REU Scholar, TAMU-CC
 2023(summer) **Jared Kusner**. B.Sc. Mechanical Engineering, NSF REU Scholar, TAMU-CC
 2023(summer) **Mohammad Aljohani**. B.Sc. Marine Biology & International Business, NSF REU Scholar, University of Hawai‘i
 2022(summer) **Erin Lausterer***. B.Sc. Marine Biology, NSF REU Scholar, University of Hawai‘i
 2023(summer) **Malia Martin***. B.Sc. Global Environmental Science, NSF REU Scholar, University of Hawai‘i
 2022(summer) **Maile Coberly**. B.Sc. Marine Biology, NSF REU Scholar, University of Hawai‘i
 2022(summer) **Skye Inn**. B.Sc. Global Environmental Science, NSF REU Scholar, University of Hawai‘i
 2021 – 2023 **Eleanor Tenbrink**. B.Sc. Environmental Science, Honors Research Scholar, NSF REU Scholar, TAMU-CC
Project: Impact of ocean acidification on Montipora capitata
 2021 – 2023 **Ignacio Rueda***. B.Sc. Biology, NOAA CCME Scholar, LSAMP Scholar, NSF REU Scholar, TAMU-CC.
Project: Historical bleaching phenotype on coral physiology
 2021 – 2023 **Victoria Blesa***. B.Sc. Biology, TAMU-CC
 2021 – 2022 **Daphne White**. B.Sc. Biology, NOAA CCME Scholar, Honors Research Scholar, TAMU-CC.
Project: Dredged sediment impacts on Caribbean corals.
 Graduated Fall ‘22 with research honors
 2021 – 2023 **Kate Gomez-Rangel***. B.Sc. Biology, TAMU-CC
Project: Larval oyster ecology and physiology
 Graduated Fall ‘22 with research honors
 2021 – 2022 **Katie Long**. B.Sc. Geography, University of Oxford.
Project: Evaluating mass coral bleaching events in Hawai‘i using remotely sensed and field-based measures. Undergraduate Dissertation Distinction.

- 2021 – 2022 **Maryssa Gates**. B.Sc. Biology, NOAA CCME Scholar, TAMU-CC
Project: Cryptic coral polyp size and food availability
Graduated Spring '22 with research honors
- 2021 **Andrew Johnson**. B.Sc. Biology, TAMU-CC
- 2020 – 2022 **Morgan Bruce**. B.Sc. Environmental Science, Islander Green Team, TAMU-CC
Project: Plankton ecology and availability in Packery Channel, Texas
Graduated Spring '22 with research honors
- 2019 – 2022 **Gabriella Herrera***. B.Sc. Biology, LSAMP Scholar, TAMU-CC.
Projects: Coral health at Texas State Aquarium & Coral photophysiology
Graduated Fall '22 with research honors
- 2019 – 2021 **Caleb Ramos***. B.Sc. Biology, LSAMP Scholar, TAMU-CC
Project: Corals in the Gulf of Mexico
- 2018 – 2019 **Ilina Gobburu***. National Cathedral School High School. Washington D.C.
Raiser Environmental Fellow 2018.
Project: Changes in coral reef community composition over the past 20 years in the He'eia Estuary.
- 2018(summer) **Rolandon Adde***. College of the Marshall Islands, Ebeye NSF REU Program.
Project: Comparing Parrotfish Assemblages in a Marine Protected Area vs. an Open Access Site.
- 2018(summer) **Tiara Marie Drabble***. Undergraduate student. American Samoa Community College, American Samoa. NSF REU Program.
Project: Monitoring Responses of Montipora capitata to Varying Lengths of Tidal Exposure.
- 2017 – 2018 **Colleen Brown**. Undergraduate University of North Carolina.
NOAA Hollings Scholar.
- 2017 – 2019 **Leah Shizuru***. UH Microbiology Undergraduate, University of Hawai'i.
- 2017 – 2018 **Anela Garaganza-Tengan***. Undergraduate Marine Biology, University of Hawai'i.
- 2017(summer) **Princess (Max) Fleumeria Garcia***. Undergraduate, Northern Marianas College, Saipan. NSF REU Program
Project: Patterns in bleaching and zooxanthellae abundance in dominant Hawaiian corals.
- 2017(summer) **John Stewart Joseph***. Undergraduate, College of Micronesia, Pohnpei. NSF REU Program.
Project: Mapping Coral Distribution in Relation to Salinity Gradients in Pila'a, Kaua'i.
- 2017 – 2018 **Paige Mino**. Undergraduate Marine Biology, University of Hawai'i.
- 2017 – 2018 **Tiana Tran***. Undergraduate Global Environment Science, University of Hawai'i.
Project: Growth and survival of coral recruits under future levels of ocean warming and acidification.
- 2017 – 2019 **Ashley Fossett**. Master's Student in Marine Biology, Hawai'i Pacific University.
Project: Bleaching resilience of the Malauka 'a, He'eia fringing reef via ground truthing of coastal aerial images.
- 2016 – 2019 **Ashley McGowan**. Master's Student in Marine Biology, University of Hawai'i. *Project: He'eia, O'ahu reef ecological investigation prior to and following removal of invasive mangrove, Rhizophora mangle.*
- 2016 – 2020 **Andrew Graham**. Undergraduate Marine Biology, University of Hawai'i.
Project: Assessment of coral recruitment and growth on Autonomous Reef Monitoring Structures (ARMS) under future levels of global climate change.
- 2016 – 2020 **Anita Tsang**. Undergraduate Marine Biology, University of Hawai'i.
- 2016 – 2020 **Rebecca Wieble**. Master's Student Zoology, University of Hawai'i.
- 2016 – 2020 **Justin Han**. Undergraduate Marine Biology, University of Hawai'i.
- 2016 – 2017 **Kekoa Santana***. Undergraduate Oceanography, Hawai'i Pacific University.

- 2015 **Lucie Guirkinger**. School of Biological Sciences, Undergraduate Royal Holloway, University of London, England.
Project: Physiological response of the rice coral Montipora capitata under reduced irradiance and elevated temperatures, both associated to global climate change.
- 2013 **Alexis Peterson***. Undergraduate at Chaminade University, EPSCoR
Project: Habitat differences on Moku o Lo 'e, Kāne 'ohe Bay, O 'ahu.,
- 2013 **Lindsey Rice**. Undergraduate, Lamar University, TX
- 2013 **Mel Evans**. Undergraduate, University of Gloucestershire, Cheltenham UK
- 2012 **Tiffany Barber**. Undergraduate, Cal State Monterey Bay, CA

COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION

MENTORSHIP

- 2021 – current **Society for Advancement of Chicanos/Hispanics and Native Americans (SACNAS) Mentor**
- 2019 – current **Undergraduate Honors Program Faculty Mentor**
Texas A&M University-Corpus Christi
- 2019 – current **McNair Scholar Program Faculty Mentor**
Texas A&M University-Corpus Christi
- 2019 – current **Louis Stokes Alliances for Minority Participation (LSAMP) Faculty Mentor**
Texas A&M University-Corpus Christi

COMMITTEES

- 2021 – 2023 **Diversity, Equity, and Inclusion Committee Member.**
Texas A&M University – Corpus Christi

TRAINING

- 2021 **Creating an Inclusive & Supportive Online Learning Environment.**
Association of College and University Educators Microcredential course

OTHER CONTRIBUTIONS

- 2021 **Guest Speaker.** Collegiate STEM Institute. STEM Operation Success
Texas A&M University-Corpus Christi
- 2020 **Keynote Speaker.** Sense of Belonging. Student Support Services
Texas A&M University-Corpus Christi

ACADEMIC AND INSTITUTIONAL SERVICE

UNIVERSITY

- 2023 – current Marine Science Graduate Student Organization Faculty Advisor
- 2020 – current Dive Control Board Representative, LSCI Chair
- 2020 - current Academic Showcase: *Annual event focused on recruiting students to TAMU-CC during the Spring semester with two academic showcases per Island Day event, typically engaging an audience of over 50 attendees. 11/15/19, 2/15/20, 2/3/23*
- 2022 – current Workshop Facilitator and Developer. GROW. College of Graduate Studies
- 2021 Ad Hoc Dive Operations Committee
- 2020 Organizer and Coordinator for Island Days, Academic Showcase (Feb 15th, 2020)
- 2019 Organizer and Coordinator for Island Days (November 15th, 2019)

COLLEGE

- 2021-2023 Diversity, Equity and Inclusion Committee, COS Representative
- 2021 Council of Principal Investigators and Research Administration, COSE Alternate Representative

DEPARTMENT

2021 – current Chair of Marine Biology Graduate Program Curriculum Committee
 2021 Faculty Search Committee Member, Tenure-track Microbial Ecologist
 2020 Faculty Search Committee Member, Tenure-track Terrestrial Ecologist
 2020 Marine Biology Program Retreat Participant

PROFESSIONAL SERVICE

MANUSCRIPTS REVIEWED

2023 Frontiers in Marine Science (1), Scientific Reports (1)
 2022 Proceedings of the Royal Society B (1)
 2021 Journal of Experimental Marine Biology and Ecology (2),
 Frontiers in Marine Science (1)
 2020 PeerJ (2), Marine and Coastal Fisheries (1)
 2019 Frontiers in Marine Science (1), PeerJ (1)
 2018 Frontiers in Marine Science (1)
 2017 Journal of Experimental Marine Biology and Ecology (1)
 2016 Coral Reefs (1) Limnology and Oceanography: Methods (1)

EDITORIAL SERVICE

2023 - current **Review Editor.** Frontiers in Marine Science – Coral Reef Research
 2021 - current **Review Editor.** Frontiers in Marine Science- Global Change and the Future Ocean
 2021 - current **Guest Editor.** Journal of Marine Science and Engineering
 Special Issue: Responses of Coral Reefs to Climate Change.
 2021 - current **Editor.** Journal: Diversity; Section: Marine Diversity
 2020 **Guest Editor.** Journal: Diversity; Section: Marine Diversity; Special Issue: Coral Reef
 Ecology and Biodiversity. https://www.mdpi.com/journal/diversity/special_issues/reef

GRANT PROPOSALS, REPORTS, AND PROGRAMS REVIEWED

2024 **Reviewer.** National Science Foundation, Division of Ocean Sciences
 2022 **Reviewer.** National Science Foundation, Division of Ocean Sciences
 2021 **Reviewer.** National Science Foundation Major Research Instrumentation Competition
 2021 **Reviewer.** Graduate Women in Science National Fellowship Program
 2021 **Panelist.** National Science Foundation Graduate Research Fellowship Program
 2021 **Panelist.** National Science Foundation Postdoctoral Research Fellowship Program
 2020 **Panelist.** National Science Foundation Ocean Science Panel.
 2020 **Invited Reviewer.** Review of Marine Monitoring Program – Annual Report,
 Great Barrier Reef Marine Park Authority, Australian Government

ORGANIZATION OF SCIENTIFIC CONFERENCES

2023 **Lead Organizer.** Gulf of Mexico Coral Reef Symposium. Moody Gardens, Galveston
 Texas. *Organized a two-day Gulf-wide symposium aimed to reshape management
 strategies for the Flower Garden Banks National Marine Sanctuary, raising over \$35k
 and drawing 150+ participants from academic, governmental, and private sectors.*
 2022 **Session Chairperson.** Scaling impacts across ecological scales. International Coral Reef
 Symposium 2022, Bremen, Germany.
 2016 **Session Chairperson.** Coral Bleaching: Monitoring, management responses and
 resilience. International Coral Reef Symposium 2016, Honolulu HI.
 2016 **Session Co-Organizer.** Multiple stressors on coral reefs to advance development in
 effective management and policy responses. International Coral Reef Symposium 2016,
 Honolulu HI.

2016 **Organizing Committee.** Paul Jokiel Memorial Session, International Coral Reef Symposium 2016, Honolulu HI.

WORKING GROUPS AND COMMITTEES

2021- current **Member.** Communication of Science, ABT Framework Working Group
 2021- current **Science Working Group.** Gulf of Mexico Coastal Acidification Network
 2021- current **Member.** Gulf of Mexico Coastal Acidification Network (GCAN)
 2019- current **Member.** Gulf of Mexico Alliance Habitat Resources Priority Issue Team
 2019- current **Member.** Coral Restoration Consortium's Monitoring Working Group. NOAA
 2017- current **Collaborative Participant.** Hawai'i Marine Monitoring Collaborative.
 2014- current **Coral Bleaching Collaborative Member.** Coral Bleaching Coalition, Hawai'i Division of Aquatic Resources.
 2015 – 2017 **Website Committee Participant.** Hawai'i Institute of Marine Biology.
 2014 – 2016 **Chemical Waste Manager.** Hawai'i Institute of Marine Biology, Lab safety and hazardous waste manager.

WORKSHOPS ATTENDED

2022 **Workshop Facilitator.** Coral Reef Report Card. XI Mexican Coral Reef Congress and II Pan American Coral Reef Congress. Veracruz, Mexico
 2022 **Workshop Participant.** Stony Coral Loss Tissue Disease International Peer Exchange. Mérida, Mexico.
 2022 **Workshop Participant.** Alda Center's Women in STEM Leadership Program. Stony Brook University.
Four-week workshop designed to empower women and their allies as they foster a more diverse, equitable and inclusive STEM culture that allows all scientists/researchers to thrive in their careers.
 2020 **Science Communication Workshop.** ABT Framework Course: Coral Reefs
Four-week intensive course focused on techniques for crafting a narrative with filmmaker and scientist, Dr. Randy Olson.
 2020 **Workshop Participant.** Finding the Right Funding Opportunity. Hanover Research Webinar. Texas A&M University-Corpus Christi
 2020 **Workshop Participant.** NSF Grant writing training workshop. Research and Innovation. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Active Threat Training. Center for Faculty Excellence. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Teaching at a Hispanic Serving Institute. Center for Faculty Excellence. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Research and Innovation Seminar. Center for Faculty Excellence. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Learning about funders and finding opportunities. Center for Faculty Excellence. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Career Planning. Center for Faculty Excellence. Texas A&M University-Corpus Christi
 2019 **Workshop Participant.** Coral Bleaching Research Coordination Network. Developing recommendations for coral bleaching experimental design protocols. The Ohio State University, Columbus, Ohio.
 2018 **Workshop Participant.** Place-Based Research Matters: Mālama aku, mālama mai. The Center for Teaching Excellence and UH Sea Grant College Program. University of Hawai'i, Mānoa.

- 2018 **Workshop Participant.** Place-Based Research Matters: Building Pilina. The Center for Teaching Excellence and UH Sea Grant College Program. University of Hawai'i, Mānoa.
- 2018 **Meeting Participant.** NSF Ocean Acidification Principle Investigators Meeting. Portland, OR.
- 2017 **Workshop Participant.** 30 by 30 Coral Reef Initiative. Hawai'i Coral Reef Initiative. Division of Aquatic Resources.
- 2017 **Workshop Participant.** Integrating Science & Culture: Science, Technology, Engineering and Math (STEM) Through the Lens of Traditional Hawaiian Values, Practices & Knowledge, University of Hawai'i, Mānoa.
- 2017 **Meeting Participant.** Annual National Estuarine Research Reserve (NERR) Meeting. Corpus Christi, TX. Talk title: *Resoration research in He'eia NERR.*
- 2016 **Workshop Participant.** Coral bleaching workshop. Division of Aquatic Resources.

OTHER PROFESSIONAL SERVICE

- 2022 **Scientific Advisor.** Strategic Planning Meeting, Texas State Aquarium Institute for Wildlife Conservation.
- 2022 **Mentoring Judge.** Texas A&M University System Pathways Student Research Symposium.
- 2021 **Mentoring Judge.** SACNAS NDiSTEM Digital Conference
- 2021 **Mentoring Judge.** MSGSO Student Symposium. Texas A&M University-Corpus Christi.
- 2020 **Significant Collaboration** with USA EPA. Established Memorandum of Understanding with US EPA
- 2020 **Participant.** NSF CAREER Cohort Program. Division of Research and Innovation at Texas A&M University-Corpus Christi
- *Six month program focused on training and support for planned submission to NSF CAREER award. Includes intensive focused research proposal development activities and additional coaching on education and broader impacts components, data management plan, and other required NSF documents.*
- 2020 **Participant.** Faculty Research Development Program. Division of Research and Innovation at Texas A&M University-Corpus Christi.
- *Six-month program focused on establishing research agenda at the University and developing communication skills.*
- 2017 **Invited Research Panelist.** He'eia Science to Management Symposium.
- *Serve on a panel to determine research needs for the He'eia community.*

PROFESSIONAL ASSOCIATIONS

Society for Advancement of Chicanos/Hispanics and Native Americans (SACNAS), American Geophysical Union, Association for the Sciences of Limnology and Oceanography, Graduate Women in Sciences, International Coral Reef Society, The Reef Environmental Education Foundation, Western Society of Naturalists, Society for Women in Marine Science, Benthic Ecology Meeting Society

OUTREACH AND PUBLIC SERVICE

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- 2022 **Invited Scientist.** Teen STEM Cafe. Gulf Reach (35 middle and highschoolers).
- 2022 **Guest Scientist and Facilitator.** Texas State Aquarium SeaCamp. 20 3rd grade students
- 2022 **Invited Speaker.** Eco-Expert Lecture Series. Oso Bay Wetlands Preserve & Learning Center, Corpus Christi Texas. Talk Title: *Color coding coral reef health.*
- 2021 **Invited Speaker.** The Narrative Blitz. ABT Framework and the National Park Service. *International audience. 1,500 attendees.*
- 2021 **Invited Scientist.** Endangered Species Day, Texas State Aquarium.

- 2021 **Guest Speaker.** Fusion Southlake Academy. Virtual with Ms. Ellesia Grantham
- 2021 **Keynote Speaker.** Sense of Belonging Event. Student Support Services, Texas A&M University-Corpus Christi.
- 2020-current **Community-led Beach Cleanups.** TAMU-CC University Beach.
- 2020 **Keynote Speaker.** Sense of Belonging Event. Student Support Services, Texas A&M University-Corpus Christi.
- 2019 **Volunteer.** Texas A&M University-Corpus Christi, Giving Tuesday USS Lexington Memorial
- 2019 **Invited Guest Speaker.** Makai Fest Summit, Kailua, HI. Talk title: *Coral Reefs.*
- 2018 **Invited Guest Speaker and Facilitator.** Imi Wai Ola Student Science Conference, NOAA Inouye Regional Center, Honolulu, HI.
- 2017 **Invited Guest Speaker.** Hanauma Bay Education Lecture Series. Hanauma Bay Nature Preserve, Hawai'i. Talk title: *Coral bleaching impacts in Hanauma Bay.*
- 2017 **Invited Scientist.** Sacred Hearts Academy Science Symposium. *Biodiversity on Coral Reefs.*
- 2015 **Guest Speaker.** Hanauma Bay Lecture Series. Talk title: *Conservation and management of Species of Concern in Kāne'ōhe Bay.*
- 2015 **Guest Speaker.** Hawai'i Institute of Marine Biology Science Inquiry Program. Talk title: *Ocean warming and acidification effects on Hawaiian corals.*
- 2015 **Guest Speaker.** Taft Elementary, Ashland OH. Talk title: *Ocean Exploration.*
- 2014 **Guest Speaker.** Hawai'i Institute of Marine Biology Science Inquiry Program. Talk title: *Climate change, ocean acidification, and Hawai'i's Coral Reefs.*
- 2014 **Guest Speaker.** Sacred Hearts Academy, Hawai'i. Talk title: *Corals and Climate Change.* Developed ocean acidification and pH lab module for middle school students.
- 2012 - 2016 **Volunteer.** 41st Albert L. Tester Symposium, University of Hawai'i, Mānoa. Honolulu, HI.
- 2013 - 2016 **Science Judge.** Hawai'i Academy of Science, State Fair, Honolulu, HI Junior Research chemistry division.
- 2013 - 2016 **Outreach Educator.** Kahi Kai, Honolulu HI Educational and community outreach to promote community awareness on marine conservation and ocean literacy.
- 2013 - 2016 **Volunteer.** Waikiki Aquarium, Honolulu, HI. Live exhibit maintenance in coral cultivation farm.
- 2011 - 2014 **Volunteer.** Alien Algae Removal: State of Hawai'i's Aquatic Invasive Species Team, Department of Land and Natural Resources. Participated in monthly mechanical removal of alien invasive algae in He'eia Fishpond, Kāne'ōhe Bay.

MEDIA ENGAGEMENTS

- 2023 **Feature Research and Interview.** Texas A&M University-Corpus Christi researcher eyes climate crisis solutions in oceans. Caller Times. <https://www.caller.com/story/news/local/2023/09/11/texas-am-university-corpus-christi-co-leads-coral-climate-solution-research/70822696007/>
- 2023 **Feature Research and Interview.** TAMU-CC partners with University of Hawaii for \$2 million coral reef research. Kristv. <https://www.kristv.com/news/local-news/tamu-cc-partners-with-university-of-hawaii-in-2-million-coral-reef-research>
- 2023 **Feature Research.** \$4M for UH-led marine carbon removal projects <https://www.hawaii.edu/news/article.php?aId=12784>
- 2023 **Feature Research and Interview.** Texas A&M University-Corpus Christi students dive into hands-on learning at Flower Garden Banks. KIIITV. <https://www.kiiitv.com/article/news/local/texas-am-university-corpus-christi-students-dive-into-hands-on-learning/503-8eb0811f-5fb1-4f37-8173-0104715b4d5f>

- 2023 **Feature Researcher and Interview.** New interactive experience added to TAMU-CC University's pool floor. <https://www.kristv.com/news/local-news/new-interactive-experience-added-to-tamu-cc-universitys-pool-floor>
- 2022 **Featured Researcher.** Researchers respond to disease outbreak in nearby coral reefs <https://www.portasouthjetty.com/articles/researchers-respond-to-disease-outbreak-in-nearby-coral-reefs/>
<https://www.tamucc.edu/news/2022/09/092922-hri-researchers-fgbnms-response-team.php>
- 2022 **Expert Interview.** Ka Pili Kai. <https://seagrant.soest.hawaii.edu/restoring-water-quality/>
- 2022 **Featured Researcher.** Conservation Series. Texas State Aquarium. Four installments <https://www.texasstateaquarium.org/conservation-series/conservation-series-coral/>
- 2021 **Featured Research.** TAMU-CC Supports Community with Safety Training, Literacy Instruction, Pollution Education, and Translation Services. <https://www.tamucc.edu/news/2021/06/062921-impact-multiplier-grants-benefit-local-community.php>
- 2021 **Featured Research.** Alice Echo-News Feature Article: TAMU-CC Researcher, Students to Study Coral Reefs in Hawaii. <https://www.alicetx.com/story/news/2021/06/07/tamu-cc-researcher-students-study-coral-reefs-in-hawaii/7583991002/>
- 2021 **Featured Research.** KIII News Feature Article: New grant awarded to TAMUCC will allow students to study in Hawaii. <https://www.kiiitv.com/article/news/new-grant-awarded-to-tamucc-will-allow-students-to-study-in-hawaii/503-76a735f5-10fe-4fc4-88d2-148f157bc8d3>
- 2021 **Featured Research.** TAMU-CC Researcher, Students to Study Coral Reefs in Hawaii <https://www.tamucc.edu/news/2021/06/060421-coral-bahr-nsf.php>
- 2020 **Featured Research.** TAMU-CC Researcher Develops Color Guide to Assess Health of Coral Reefs: <https://tamucc.edu/news/2020/10/102920-coral-health-card.html#.X8atSNNKhTY>
- 2019 **Guest Scientist** Podcast Interview. Last Chance Endeavors, Inc. <https://www.lastchanceendeavors.com/podcast/episode/301f960e/keisha-bahr-and-danny-coffey-marine-researchers-at-whalefest-2019-or-coral-bleaching-and-shark-tagging-or-episode-020>
- 2018 **Featured Publication.** Top 5 most viewed publication in 2018. Article: Evidence of acclimatization or adaptation in Hawaiian corals to higher ocean temperatures.
- 2018 **Guest Blog Post.** PeerJ Blog. *Corals are adapting to survive, but ocean temperatures are rising faster than corals can change.* <https://peerj.com/blog/post/115284880848>
- 2018 **Guest Scientist.** Voice of the Sea, Hawai'i Institute of Marine Biology Technology: <https://vimeo.com/265852550>
- 2017 **Featured Publication.** Article: Patterns of bleaching and mortality following widespread warming events in 2014 and 2015 at the Hanauma Bay Nature Preserve, Hawai'i. PeerJ 5:e3355 <https://doi.org/10.7717/peerj.3355>. *Featured in Guardian, Popular science, Civil beat, Hawai'i News Now, Science Daily, Science News, Courthouse News, Eureka Alert and others.*
- 2016 **Guest Scientist.** Hawaiian Airlines Hana Hou. *The Far Atolls.* <http://hanahou.us/issues/19.4/feat-nw-hawn-islands.html>
- 2016 **Guest Blog Post.** Early Career Climate Forum. *Corals under climate change: Hawai'i's winners and losers:* <https://www.eccforum.org/coralsandclimate>
- 2015 **Expert Interview.** University of Hawai'i, Ieva Bytautaite. *Hawai'i's Coral Reefs: The Dangers of coral bleaching and its effects on Hawai'i's corals reefs.* <http://www.hoaoahu.com/coralreefs>
- 2014 **Expert Interview.** Seawords, University of Hawai'i, Marine Option Program. Ocean Acidification: as adverse as originally thought? https://issuu.com/seawords/docs/december_2014
- 2012 **Expert Interview.** EPSCoR Hawai'i CyberTeam. *Climate Change: Bleaching, Ocean Acidification, Calcification, and Growth.* YouTube video
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RESEARCH SKILLS

AAUS Scientific Diver Certification: *University of Hawai'i, Texas A&M-Corpus Christi*

- NAUI Master, Rescue, Enriched Air Nitrox Diver
- Depth Authorization: 100ft
- Logged Research Dives: 500

Boating Safety: Small Vessel Operator

- America's Boating Course United State Power Squadrons
- Boat US Foundation

Experimental Manipulations

- Design and development of CO₂ injection system for ocean acidification manipulations
- Continuous flow through mesocosm design and maintenance
- Eco-physiology using intermittent flow respirometry

Laboratory Skills

- Polymerase chain reaction (PCR), gel electrophoresis, DNA extractions, qPCR
- Seawater chemistry analysis (Total Alkalinity, Spectrophotometric pH, etc.)

Software Programs

- Statistics: Minitab, SPSS, JMP, R
- ArcGIS, Adobe Illustrator, Dreamweaver, and website design

CERTIFICATIONS

Best Practices in Online Instruction. *Texas A&M-Corpus Christi*

Office of Distance Education and Learning Technologies. Recieved 30 April 2020

AAUS Scientific Diver Certification: *University of Hawai'i, Texas A&M-Corpus Christi*

- CPR and Professional First Aid – Divers Alert Network
- NAUI Master, Rescue, Enriched Air Nitrox Diver

Lab Safety Certifications: *University of Hawai'i*

- General Biosafety Principals and Practices Training
- Bloodborne Pathogens and Safe Sharps Use
- Hazard Waste Generator Training
- Understanding and using Biological Safety Cabinet
- Transportation of Biological Substances Awareness